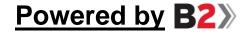


USA Debit EMV™ Test Plan

Version 13.00

April 2023



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Revision History

Version	Date	Revisions		
1.00	December 09, 2017	Initial document release		
1.10	December 14, 2017	 Recommended transaction \$value updated for cards 13, 15, 16 		
1.20	May 30, 2018	Renumbered Test Cases: CD.MMCL.C03-T01 corrected to CD.MCCL.C03-T01 CD.MMCL.C03-T02 became CD.MCCL.C03-T03 Updated Test Cases: CD.MCCL.C03-T01 CD.MCCL.C08-T01 CD.MCCL.C11-T01 CD.MCCL.C11-T03 New Test Cases: CD.MCCL.C03-T02		
1.30	June 1, 2018	Removed Test Cases: CD.MCCL.C08-T03 CD.MCCL.C12-T03 CD.MCCL.C12-T04 Renumbered Test cases: CD.MCCL.C08-T04 became CD.MCCL.C08-T03 Updated Test Cases: CD.MCCL.C08-T02 CD.MCCL.C08-T03 CD.MCCL.C08-T03 CD.MCCL.C09-T01 Card version numbers (profile table, Tag data) updated to match physical card version - all are currently v4.0. Tags 82, 9F07, 9F69: interpretation of bit values added		
2.00	August 20, 2018	TC03: updated to v5.0 - Tag 57 modified		
3.00	September 27, 2018	 Tag 82 (AIP) updated on non-Visa cards Discover cards (TC12, TC13) - Expiry date changed to 23/12 DNA Card (TC14) - Expiry date changed to 25/12 		
3.10	December 13, 2018	TC03: documentation updated to reflect Dual-Funding		
4.00	March 11, 2019	TC03: updated to v6.0 - Discretionary data modified		
4.01	June 7, 2019	Card set on which tests are based renamed to "USA Debit EMV Test Card Set". No change to cards themselves.		
5.00	June 21, 2019	TC16: updated to v5.0 - Language indicator modified		
6.00	July 7, 2020	TC10: Support for new physical cardstock added. No discernible change to EMV tags		

Version	Date	Revisions	
6.10	February 18, 2021	• TC15: MTI (Contactless) tags 9F52, 9F54, 9F55, 9F56, 9F57 revealed.	
7.00	March 23, 2021	TC05-TC11: (Mastercard/Maestro) change Expiry Date to 25/12	
8.00	December 14, 2021	 TC01-TC04: card expiry date updated TC01, TC05: PAR (Tag 9F 24) added TC15: replaced with updated DI card (Interac Flash BIN '00') TC16: Interac card replaced with Mastercard Credit/Debit/ U.S. Maestro card 	
9.00	March 18, 2022	TC15: new BIN, PAN, DES keys	
10.00	August 15, 2022	 TC12-13 – Discover cards change Expiry Date to 05/26. New PANs assigned. TC14 – DNA card. Support for new cardstock. No change to functionality 	
11.00	December 14, 2022	TC12– Tag 57 updated ('Final char is 'F')	
12.00	March 15, 2023	TC10 – Becomes DI Card TC15 - change cardstock – NO change to functionality	
13.00	April 4, 2023	TC12, TC13 – Cashback validation enabled	

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Chapter 1 - Overview

1.1 USA Debit EMV Test Plan - Purpose

This test plan is designed for clients who wish to utilize the USA Debit EMV Test Card Set, provided by B2, to perform internal testing, training and/or User Acceptance Testing (UAT) with U.S. processors.

The test plan benefits are derived from having a defined and repeatable testing methodology. In addition, the test plan includes test cases that test many functions which are required from a practical standpoint when releasing a debit-capable EMV POS Solution into the U.S. marketplace.

1.2 Target Audience

This document is intended for integrators, developers, POS vendors and merchants who wish to develop an EMV POS Solution that supports EMV contact and contactless debit functionality.

This document assumes that the user has a good understanding of POS credit and debit transaction processing in the U.S. and a general understanding of EMV and contactless smartcard concepts.

1.3 System Requirements

This is a standalone document that may be used with any POS architecture - e.g. standalone, semi-integrated or fully-integrated.

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Chapter 2 - Implementing U.S. Debit

2.1 U.S. Common Debit Scenarios

To meet the requirements of the Durbin amendment to the Dodd–Frank Wall Street Reform and Consumer Protection Act ("Durbin regulations"), and to provide merchants and/or acquirers the choice to route transactions from debit and prepaid card programs via unaffiliated networks; Visa, Mastercard, Discover and Debit Network Alliance (DNA) have introduced the following AIDs (commonly referred to as the "U.S. Common Debit AIDs").

U.S. Common Debit AIDs

Brand	Scheme	AID	
Discover	U.S. Common Debit	A0000001524010	
DNA	U.S. Common Debit	A0000006200620	
Mastercard	U.S. Maestro	A0000000042203	
Visa	Visa Common Debit	A000000980840	

Other individual debit networks (in addition to DNA) may offer their own U.S. Debit AIDs that will reside on non-Visa, non-Mastercard and non-Discover branded cards.

Visa, Mastercard and Discover branded chip cards, issued in the U.S. under debit and prepaid card programs, will support both a U.S. Common Debit AID and a Global Debit AID (either standard Visa AID, standard Mastercard AID, Maestro AID or standard Discover AID).

- If a Global Debit AID (Visa, Interlink, Mastercard, Maestro or Discover) is used to initiate the chip transaction, the transaction must be routed via the corresponding card brand network. The network used is based on the AID selected.
- If a U.S. Common Debit AID is used to initiate a chip transaction, the resulting transaction may be routed via any of the card brand networks, or any unaffiliated network that has executed the necessary access agreement with Visa, Mastercard or Discover.

For both contact and contactless transactions, EMV POS Solutions may use the standard Application Selection process described for all EMV transactions. However, the merchant may filter the resulting Candidate List to remove multiple AIDs which access the same underlying funding account, such that only one AID per unique funding account remains. EMV POS Solutions must <u>not</u> assume that if a U.S. Common Debit AID is present, that this AID can be automatically selected to the exclusion of all other AIDs on the card, as those AIDs may relate to alternative products which the cardholder may wish to use (e.g. a credit product which is issued together with a debit product).

All AIDs which relate to debit or prepaid programs can be identified in the data read during Application Selection. The presence of the following two data elements identifies the AID as relating to a U.S. Debit or prepaid program:

- Issuer Country Code (Tag 5F55) Two alpha digits with a value of 0x5553 ("US")
- Issuer Identification Number (Tag 42) Contains the Bank Identification Number (BIN) (i.e. the first 6 digits of the PAN).

There are three possible situations that must be handled:

- The card has two AIDs where these data elements are present and the values of the Issuer Identification Number (IIN) are the same for both AIDs (Scenario One below):
 - The EMV POS Solution should assume that the AIDs with the same IIN access the same underlying funding account and therefore can remove one of those AIDs from the Candidate List.
 - For contact and contactless transactions, where there are only 2 AIDs present in

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the card (1 Global AID and 1 U.S. Common AID), the EMV POS Solution may automatically select the single remaining AID in the Candidate List in accordance with Final Selection processing (section <u>2.5 Final Selection Processing</u> below). The card has more than 2 AIDs where these data elements are present and 2 of the AIDs have the same value for the Issuer Identification Number (IIN). In this scenario there will also be one or more other AID(s) present on the card that have either no IIN or a different IIN from the pair of AIDs with the same IIN (Scenario Two below):

- The EMV POS Solution should assume that the AIDs with the same IIN access the same underlying funding account and therefore can remove one of those AIDs from the Candidate List.
- For contact transactions, the EMV POS Solution should present the remaining Candidate List choices to the cardholder in accordance with Final Selection processing (section 1.4.3 below).
- For contactless transactions, the EMV POS Solution should automatically select the AID in the Candidate List that has the highest Application Priority Indicator (Tag 87) value.
- 2. When a card has two or more pairs of AIDs where these data elements are present and for each pair, both AIDs have the same IIN (Scenario Three below):
 - For each pair of AIDs with the same IIN, the EMV POS Solution should assume that the AIDs with the same IIN access the same underlying funding account and therefore can remove one of those AIDs from the Candidate List - leaving only one AID for each IIN.
 - For contact transactions, the EMV POS Solution should present the remaining Candidate List choices to the cardholder in accordance with Final Selection processing (section 1.4.3 below).
 - For contactless transactions, the EMV POS Solution should automatically select the AID in the Candidate List that has the highest Application Priority Indicator (Tag 87) value.

U.S. Common Debit Scenarios

0.0. 00	I Debit Scenarios				
Scenario One	AID Care	_	IIN Tag 42 Ile debit funding		
Global Debit AID	TC 01 - A000000031010 TC 05 - A000000041010 TC 12 - A0000000153010	US	TC 01 - 476173 TC 05 - 541333 TC 12 - 651000	Merchant may decide which AID to select based on their preferred routing choice: Global AID – may only be routed to Visa, Mastercare or Discover (any	
U.S. Common Debit AID	TC 01 - A0000000980840 TC 05 - A0000000042203 TC 12 - A0000000154010	US	TC 01 - 476173 TC 05 - 541333 TC 12 - 651000	supported CVM may be used) U.S. Common Debit AID may be routed to any of the global networks or any of the supported debit networks (any supported CVM may be used)	
Two	Combo card accessing a credit account and a single funding debit account: USA Debit Test Cards 03, 09				
Global Credit AID	TC 03 - A000000003101001 TC 09 - A0000000041010	n/a	n/a	Global Credit AID will remain in the Candidate List for cardholder selection.	

U.S. Common Debit Scenarios

U.S. COMMINION	n Debit Scenarios				
Scenario	AID	Country Code Tag 5F55	IIN Tag 42	Candidate List Choice for the Merchant	
Global Debit AID	TC 03 - A000000003101002 TC 09 - A0000000043060	US	TC 03 - 476173 TC 09 - 679999	Merchant should decide on either the Global AID or the U.S. Common Debit AID based on their preferred routing choice: Global AID – may only be routed to Visa, Mastercard or Discover (any supported CVM may be used) U.S. Common Debit AID – may be routed to any of the global networks or any of the supported debit networks (any supported CVM may be used)	
U.S. Common Debit AID	TC 03 - A0000000980840 TC 09 - A000000042203	US	TC 03 - 476173 TC 09 - 679999		
Three	Card accesses two		accounts – Acco	ounts have different IINs:	
Global Debit AID 1	TC 11 - A0000000043060	US	5413333	Merchant should choose either the 2 Global AIDs or the 2	
U.S. Common Debit AID 1	TC 11 - A000000004220301	US	541333	U.S. Common Debit AIDs based on their preferred routing choice: Global AIDs — may only be routed to	
Global Debit AID 2	TC 11 - A0000000041010	US	679999	Visa, Mastercard or Discover (any supported CVM may be used) U.S. Common Debit AIDs – may be routed to any of the global networks or any of the supported debit	
U.S. Common Debit AID 2	TC 11 - A0000000004220302	US	679999	networks (any supported CVM may be used)	

2.2 Application Selection for U.S. Debit with Cardholder Verification Handling

For traditional magstripe debit transactions, merchants can decide when selecting the card type what cardholder verification to use for a debit transaction. This may be either to:

- 1. Prompt the cardholder to enter the PIN (commonly referred to as "PIN Preferring Merchants"). The cardholder can, in some implementations, bypass the PIN to allow for a signature transaction.
- 2. Prompt the cardholder to select either 'Credit' or 'Debit' (commonly referred to as "Credit/Debit Prompting merchants"). In this situation:

- Credit means perform a Signature Debit transaction
- Debit means perform a PIN Debit transaction

This section describes how to perform Application Selection for EMV U.S. Debit so that the routing choice of the merchant is retained, and the expected cardholder verification is performed based on merchant and/or cardholder preferences. This section has been split between; PIN Preferring merchants and Credit/Debit Prompting merchants.

2.3 PIN Preferring Merchants:

The following assumptions have been made when describing the U.S. Debit Application Selection process for PIN Preferring Merchants:

- 1. Solutions supporting U.S. Debit will have two kernel configurations:
 - All CVM Configuration Terminal Capabilities (Tag 9F33) is set to support all CVMs the merchant wishes to support (e.g. PIN - offline/online, Signature and NO CVM).
 - NO CVM Configuration Terminal Capabilities (Tag 9F33) is set to support only the NO CVM option.
- 2. When using a configurable kernel, the Terminal Type (Tag 9F35) and Additional Terminal Capabilities (Tag 9F40) values may remain the same regardless of the value used for Terminal Capabilities (Tag 9F33).
- 3. PIN Bypass is supported by all PIN supporting kernel configurations.
- 4. The payment application supports a NO CVM limit for all payment products.

The steps required to filter the Candidate List to fully support U.S. Debit are:

- For each transaction the final amount for the transaction must be known prior to filtering the Candidate List.
- 2. Once the final amount is known and the Candidate List is created, the card type will be identified based on the list of AIDs in the Candidate List. There are two options:
 - The Candidate List does not contain any U.S. Common Debit AIDs This is either an international or domestic credit card or an international debit card (USA Debit Test Cards 04, 06, 07, 15 and 16). In this case there are no additional steps required to filter the Candidate List and the application can continue to the Final Selection Process (section 1.4.3 below).
 - The Candidate List contains one or more U.S. Common Debit AIDs This is a U.S. Debit card (USA Debit Test Cards 01, 02, 03, 05, 08, 09, 10, 11, 12, 13 and 14).
- 3. For U.S. Debit cards, the EMV POS Solution must determine which AIDs should remain in the Candidate List, based on the three scenarios described in Table 02 (above). Depending on the number of AIDs remaining in the Candidate List, one the following should be performed:
 - Candidate List only contains one AID Continue to step 4.
 - Candidate List contains more than one AID Continue to the Final Selection Process (section 1.4.3 below).
- 4. If the Candidate List only contains a single U.S. Common Debit AID, the EMV POS Solution must determine if the transaction is under or over the NO CVM limit:
 - Transaction is under the NO CVM limit Set Terminal Capabilities (Tag 9F33) to "NO CVM Only Configuration" and continue with Final Selection Process (section 1.4.3 below).
 - Transaction is over the NO CVM limit continue to step 5.

5. If the Candidate List contains a single U.S. Common Debit AID and the transaction is over the NO CVM limit for U.S. Debit, then set the Terminal Capabilities (Tag 9F33) to All CVM Configuration. Later during Cardholder Verification, the application will prompt for PIN and may allow the cardholder to bypass the PIN.

2.4 Credit/Debit Prompting Merchants:

The following assumptions have been made when describing the Application Selection process for merchants supporting Credit/Debit Prompting for U.S. Debit:

- 1. Solutions supporting U.S. Debit will have three kernel configurations:
 - All CVM Configuration Terminal Capabilities (Tag 9F33) is set to support all CVMs the merchant wishes to support (e.g. PIN - offline/online, Signature and NO CVM).
 - Signature and No CVM Configuration Terminal Capabilities (Tag 9F33) is set to support only Signature and the NO CVM option.
 - NO CVM Configuration Terminal Capabilities (Tag 9F33) is set to support only the NO CVM option.
- When using a configurable kernel, the Terminal Type (Tag 9F35) and Additional Terminal Capabilities (Tag 9F40) values may remain the same regardless of the value used for Terminal Capabilities (Tag 9F33).
- 3. PIN Bypass is supported in all PIN supporting kernel configurations.
- 4. The payment application supports a NO CVM limit for all payment products.

The steps required to filter the Candidate List to fully support U.S. Debit are:

- 1. For each transaction the final amount for the transaction must be known prior to filtering the Candidate List.
- 2. For each transaction the cardholder must select either Credit or Debit.
- 3. Once the final amount is known, the cardholder has selected either Debit or Credit, the Candidate List is created, the card type will be identified based on the list of AIDs in the Candidate List. There are two options:
 - The Candidate List does not contain any U.S. Common Debit AIDs This is either an international or domestic credit card or an international debit card (USA Debit Test Cards 04, 06, 07, 15 and 16). In this case there are no additional steps required in relation to filtering the Candidate List and the application can continue to the Final Selection Process (section 1.4.3 below).
 - The Candidate List contains one or more U.S. Common Debit AIDs This is a U.S. Debit card (USA Debit Test Cards 01, 02, 03, 05, 08, 09, 10, 11, 12, 13 and 14).
- 4. For U.S. Debit cards, the EMV POS Solution must determine which AIDs should remain in the Candidate List, based on the three scenarios described in Table 02 (above). For each of the scenarios described in Table 02 the AIDs to be removed from the Candidate List will also be based on the button selected by the cardholder (Credit/Debit):
 - Credit Button Selected Remove all U.S. Common AIDs that share an IIN with a Global AID.
 - Debit Button Selected Remove all Global AIDs that share an IIN with a U.S. Common AID.

Depending on the number of AIDs remaining in the Candidate List, one the following should be performed:

Candidate List only contains one AID – Continue to step 5.

- Candidate List contains more than one AID Continue to the Final Selection Process (section 1.4.3 below).
- 5. If the Candidate List only contains a single U.S. Common Debit AID, the EMV POS Solution must determine if the transaction is under or over the NO CVM limit:
 - Transaction is under the NO CVM limit Set Terminal Capabilities (Tag 9F33) to "NO CVM Only Configuration" and continue with Final Selection Process (section 1.4.3 below).

If the Candidate List only contains a single Global Debit AID, the EMV POS Solution must determine if the transaction is under or over the NO CVM limit:

- Transaction is under the NO CVM limit Set Terminal Capabilities (Tag 9F33) to "NO CVM Only Configuration" and continue with Final Selection Process (section 1.4.3 below).
- If the Transaction is over the NO CVM limit Continue to step 6.
- 6. If the Candidate List contains a single U.S. Common Debit AID and the transaction is over the U.S. Debit CVM limit for U.S. Debit, the following should be performed:
 - Transaction is over the NO CVM limit Set Terminal Capabilities (Tag 9F33) to "All CVM Configuration" and continue with Final Selection Process (section 1.4.3 below). PIN Bypass may still be allowed during EMV Cardholder Verification.

If the Candidate List contains a single Global Debit AID and the transaction is over the NO CVM limit for the Global Debit AID, the following should be performed:

Transaction is over the NO CVM limit – Set Terminal Capabilities (Tag 9F33) to "All CVM Configuration" and continue with Final Selection Process (section 1.4.3 below). As the transaction is over the NO CVM limit and the only CVM supported by the terminal is Signature - the application should print a signature line on the receipt.

2.5 Final Selection Processing

Once the Candidate List has been built and U.S. Common Debit processing has been performed, Final Selection can begin. During this process the AID to be used for the transaction is selected.

If the Candidate List only contains one AID it is automatically selected, Final Selection ends and Cardholder Application Confirmation may be performed.

- Cardholder Application Confirmation is only required when the Application Priority Indicator - Cardholder Confirmation Indicator (Tag 87 bit-8) is set to '1'.
- If cardholder confirmation is required, the cardholder must be prompted to confirm that the application may be used. To do this the Application Preferred Name (Tag 9F12) or the Application Label (Tag 50) is displayed to the cardholder who must then confirm the selection.

If the Candidate List contains two or more mutually supported applications (AIDs), the application list should be presented to the cardholder for selection. However, EMV POS Solutions may auto-select the U.S. Common Debit AID (if present). In a Credit/Debit Prompting configuration, Application Selection may occur after Credit/Debit Selection. This means that it may be necessary to prompt again for Credit or Debit based on the Application Label or Preferred Name of the AIDs in the candidate list.

When presenting the Candidate List for selection, the application names may be displayed all on one screen or with one application name per screen, using navigation buttons to traverse the list (e.g. 'Next' and 'Previous'). Regardless of the method used to display the Candidate List, the



application names displayed are determined as follows:

Display the Application Preferred Name (Tag 9F12) if it is stored in a character set supported by the display. This can be determined by checking the Issuer Code Table Index (Tag 9F11). A value of '1' indicates that the Application Preferred Name is encoded using the Latin character set (i.e. contains standard English alphabetic characters).

Display the Application Label (Tag 50) if the Application Preferred Name is not present or cannot be displayed.

If the Application Preferred Name and Application Label are not present or cannot be displayed, display a default' application name assigned to the AID by the EMV POS Solution.

Once the AID to be used for the transaction has been chosen, the kernel may relay the application information back to the payment' application, so the following can be performed:

Set the Terminal Capabilities (Tag 9F33) – This will be based on the NO CVM limit for the card type based on the merchant environment (Credit/Debit) or PIN Preferring and the AID that has been selected (either the "All CVM Configuration", "Signature and NO CVM Configuration" or the "NO CVM Only Configuration"):

Global Debit AID:

- Transaction is over the NO CVM limit:
- PIN Preferring Merchant Select the "All CVM Configuration"
- Credit/Debit Prompting Merchant Select the "Signature and NO CVM Configuration"
- Transaction is under the NO CVM limit (for both PIN Preferring and Credit/Debit)
 Select the "NO CVM Only Configuration"

U.S. Common Debit AID:

- Transaction is over the NO CVM limit (for both PIN Preferring and Credit/Debit) -Select the "All CVM Configuration"
- Transaction is under the NO CVM limit (for both PIN Preferring and Credit/Debit)
 Select the "NO CVM Only Configuration"

Set the Processing Code:

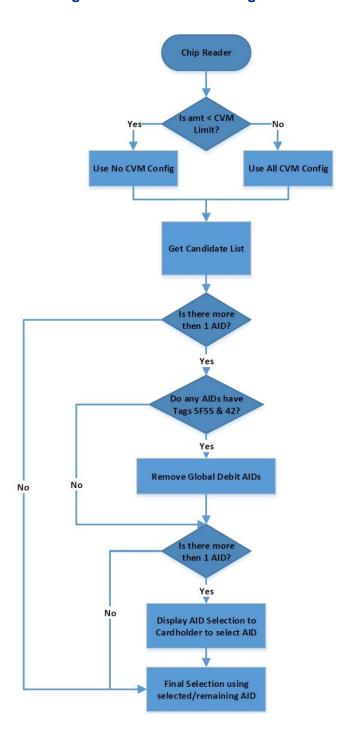
- International/Global AID selected a credit Processing Code should be used
- U.S. Common Debit AID, Interlink, Maestro or Interac selected a debit Processing Code should be used

The kernel can now select the AID on the chip and Final Selection ends.

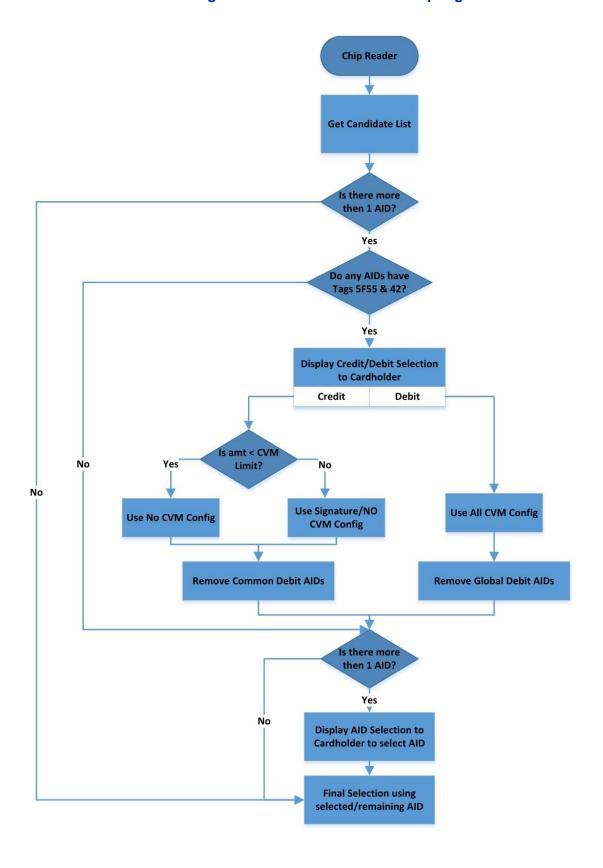
In some implementations it may not be feasible to perform cardholder Application Selection. For these cases, an EMV transaction should not be performed if the chip card contains multiple applications, unless there is a method to inform the cardholder which application is being used.

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2.6 U.S. Debit Processing Flowchart PIN Preferring Merchants



2.7 U.S. Debit Processing Flowchart - Credit/Debit Prompting Merchants



Chapter 3 - USA Debit EMV Test Plan

3.1 Test Case Outline

To perform the tests defined in this section you will require the USA Debit EMV Test Card Set provided by B2. The card numbers ('TCxx') used throughout will be consistent with that set. See USA Debit EMV Test Card Set Profiles in this document.

Types of Merchant Configuration include:

- PIN Preferring (PP)
- Credit/Debit Prompting (CD)

For test cards that have more than one AID, Application Selection methods include:

- Merchant-Controlled Candidate List (MCCL)
 Also referred to as 'filtering the candidate list' in the Chapter 2, entitled Implementing U.S. Debit
- Standard EMV Application Selection (SEAS)

Note - the short forms (in brackets, above) will be used in the naming of test cases.

Test cases are organized into categories by 'Merchant Configuration'.

The test cases for each of these cards are ordered according to type of merchant and (where applicable) the method used to select the application (where the card has more than a single AID).

3.2 Selecting Applicable Test Cases

The test cases have been organized into four categories based on merchant configuration. Users of this document should select the relevant configuration and only use test cases applicable to that configuration:

- PIN Preferring, Merchant Controlled Candidate List
- PIN Preferring, Standard EMV Application Selection
- Credit/Debit Prompting, Merchant Controlled Candidate List
- Credit/Debit Prompting, Standard EMV Application Selection

3.3 USA Debit EMV Test Cases

Important Assumption: All EMV Floor limits are set to \$0.00.

Important Notes:

- As of Version 8.00 of this document, Test Card 15 v4.0 was replaced with v5.0 and Test Card 16 v5.0 was replaced with v6.0. There are significant changes to these two cards.
 - TC 16 test cases have NOT been updated to reflect the changes. When that occurs, this notification will be removed.
- When the application prompts for Cashback, outcomes (Approval / Declined) may differ from one terminal configuration or host to another. It is advised that, if possible, Cashback be disabled.
- As of Version 6.0 of Test Card 15, this Interac Flash card has a BIN range of '001203'. These cards are supported by all Canadian processors but are not necessarily supported by all U.S. and International processors. Check with your acquirer account representative to determine if the Interac Flash BIN '001203' range is supported by their development host. If your processor does not yet support Interac Flash, the card will function properly at the POS but it will not obtain a host approval.



The format used for the Test Case naming is as follows.

DD.AAAA.Cxx-Tyy, where:

■ **DD** is:

PP - PIN Preferring

CD - Credit/Debit

• AAAA is:

MCCL - Merchant Controlled Candidate List)

SEAS - Standard EMV Application Selection

Cxx is:

The Card Number (01-16)

Tyy is:

The Test Number (resets to "01" for each card)

e.g.

PP.MCCL.C01-T01 – uses USA Debit Test Card 01 and would be run if the merchant is PIN Preferring and uses the Merchant-Controlled Candidate List method to choose the application. In this category there are four test cases and T01 is the first test case.

CD.SEAS.C03-T05 – uses USA Debit Test Card 03 and would be run if the merchant supports Credit/Debit Prompting and uses the Standard EMV Application Selection method to choose the application. In this category there are five test cases and T05 is the fifth test case.

3.3.1 Test Case ID and Title

PP.MCCL.C01-T01 PIN Preferring, Merchant Controlled Candidate List Card 01, Test 01

The first section is the Test Case ID followed by the test Title. The Title is intended to be as brief and concise as possible. In some situations, the test case Purpose and the test case number and suffix are required to distinguish the test from other similar test cases.

3.3.2 Type

Type: Contact

The second section identifies the test case Type. Two Types are supported – 'Contact' and 'Contactless'

3.3.3 Purpose

Purpose:

Test that when a Visa card with more than one AID is inserted, the application:

- Does <u>not</u> prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' AID

The third section is the test case Purpose – this defines what is being tested by the test case.

3.3.4 Pre-Requisites

Pre-Requisites:

- Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

The fourth section identifies any Pre-Requisites that must be completed prior to running the test case. Each test Type will have a standard set of pre-requisites, documented at the beginning of the test section.

3.3.5 Steps

Steps:

- Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card xx

The fifth section contains the Steps required to run the test case. Each step is a simple one action process. In most cases, only the steps applicable to the test being performed are documented, not all steps required to run the complete transaction.

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3.3.6 **Pass Criteria**

Pass Criteria:

- 1. "Chip" – indicates the card was inserted
- 2. "A000000980840" - AID selected was 'US Debit'

The sixth section identifies the test case Pass Criteria. This may range from a simple prompt or message on a screen, to contents of a receipt. Receipt information shown is required, but the exact receipt text may differ based on your specific merchant implementation and/or processor requirements.

3.3.7 **Comments**

Comments:

The last section identifies any general Comments. This section is intended to provide guidance or information that does not fit easily into any of the sections above. For most test cases this section is blank.

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3.3.8 Complete list of AIDs used in USA Debit EMV Test Card Set

AIDs that should be loaded in the acceptance device when testing using the USA Debit EMV Test Plan are seen in the table below.

Cards 01 - 11 contents: Application AID, Credit/Debit, Label, PAN

Card	Application 1	Application 2	Application 3	Application 4
	A000000031010	A000000980840		
01	Debit	Debit		
01	Visa Debit	US Debit		
	4761739001010135	4761739001010135		
	A000000980840			
02	Debit			
02	US Debit			
	4761739001010135			
	A00000003101001	A00000003101002	A000000980840	
03	Credit	Debit	Debit	
03	Visa Credit	Visa Debit	US Debit	
	4761739001010176	4761739001010135	4761739001010135	
	A000000033010			
04	Debit			
04	Interlink			
	4761731000000084			
	A000000041010	A0000000042203		
05	Debit	Debit		
03	Mastercard Debit	US Maestro		
	5413330089099130	5413330089099130		
	A0000000043060	A000000043060		
	D0561111	D0562222		
06	Debit	Debit		
	Maestro1	Maestro2		
	67999989000002010	67999989000002028		
	A000000041010	A000000043060		
07	Credit	Debit		
0,	Mastercard	Maestro		
	5413330089020060	6799998900000200051		
	A0000000042203	A0000000042203		
	D0561111	D0562222		
08	Debit	Debit		
	US Checking	US Savings		
	5413330089099007	5413330089099015		
	A0000000041010	A0000000043060	A0000000042203	
09	Credit	Debit	Debit	
	Mastercard	Maestro	US Maestro	
	5413330089020060	6799998900000200051	6799998900000200051	
	A0000000042203			
10	Debit			
-	US Maestro			
	5413330089099130	4.0000000000000000000000000000000000000	4.0000000040000	4.000000004000000
	A0000000041010	A000000004220301	A000000043060	A000000004220302
11	Debit	Debit	Debit	Debit
	Mastercard Debit	US Checking	Maestro	US Savings
	5413330089020060	5413330089020060	6799998900000200051	6799998900000200051

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Cards 12 - 16 contents: Application AID, Credit/Debit, Label, PAN

Card	Application 1	Application 2	Application 3	Application 4
12	A0000001524010	A0000001523010		
	Debit	Debit		
	US Debit	Discover Debit		
	6011973700000005	6011973700000005		
13	A0000001524010			
	Debit			
	US Debit			
	6011973700000005			
14	A0000006200620			
	Debit			
	DNA			
	4000000000000028			
15	A0000002771010	A0000002771010		
	Debit	Debit		
	Interac	Interac Flash		
	0012020000001	0012020000001		
16*	A000000004101001	A000000004101002	A000000000042203	
	Credit	Debit	Debit	
	Mastercard	Mastercard	US Maestro	
	5413330089020060	5413330089099130	5413330089099130	

3.3.9 PIN Preferring, Merchant Controlled Candidate List – Test Cases

3.3.9.1 PP.MCCL.C01-T01

PP.MCCL.C01-T01 PIN Preferring, Merchant Controlled Candidate List Card 01 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Does <u>not</u> prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.2 PP.MCCL.C01-T02

PP.MCCL.C01-T02 PIN Preferring, Merchant Controlled Candidate List Card 01 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.3 PP.MCCL.C01-T03

PP.MCCL.C01-T03 PIN Preferring, Merchant Controlled Candidate List Card 01 - Test 03

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, tap Test Card 01
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.4 PP.MCCL.C01-T04

PP.MCCL.C01-T04 PIN Preferring, Merchant Controlled Candidate List Card 01 - Test 04

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is above \$10

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- User is <u>not</u> prompted to enter a PIN
- 4. The 'US Debit' application is automatically selected
- 5. The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

3.3.9.5 PP.MCCL.C02-T01

PP.MCCL.C02-T01 PIN Preferring, Merchant Controlled Candidate List Card 02 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.6 PP.MCCL.C02-T02

PP.MCCL.C02-T02 PIN Preferring, Merchant Controlled Candidate List Card 02 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000980840
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.7 PP.MCCL.C03-T01

PP.MCCL.C03-T01 PIN Preferring, Merchant Controlled Candidate List Card 03 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Visa Credit' and 'US Debit' only
- 2. Allows the user to select the 'Visa Credit' application
- 3. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'Visa Credit' application when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Visa Credit' and 'US Debit' only
- 3. User is able to select 'Visa Credit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101001" AID selected was 'Visa Credit'
 - c. "0176" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.9.8 PP.MCCL.C03-T02

PP.MCCL.C03-T02 PIN Preferring, Merchant Controlled Candidate List Card 03 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Visa Credit' and 'US Debit' only
- 2. Allows the user to select the 'US Debit' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'US Debit' application when prompted
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Visa Credit' and 'US Debit' only
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.9 PP.MCCL.C03-T03

PP.MCCL.C03-T03 PIN Preferring, Merchant Controlled Candidate List Card 03 - Test 03

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Visa Credit' and 'US Debit' only
- 2. Allows the user to select the 'US Debit' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'US Debit' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Visa Credit' and 'US Debit' only
- User is able to select 'US Debit'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.10 PP.MCCL.C04-T01

PP.MCCL.C04-T01 PIN Preferring, Merchant Controlled Candidate List Card 04 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only the Interlink AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interlink' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000033010

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 04
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 4. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 5. User is <u>not</u> prompted to select an application
- The Interlink application is automatically selected
- 7. The transaction is approved
- 8. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000033010" AID selected was 'Interlink'
 - c. "0671" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.11 PP.MCCL.C05-T01

PP.MCCL.C05-T01 PIN Preferring, Merchant Controlled Candidate List Card 05 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.12 PP.MCCL.C05-T02

PP.MCCL.C05-T02 PIN Preferring, Merchant Controlled Candidate List Card 05 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 05
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.13 PP.MCCL.C05-T03

PP.MCCL.C05-T03 PIN Preferring, Merchant Controlled Candidate List Card 05 - Test 03

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.14 PP.MCCL.C05-T04

PP.MCCL.C05-T04 PIN Preferring, Merchant Controlled Candidate List Card 05 - Test 04

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is above \$20

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. User is not prompted to enter a PIN
- 4. The 'US Maestro' application is automatically selected
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

3.3.9.15 PP.MCCL.C06-T01

PP.MCCL.C06-T01 PIN Preferring, Merchant Controlled Candidate List Card 06 - Test 01

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 2. Allows the user to select the 'Maestro1' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. Select 'Maestro1' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro1'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0561111" AID selected was 'Maestro1'
 - c. "2010" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.16 PP.MCCL.C06-T02

PP.MCCL.C06-T02 PIN Preferring, Merchant Controlled Candidate List Card 06 - Test 02

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 2. Allows the user to select the 'Maestro2' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. Select 'Maestro2' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro2'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0562222" AID selected was 'Maestro2'
 - c. "2028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.17 PP.MCCL.C07-T01

PP.MCCL.C07-T01 PIN Preferring, Merchant Controlled Candidate List Card 07 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. Select 'Mastercard' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.18 PP.MCCL.C07-T02

PP.MCCL.C07-T02 PIN Preferring, Merchant Controlled Candidate List Card 07 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A000000043060
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 07
- 3. Select 'Mastercard' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- User is able to select 'Mastercard'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.19 PP.MCCL.C07-T03

PP.MCCL.C07-T03 PIN Preferring, Merchant Controlled Candidate List Card 07 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. Select 'Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was Maestro
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.20 PP.MCCL.C08-T01

PP.MCCL.C08-T01 PIN Preferring, Merchant Controlled Candidate List Card 08 - Test 01

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Checking' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Checking' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- 3. User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.21 PP.MCCL.C08-T02

PP.MCCL.C08-T02 PIN Preferring, Merchant Controlled Candidate List Card 08 - Test 02

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Checking' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Checking' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Checking'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.22 PP.MCCL.C08-T03

PP.MCCL.C08-T03 PIN Preferring, Merchant Controlled Candidate List Card 08 - Test 03

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Savings' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Savings' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- 3. User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.23 PP.MCCL.C08-T04

PP.MCCL.C08-T04 PIN Preferring, Merchant Controlled Candidate List Card 08 - Test 04

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Savings' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 08
- 3. Select 'US Savings' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Savings'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.24 PP.MCCL.C09-T01

PP.MCCL.C09-T01 PIN Preferring, Merchant Controlled Candidate List Card 09 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Mastercard' and 'US Maestro' only
- 2. Allows the user to select the 'Mastercard' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'Mastercard' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'US Maestro' only
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.9.25 PP.MCCL.C09-T02

PP.MCCL.C09-T02 PIN Preferring, Merchant Controlled Candidate List Card 09 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Mastercard' and 'US Maestro' only
- 2. Allows the user to select the 'Mastercard' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'Mastercard' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'US Maestro' only
- User is able to select 'Mastercard'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.26 PP.MCCL.C09-T03

PP.MCCL.C09-T03 PIN Preferring, Merchant Controlled Candidate List Card 09 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Mastercard' and 'US Maestro' only
- 2. Allows the user to select the 'US Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'US Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'US Maestro' only
- 3. User is able to select 'US Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.27 PP.MCCL.C09-T04

PP.MCCL.C09-T04 PIN Preferring, Merchant Controlled Candidate List Card 09 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts the user for Application Selection by displaying 'Mastercard' and 'US Maestro' only
- 2. Allows the user to select the 'US Maestro' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'US Maestro' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'US Maestro' only
- 3. User is able to select 'US Maestro'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.28 PP.MCCL.C10-T01

PP.MCCL.C10-T01 PIN Preferring, Merchant Controlled Candidate List Card 10 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.29 PP.MCCL.C10-T02

PP.MCCL.C10-T02 PIN Preferring, Merchant Controlled Candidate List Card 10 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.30 PP.MCCL.C11-T01

PP.MCCL.C11-T01 PIN Preferring, Merchant Controlled Candidate List Card 11 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Checking' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'US Checking' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- 3. User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.31 PP.MCCL.C11-T02

PP.MCCL.C11-T02 PIN Preferring, Merchant Controlled Candidate List Card 11 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Checking' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- Select 'US Checking' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Checking'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.32 PP.MCCL.C11-T03

PP.MCCL.C11-T03 PIN Preferring, Merchant Controlled Candidate List Card 11 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Savings' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'US Savings' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- 3. User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.33 PP.MCCL.C11-T04

PP.MCCL.C11-T04 PIN Preferring, Merchant Controlled Candidate List Card 11 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 2. Allows the user to select the 'US Savings' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'US Savings' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Savings'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.34 PP.MCCL.C12-T01

PP.MCCL.C12-T01 PIN Preferring, Merchant Controlled Candidate List Card 12 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.35 PP.MCCL.C12-T02

PP.MCCL.C12-T02 PIN Preferring, Merchant Controlled Candidate List Card 12 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does <u>not</u> prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.36 PP.MCCL.C12-T03

PP.MCCL.C12-T03 PIN Preferring, Merchant Controlled Candidate List Card 12 - Test 03

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.37 PP.MCCL.C12-T04

PP.MCCL.C12-T04 PIN Preferring, Merchant Controlled Candidate List Card 12 - Test 04

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is above \$79

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. User is not prompted to enter a PIN
- 4. The 'US Debit' application is automatically selected
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

Comments:

3.3.9.38 PP.MCCL.C13-T01

PP.MCCL.C13-T01 PIN Preferring, Merchant Controlled Candidate List Card 13 - Test 01

PP.MCCL.C13-T01 PIN Preferring, Merchant Controlled Candidate List Card 13 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Does <u>not</u> prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000001524010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.9.39 PP.MCCL.C13-T02

PP.MCCL.C13-T02 PIN Preferring, Merchant Controlled Candidate List Card 13 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000001524010
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.9.40 PP.MCCL.C14-T01

PP.MCCL.C14-T01 PIN Preferring, Merchant Controlled Candidate List Card 14 - Test 01

Type: Contact

Purpose:

Test that when a DNA card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'DNA' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000006200620

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 14
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- The DNA application is automatically selected
- The transaction is approved / declined *
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000006200620" AID selected was 'DNA'
 - c. "0028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

* Final disposition (Approved / Declined) is outside the scope of this document. For this test case to be successful, the transaction should go online but as the cryptogram doesn't need to be valid, the host may approve or decline.

3.3.9.41 PP.MCCL.C15-T01

PP.MCCL.C15-T01 PIN Preferring, Merchant Controlled Candidate List Card 15 - Test 01

Type: Contact

Purpose:

Test that when an Interac Flash card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "8644" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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3.3.9.42 PP.MCCL.C16-T01

PLEASE READ IMPORTANT NOTES AT THE BEGINING OF SECTION 3.3

PP.MCCL.C16-T01 PIN Preferring, Merchant Controlled Candidate List Card 16 - Test 01

Type: Contact

Purpose:

Test that when an Interac card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- When prompted for card entry, insert Test Card 16
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "1933" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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3.3.10 PIN Preferring, Standard EMV Application Selection – Test Cases

3.3.10.1 PP.SEAS.C01-T01

PP.SEAS.C01-T01 PIN Preferring, Standard EMV Application Selection Card 01 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'Visa Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- 3. Select 'Visa Debit' application when prompted

Pass Criteria:

- User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Visa Debit' and 'US Debit'
- 3. User is able to select 'Visa Debit'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.10.2 PP.SEAS.C01-T02

PP.SEAS.C01-T02 PIN Preferring, Standard EMV Application Selection Card 01 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- Select 'US Debit' application when prompted
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- User is prompted to select 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.3 PP.SEAS.C01-T03

PP.SEAS.C01-T03 PIN Preferring, Standard EMV Application Selection Card 01 - Test 03

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports AID A000000031010, A0000000980840
- 4. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$10.00
- When prompted for card entry, insert Test Card 01
- Select 'US Debit' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.4 PP.SEAS.C01-T04

PP.SEAS.C01-T04 PIN Preferring, Standard EMV Application Selection Card 01 - Test 04

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Visa Debit' application
- 4. Uses Signature as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports AID A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Visa Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" Signature CVM was used

3.3.10.5 PP.SEAS.C01-T05

PP.SEAS.C01-T05 PIN Preferring, Standard EMV Application Selection Card 01 - Test 05

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Visa Debit' application
- 4. Does <u>not</u> require a Signature as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports AID A000000031010, A0000000980840
- Contactless CVM Floor limit is above \$10

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Visa Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No Signature Required" No CVM was used

3.3.10.6 PP.SEAS.C02-T01

PP.SEAS.C02-T01 PIN Preferring, Standard EMV Application Selection Card 02 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.7 PP.SEAS.C02-T02

PP.SEAS.C02-T02 PIN Preferring, Standard EMV Application Selection Card 02 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000980840
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.8 PP.SEAS.C03-T01

PP.SEAS.C03-T01 PIN Preferring, Standard EMV Application Selection Card 03 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 2. Allows the user to select the 'Visa Credit' application
- 3. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'Visa Credit' application when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'Visa Credit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101001" AID selected was 'Visa Credit'
 - c. '0176' last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.10.9 PP.SEAS.C03-T02

PP.SEAS.C03-T02 PIN Preferring, Standard EMV Application Selection Card 03 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 2. Allows the user to select the 'Visa Debit' application
- 3. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'Visa Debit' application when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'Visa Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101002" AID selected was 'Visa Debit'
 - c. '0135' last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.10.10 PP.SEAS.C03-T03

PP.SEAS.C03-T03 PIN Preferring, Standard EMV Application Selection Card 03 - Test 03

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 2. Allows the user to select the 'US Debit' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'US Debit' application when prompted
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. '0135 last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.11 PP.SEAS.C03-T04

PP.SEAS.C03-T04 PIN Preferring, Standard EMV Application Selection Card 03 - Test 04

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 2. Allows the user to select the 'US Debit' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. Select 'US Debit' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. '0135' last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.12 PP.SEAS.C04-T01

PP.SEAS.C04-T01 PIN Preferring, Standard EMV Application Selection Card 04 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only the Interlink AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'Interlink' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000033010

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 04
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is <u>not</u> prompted to select an application
- 3. The 'Interlink' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000033010" AID selected was 'Interlink'
 - c. "0671" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.13 PP.SEAS.C05-T01

PP.SEAS.C05-T01 PIN Preferring, Standard EMV Application Selection Card 05 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'US Maestro'
- 3. Allows the user to select the 'Mastercard Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. Select 'Mastercard Debit' application when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard and 'US Maestro'
- User is able to select 'Mastercard Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.10.14 PP.SEAS.C05-T02

PP.SEAS.C05-T02 PIN Preferring, Standard EMV Application Selection Card 05 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'US Maestro'
- 3. Allows the user to select the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. Select 'US Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'US Maestro'
- User is able to select 'US Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.15 PP.SEAS.C05-T03

PP.SEAS.C05-T03 PIN Preferring, Standard EMV Application Selection Card 05 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'US Maestro'
- 3. Allows the user to select the 'US Maestro' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05
- 3. Select 'US Maestro' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'US Maestro'
- User is able to select 'US Maestro'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.16 PP.SEAS.C05-T04

PP.SEAS.C05-T04 PIN Preferring, Standard EMV Application Selection Card 05 - Test 04

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Mastercard Debit' application
- 4. Uses Signature as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Mastercard Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature Panel" Signature CVM was used

3.3.10.17 PP.SEAS.C05-T05

PP.SEAS.C05-T05 PIN Preferring, Standard EMV Application Selection Card 05 - Test 05

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Mastercard Debit' application
- 4. Does <u>not</u> require a Signature as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is above \$20

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Mastercard Debit' application is automatically selected
- 4. The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "No Signature Required" No CVM was used

3.3.10.18 PP.SEAS.C06-T01

PP.SEAS.C06-T01 PIN Preferring, Standard EMV Application Selection Card 06 - Test 01

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 2. Allows the user to select the 'Maestro1' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. Select 'Maestro1' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro1'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0561111" AID selected was 'Maestro1'
 - c. "2010" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.19 PP.SEAS.C06-T02

PP.SEAS.C06-T02 PIN Preferring, Standard EMV Application Selection Card 06 - Test 02

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 2. Allows the user to select the 'Maestro2' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. Select 'Maestro2' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro2'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0562222" AID selected was 'Maestro2'
 - c. "2028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.20 PP.SEAS.C07-T01

PP.SEAS.C07-T01 PIN Preferring, Standard EMV Application Selection Card 07 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. Select 'Mastercard' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- User is able to select 'Mastercard'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.21 PP.SEAS.C07-T02

PP.SEAS.C07-T02 PIN Preferring, Standard EMV Application Selection Card 07 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Allows the user to bypass the PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A000000043060
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 07
- 3. Select 'Mastercard' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass the PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.22 PP.SEAS.C07-T03

PP.SEAS.C07-T03 PIN Preferring, Standard EMV Application Selection Card 07 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit and a Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 2. Allows the user to select the 'Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. Select 'Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was Maestro
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.23 PP.SEAS.C08-T01

PP.SEAS.C08-T01 PIN Preferring, Standard EMV Application Selection Card 08 - Test 01

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 2. Allows the user to select the 'US Checking' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Checking' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- 3. User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.24 PP.SEAS.C08-T02

PP.SEAS.C08-T02 PIN Preferring, Standard EMV Application Selection Card 08 - Test 02

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 2. Allows the user to select the 'US Checking' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 08
- 3. Select 'US Checking' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- User is able to select 'US Checking'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.25 PP.SEAS.C08-T03

PP.SEAS.C08-T03 PIN Preferring, Standard EMV Application Selection Card 08 - Test 03

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 2. Allows the user to select the 'US Savings' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Savings' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- 3. User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.26 PP.SEAS.C08-T04

PP.SEAS.C08-T04 PIN Preferring, Standard EMV Application Selection Card 08 - Test 04

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 2. Allows the user to select the 'US Savings' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. Select 'US Savings' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- User is able to select 'US Savings'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.27 PP.SEAS.C09-T01

PP.SEAS.C09-T01 PIN Preferring, Standard EMV Application Selection Card 09 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'Mastercard' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.28 PP.SEAS.C09-T02

PP.SEAS.C09-T02 PIN Preferring, Standard EMV Application Selection Card 09 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 2. Allows the user to select the 'Mastercard' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'Mastercard' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. User is able to select 'Mastercard'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.29 PP.SEAS.C09-T03

PP.SEAS.C09-T03 PIN Preferring, Standard EMV Application Selection Card 09 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 2. Allows the user to select the 'Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.30 PP.SEAS.C09-T04

PP.SEAS.C09-T04 PIN Preferring, Standard EMV Application Selection Card 09 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 2. Allows the user to select the 'US Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. Select 'US Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- User is able to select 'US Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.31 PP.SEAS.C09-T05

PP.SEAS.C09-T05 PIN Preferring, Standard EMV Application Selection Card 09 - Test 05

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 2. Allows the user to select the 'US Maestro' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- Select 'US Maestro' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. User is able to select 'US Maestro'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.32 PP.SEAS.C10-T01

PP.SEAS.C10-T01 PIN Preferring, Standard EMV Application Selection Card 10 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.33 PP.SEAS.C10-T02

PP.SEAS.C10-T02 PIN Preferring, Standard EMV Application Selection Card 10 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.34 PP.SEAS.C11-T01

PP.SEAS.C11-T01 PIN Preferring, Standard EMV Application Selection Card 11 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'Mastercard Debit' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'Mastercard Debit' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'Mastercard Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.35 PP.SEAS.C11-T02

PP.SEAS.C11-T02 PIN Preferring, Standard EMV Application Selection Card 11 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'Mastercard Debit' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 4. Application is configured as PIN Preferring
- 5. Application Selection is Standard EMV Application Selection
- Terminal supports the following AIDs: A0000000041010, A0000000043060 and A000000042203
- 7. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'Mastercard Debit' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'Mastercard Debit'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.36 PP.SEAS.C11-T03

PP.SEAS.C11-T03 PIN Preferring, Standard EMV Application Selection Card 11 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'US Checking' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'US Checking' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.37 PP.SEAS.C11-T04

PP.SEAS.C11-T04 PIN Preferring, Standard EMV Application Selection Card 11 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'US Checking' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'US Checking' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Checking'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.38 PP.SEAS.C11-T05

PP.SEAS.C11-T05 PIN Preferring, Standard EMV Application Selection Card 11 - Test 05

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'Maestro' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. Select 'Maestro' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.39 PP.SEAS.C11-T06

PP.SEAS.C11-T06 PIN Preferring, Standard EMV Application Selection Card 11 - Test 06

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'US Savings' application
- 3. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- Select 'US Savings' application when prompted
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.40 PP.SEAS.C11-T07

PP.SEAS.C11-T07 PIN Preferring, Standard EMV Application Selection Card 11 - Test 07

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 2. Allows the user to select the 'US Savings' application
- 3. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 11
- 3. Select 'US Savings' application when prompted
- 4. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Savings'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.41 PP.SEAS.C12-T01

PP.SEAS.C12-T01 PIN Preferring, Standard EMV Application Selection Card 12 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. Select 'US Debit' application when prompted
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.42 PP.SEAS.C12-T02

PP.SEAS.C12-T02 PIN Preferring, Standard EMV Application Selection Card 12 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. Select 'US Debit' application when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- User is able to select 'US Debit'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.43 PP.SEAS.C12-T03

PP.SEAS.C12-T03 PIN Preferring, Standard EMV Application Selection Card 12 - Test 03

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'Discover Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. Select 'Discover Debit' application when prompted
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- 3. User is able to select 'Discover Debit'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001523010" AID selected was 'Discover Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.44 PP.SEAS.C12-T04

PP.SEAS.C12-T04 PIN Preferring, Standard EMV Application Selection Card 12 - Test 04

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'Discover Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. Select 'Discover Debit' application when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- User is able to select 'Discover Debit'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001523010" AID selected was 'Discover Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.45 PP.SEAS.C12-T05

PP.SEAS.C12-T05 PIN Preferring, Standard EMV Application Selection Card 05 - Test 05

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.46 PP.SEAS.C12-T06

PP.SEAS.C12-T06 PIN Preferring, Standard EMV Application Selection Card 12 - Test 06

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is above \$79

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No Signature Required" No CVM was used

3.3.10.47 PP.SEAS.C13-T01

PP.SEAS.C13-T01 PIN Preferring, Standard EMV Application Selection Card 13 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000001524010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.10.48 PP.SEAS.C13-T02

PP.SEAS.C13-T02 PIN Preferring, Standard EMV Application Selection Card 13 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000001524010
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- 5. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.10.49 PP.SEAS.C14-T01

PP.SEAS.C14-T01 PIN Preferring, Standard EMV Application Selection Card 14 - Test 01

Type: Contact

Purpose:

Test that when a DNA card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'DNA' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000006200620

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 14
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- The 'DNA' application is automatically selected
- The transaction is approved *
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000006200620" AID selected was 'DNA'
 - c. "0028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

* Final disposition (Approved / Declined) is outside the scope of this document. For this test case to be successful, the transaction should go online but as the cryptogram doesn't need to be valid, the host may approve or decline.

3.3.10.50 PP.SEAS.C15-T01

PP.SEAS.C15-T01 PIN Preferring, Standard EMV Application Selection Card 15 - Test 01

Type: Contact

Purpose:

Test that when an Interac Flash card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "8644" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

3.3.10.51 PP.SEAS.C16-T01

PLEASE READ IMPORTANT NOTES AT THE BEGINING OF SECTION 3.3

PP.SEAS.C16-T01 PIN Preferring, Standard EMV Application Selection Card 16 - Test 01

Type: Contact

Purpose:

Test that when an Interac card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- When prompted for card entry, insert Test Card 16
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "1933" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

3.3.11 Credit/Debit Prompting, Merchant Controlled Candidate List – Test Cases

3.3.11.1 CD.MCCL.C01-T01

CD.MCCL.C01-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 01 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.2 CD.MCCL.C01-T02

CD.MCCL.C01-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 01 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Visa Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Visa Debit' application is automatically selected
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

Comments:

3.3.11.3 CD.MCCL.C01-T03

CD.MCCL.C01-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 01 - Test 03

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, tap Test Card 01
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.4 CD.MCCL.C01-T04

CD.MCCL.C01-T04 Credit/Debit Prompting, Merchant Controlled Candidate List Card 01 - Test 04

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is above \$10

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- User is <u>not</u> prompted to enter a PIN
- 4. The 'US Debit' application is automatically selected
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

3.3.11.5 CD.MCCL.C02-T01

CD.MCCL.C02-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 02 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'

C.

- d. "0135" last 4 digits of the PAN
- e. "Verified by PIN" PIN CVM was used

3.3.11.6 CD.MCCL.C02-T02

CD.MCCL.C02-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 02 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.7 CD.MCCL.C03-T01

CD.MCCL.C03-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 03 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying the following applications: 'Visa Credit' and 'Visa Debit'
- 3. Allows the user to select the 'Visa Credit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, insert Test Card 03
- When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit' and 'Visa Debit'
- 3. User is able to select 'Visa Credit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101001" AID selected was 'Visa Credit'
 - c. "0176" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

Comments:

3.3.11.8 CD.MCCL.C03-T02

CD.MCCL.C03-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 03 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts for Credit and Debit (user selects 'Credit)
- 2. Prompts the user for Application Selection by displaying the following applications: 'Visa Credit' and 'Visa Debit'
- 3. Allows the user to select the 'Visa Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, insert Test Card 03
- 3. When prompted, select 'Credit'

Pass Criteria:

- User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit' and 'Visa Debit'
- 3. User is able to select 'Visa Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A00000003101002" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.9 CD.MCCL.C03-T03

CD.MCCL.C03-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 03 - Test 03

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.10 CD.MCCL.C04-T01

CD.MCCL.C04-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 04 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only the Interlink AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'Interlink' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000033010

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 04
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'Interlink' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000033010" AID selected was 'Interlink'
 - c. "0671" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.11 CD.MCCL.C05-T01

CD.MCCL.C05-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 05 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.12 CD.MCCL.C05-T02

CD.MCCL.C05-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 05 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Mastercard Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Mastercard Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.13 CD.MCCL.C05-T03

CD.MCCL.C05-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 05 - Test 03

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.14 CD.MCCL.C05-T04

CD.MCCL.C05-T04 Credit/Debit Prompting, Merchant Controlled Candidate List Card 05 - Test 04

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is above \$10

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. User is not prompted to enter a PIN
- 4. The 'US Maestro' application is automatically selected
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

3.3.11.15 CD.MCCL.C06-T01

CD.MCCL.C06-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 06 - Test 01

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 3. Allows the user to select the 'Maestro1' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro1' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro1'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0561111" AID selected was 'Maestro1'
 - c. "2010" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.16 CD.MCCL.C06-T02

CD.MCCL.C06-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 06 - Test 02

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 3. Allows the user to select the 'Maestro2' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 1. Terminal supports the following AID: A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro2' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro2'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0562222" AID selected was 'Maestro2'
 - c. "2028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.17 CD.MCCL.C07-T01

CD.MCCL.C07-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 07 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 07
- When prompted, select 'Credit'
- 4. Select 'Mastercard' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select 'Mastercard' and 'Maestro'
- User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.18 CD.MCCL.C07-T02

CD.MCCL.C07-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 07 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. When prompted, select 'Debit'
- 4. Select 'Mastercard' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.19 CD.MCCL.C07-T03

CD.MCCL.C07-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 07 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.20 CD.MCCL.C08-T01

CD.MCCL.C08-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 08 - Test 01

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Gives an error for an 'Empty Candidate List' outcome.

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted with an error message relevant for an 'Empty Candidate List' outcome
- 3. The transaction is not processed as a chip transaction

Comments:

Fallback processing is out of scope of this test plan

3.3.11.21 CD.MCCL.C08-T02

CD.MCCL.C08-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 08 - Test 02

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 3. Allows the user to select the 'US Checking' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Debit'
- 4. Select 'US Checking' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Checking'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.22 CD.MCCL.C08-T03

CD.MCCL.C08-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 08 - Test 03

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 3. Allows the user to select the 'US Savings' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Debit'
- 4. Select 'US Savings' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Savings'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

3.3.11.23 CD.MCCL.C09-T01

CD.MCCL.C09-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 09 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying the following applications: 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Mastercard' and 'Maestro'
- User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

Comments:

3.3.11.24 CD.MCCL.C09-T02

CD.MCCL.C09-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 09 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.25 CD.MCCL.C10-T01

CD.MCCL.C10-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 10 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.26 CD.MCCL.C10-T02

CD.MCCL.C10-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 10 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'US Maestro' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.27 CD.MCCL.C11-T01

CD.MCCL.C11-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 11 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'Maestro' only
- 3. Allows the user to select the 'Mastercard Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. When prompted, select 'Credit'
- 4. Select 'Mastercard Debit' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'Maestro' only
- 3. User is able to select 'Mastercard Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "0060" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.28 CD.MCCL.C11-T02

CD.MCCL.C11-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 11 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 3. Allows the user to select the 'US Checking' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Debit'
- 4. Select 'US Checking' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.29 CD.MCCL.C11-T03

CD.MCCL.C11-T03 Credit/Debit Prompting, Merchant Controlled Candidate List Card 11 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'Maestro' only
- 3. Allows the user to select the 'Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Credit'
- 4. Select 'Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'Maestro' only
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.30 CD.MCCL.C11-T04

CD.MCCL.C11-T04 Credit/Debit Prompting, Merchant Controlled Candidate List Card 11 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings' only
- 3. Allows the user to select the 'US Savings' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. When prompted, select 'Debit'
- 4. Select 'US Savings' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- 3. User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.31 CD.MCCL.C12-T01

CD.MCCL.C12-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 12 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.32 CD.MCCL.C12-T02

CD.MCCL.C12-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 12 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Discover Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Discover Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001523010" AID selected was 'Discover Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.33 CD.MCCL.C13-T01

CD.MCCL.C13-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 13 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000001524010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.11.34 CD.MCCL.C13-T02

CD.MCCL.C13-T02 Credit/Debit Prompting, Merchant Controlled Candidate List Card 13 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000001524010

Steps:

- Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.11.35 CD.MCCL.C14-T01

CD.MCCL.C14-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 14 - Test 01

Type: Contact

Purpose:

Test that when a DNA card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'DNA' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000006200620

Steps:

- Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 14
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- The 'DNA' application is automatically selected
- 4. The transaction is approved *
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000006200620" AID selected was 'DNA'
 - c. "0028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

* Final disposition (Approved / Declined) is outside the scope of this document. For this test case to be successful, the transaction should go online but as the cryptogram doesn't need to be valid, the host may approve or decline.

3.3.11.36 CD.MCCL.C15-T01

CD.MCCL.C15-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 15 - Test 01

Type: Contact

Purpose:

Test that when an Interac Flash card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "8644" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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3.3.11.37 CD.MCCL.C16-T01

PLEASE READ IMPORTANT NOTES AT THE BEGINING OF SECTION 3.3

CD.MCCL.C16-T01 Credit/Debit Prompting, Merchant Controlled Candidate List Card 16 - Test 01

Type: Contact

Purpose:

Test that when an Interac card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 16
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "1933" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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3.3.12 Credit/Debit Selection, Standard EMV Application Selection – Test Cases

3.3.12.1 CD.SEAS.C01-T01

CD.SEAS.C01-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 01 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'Visa Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, insert Test Card 01
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Visa Debit' and 'US Debit'
- 3. User is able to select 'Visa Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.2 CD.SEAS.C01-T02

CD.SEAS.C01-T02 Credit/Debit Prompting, Standard EMV Application List Card 01 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 01
- When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.3 CD.SEAS.C01-T03

CD.SEAS.C01-T03 Credit/Debit Prompting, Standard EMV Application List Card 01 - Test 03

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'Visa Debit' application
- 4. Uses Signature as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports AID A000000031010, A0000000980840
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Visa Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000031010" AID selected was 'Visa Debit'
 - C.
 - d. "0135" last 4 digits of the PAN
 - e. "Signature panel" Signature CVM was used

3.3.12.4 CD.SEAS.C01-T04

CD.SEAS.C01-T04 Credit/Debit Prompting, Standard EMV Application Selection Card 01 - Test 04

Type: Contactless

Purpose:

Test that when a Visa card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Visa Debit' application
- 4. Does <u>not</u> require a Signature as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports AID A000000031010, A0000000980840
- Contactless CVM Floor limit is above \$10

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, tap Test Card 01

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Visa Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000031010" AID selected was 'Visa Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "No Signature Required" No CVM was used

3.3.12.5 CD.SEAS.C02-T01

CD.SEAS.C02-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 02 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 02
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.6 CD.SEAS.C02-T02

CD.SEAS.C02-T02 Credit/Debit Prompting, Standard EMV Application Selection Card 02 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'US Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- When prompted for card entry, insert Test Card 02
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. "0135" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.7 CD.SEAS.C03-T01

CD.SEAS.C03-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 03 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with a Credit AID and more than one Debit AID is inserted, the application:

- Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'Visa Credit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. When prompted, select 'Credit'

Pass Criteria:

- User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- User is able to select 'Visa Credit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101001" AID selected was 'Visa Credit'
 - c. '0176' last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

Comments:

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3.3.12.8 CD.SEAS.C03-T02

CD.SEAS.C03-T02 Credit/Debit Prompting, Standard EMV Application List Card 03 - Test 02

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'Visa Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. When prompted, select 'Credit'
- 4. Select 'Visa Debit' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'Visa Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000003101002" AID selected was 'Visa Debit'
 - c. '0135' last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.9 CD.SEAS.C03-T03

CD.SEAS.C03-T03 Credit/Debit Prompting, Standard EMV Application Selection Card 03 - Test 03

Type: Contact

Purpose:

Test that when a Visa card with a Credit and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A0000000980840

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 03
- 3. When prompted, select 'Debit'
- 4. Select 'US Debit' application when prompted
- 5. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select all of the following applications: 'Visa Credit', 'Visa Debit' and 'US Debit'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000980840" AID selected was 'US Debit'
 - c. '0135 last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.10 CD.SEAS.C04-T01

CD.SEAS.C04-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 04 - Test 01

Type: Contact

Purpose:

Test that when a Visa card with only the Interlink AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does not prompt for Application Selection
- 3. Automatically selects the 'Interlink' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000033010

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 04
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'Interlink' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000033010" AID selected was 'Interlink'
 - c. "0671" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.11 CD.SEAS.C05-T01

CD.SEAS.C05-T01 Credit/Debit Prompting, Standard EMV Application List Card 05 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'US Maestro'
- 3. Allows the user to select the 'Mastercard Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 05
- 3. When prompted, select 'Credit'
- 4. Select 'Mastercard' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'US Maestro'
- User is able to select 'Mastercard'
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'

C.

- d. "9130" last 4 digits of the PAN
- e. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.12 CD.SEAS.C05-T02

CD.SEAS.C05-T02 Credit/Debit Prompting, Standard EMV Application List Card 05 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard Debit' and 'US Maestro'
- 3. Allows the user to select the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 05
- 3. When prompted, select 'Debit'
- 4. Select 'US Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'US Maestro'
- User is able to select 'US Maestro'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

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3.3.12.13 CD.SEAS.C05-T03

CD.SEAS.C05-T03 Credit/Debit Prompting, Standard EMV Application Selection Card 05 - Test 03

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Mastercard Debit' application
- 4. Uses Signature as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Mastercard Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature Panel" Signature CVM was used

3.3.12.14 CD.SEAS.C05-T04

CD.SEAS.C05-T04 Credit/Debit Prompting, Standard EMV Application Selection Card 05 - Test 04

Type: Contactless

Purpose:

Test that when a Mastercard card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Mastercard Debit' application
- 4. Does <u>not</u> require a Signature as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000042203
- 4. Contactless CVM Floor limit is above \$20

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, tap Test Card 05

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Mastercard Debit' application is automatically selected
- 4. The transaction is approved
- Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "9130" last 4 digits of the PAN
 - d. "No Signature Required" No CVM was used

3.3.12.15 CD.SEAS.C06-T01

CD.SEAS.C06-T01 Credit/Debit Prompting, Standard EMV Application List Card 06 - Test 01

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 3. Allows the user to select the 'Maestro1' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro1' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro1'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0561111" AID selected was 'Maestro1'
 - c. "2010" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.16 CD.SEAS.C06-T02

CD.SEAS.C06-T02 Credit/Debit Prompting, Standard EMV Application List Card 06 - Test 02

Type: Contact

Purpose:

Test that when a Maestro card with more than one Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Maestro1' and 'Maestro2'
- 3. Allows the user to select the 'Maestro2' application

Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 06
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro2' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Maestro1' and 'Maestro2'
- User is able to select 'Maestro2'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060D0562222" AID selected was 'Maestro2'
 - c. "2028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.17 CD.SEAS.C07-T01

CD.SEAS.C07-T01 Credit/Debit Prompting, Standard EMV Application List Card 07 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. When prompted, select 'Credit'
- 4. Select 'Mastercard' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.18 CD.SEAS.C07-T02

CD.SEAS.C07-T02 Credit/Debit Prompting, Standard EMV Application List Card 07 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. When prompted, select 'Debit'
- 4. Select 'Mastercard' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.19 CD.SEAS.C07-T03

CD.SEAS.C07-T03 Credit/Debit Prompting, Standard EMV Application List Card 07 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and a Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'Mastercard' and 'Maestro'
- 3. Allows the user to select the 'Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 07
- 3. When prompted, select 'Debit'
- 4. Select 'Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.20 CD.SEAS.C08-T01

CD.SEAS.C08-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 08 - Test 01

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 3. Allows the user to select the 'US Checking' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Credit'
- 4. Select 'US Checking' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- 3. User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.21 CD.SEAS.C08-T02

CD.SEAS.C08-T02 Credit/Debit Prompting, Standard EMV Application Selection Card 08 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 3. Allows the user to select the 'US Checking' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Debit'
- 4. Select 'US Checking' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- User is able to select 'US Checking'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0561111" AID selected was 'US Checking'
 - c. "9007" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

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3.3.12.22 CD.SEAS.C08-T03

CD.SEAS.C08-T03 Credit/Debit Prompting, Standard EMV Application Selection Card 08 - Test 03

Type: Contact

Purpose:

Test that when a U.S. Maestro card with more than one U.S. Maestro AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 3. Allows the user to select the 'US Savings' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- When prompted, select 'Credit'
- 4. Select 'US Savings' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Checking' and 'US Savings'
- User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.23 CD.SEAS.C08-T04

CD.SEAS.C08-T04 Credit/Debit Prompting, Standard EMV Application Selection Card 08 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Checking' and 'US Savings'
- 3. Allows the user to select the 'US Savings' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 08
- 3. When prompted, select 'Debit'
- 4. Select 'US Savings' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select 'US Checking' and 'US Savings'
- User is able to select 'US Savings'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203D0562222" AID selected was 'US Savings'
 - c. "9015" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.24 CD.SEAS.C09-T01

CD.MCCL.C09-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 09 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. Allows the user to select the 'Mastercard' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 3. When prompted, select 'Credit'
- 4. Select 'Mastercard' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. User is able to select 'Mastercard'
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard'
 - c. "0060" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

Comments:

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3.3.12.25 CD.SEAS.C09-T02

CD.SEAS.C09-T02 Credit/Debit Prompting, Standard EMV Application Selection

Card 09 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. Allows the user to select the 'Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- When prompted, select 'Debit'
- 4. Select 'Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.26 CD.SEAS.C09-T03

CD.SEAS.C09-T03 Credit/Debit Prompting, Standard EMV Application Selection Card 09 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard card with a Credit AID and more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. Allows the user to select the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- When prompted, select 'Debit'
- 4. Select 'US Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 3. User is able to select 'US Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.27 CD.SEAS.C10-T01

CD.SEAS.C10-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 10 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.28 CD.SEAS.C10-T02

CD.SEAS.C10-T02 Credit/Debit Prompting, Standard EMV Application Selection Card 10 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Maestro' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 10
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Maestro' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A000000042203" AID selected was 'US Maestro'
 - c. "9130" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.29 CD.SEAS.C11-T01

CD.SEAS.C11-T01 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 01

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'Mastercard Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. When prompted, select 'Debit'
- 4. Select 'Mastercard Debit' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. User is able to select 'Mastercard Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.30 CD.SEAS.C11-T02

CD.SEAS.C11-T02 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 02

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'Mastercard Debit' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Credit'
- 4. Select 'Mastercard Debit' application when prompted
- 5. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'Mastercard Debit'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000041010" AID selected was 'Mastercard Debit'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.12.31 CD.SEAS.C11-T03

CD.SEAS.C11-T03 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 03

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'US Checking' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 11
- When prompted, select 'Debit'
- 4. Select 'US Checking' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Checking'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.32 CD.SEAS.C11-T04

CD.SEAS.C11-T04 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 04

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'US Checking' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Credit'
- 4. Select 'US Checking' application when prompted
- 5. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Checking'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220301" AID selected was 'US Checking'
 - c. "0060" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.12.33 CD.SEAS.C11-T05

CD.SEAS.C11-T05 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 05

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'Maestro' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Debit'
- 4. Select 'Maestro' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. User is able to select 'Maestro'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A000000043060" AID selected was 'Maestro'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.34 CD.SEAS.C11-T06

CD.SEAS.C11-T06 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 06

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'US Savings' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203

Steps:

- 1. Start a Purchase transaction for \$20.00
- When prompted for card entry, insert Test Card 11
- When prompted, select 'Debit'
- 4. Select 'US Savings' application when prompted
- 5. Enter PIN ("4315") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Savings'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.35 CD.SEAS.C11-T07

CD.SEAS.C11-T07 Credit/Debit Prompting, Standard EMV Application Selection Card 11 - Test 07

Type: Contact

Purpose:

Test that when a Mastercard Debit card with 2 pairs of U.S. Debit AIDs is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. Allows the user to select the 'US Savings' application
- 4. Allows the user to bypass PIN entry

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000000041010, A0000000043060 and A0000000042203
- 4. PIN Bypass is supported

Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- When prompted, select 'Credit'
- 4. Select 'US Savings' application when prompted
- 5. When prompted for PIN, press Enter/Cancel to bypass PIN entry

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Savings'
- 4. When a PIN is not entered, transaction continues with No CVM or Signature
- The transaction is approved
- 6. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A00000004220302" AID selected was 'US Savings'
 - c. "0051" last 4 digits of the PAN
 - d. "No signature required" or "Signature panel" No CVM or Signature CVM was used

3.3.12.36 CD.SEAS.C12-T01

CD.SEAS.C12-T01 Credit/Debit Prompting, Standard EMV Application List Card 12 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'Discover Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- When prompted for card entry, insert Test Card 12
- 3. When prompted, select 'Credit'
- 4. Select 'Discover Debit' application when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- User is able to select 'Discover Debit'
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001523010" AID selected was 'Discover Debit'
 - c. "0005" last 4 digits of the PAN
 - d. Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.37 CD.SEAS.C12-T02

CD.SEAS.C12-T02 Credit/Debit Prompting, Standard EMV Application List Card 12 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. When prompted, select 'Debit'
- 4. Select 'US Debit' application when prompted
- 5. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- User is able to select 'US Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.38 CD.SEAS.C12-T03

CD.SEAS.C12-T03 Credit/Debit Prompting, Standard EMV Application List Card 12 - Test 03

Type: Contact

Purpose:

Test that when a Discover card with more than one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Prompts the user for Application Selection by displaying 'US Debit' and 'Discover Debit'
- 3. Allows the user to select the 'Discover Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 12
- 3. When prompted, select 'Debit'
- 4. Select 'Discover Debit' application when prompted
- 5. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'US Debit' and 'Discover Debit'
- User is able to select 'Discover Debit'
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates card was inserted
 - b. "A0000001523010" AID selected was 'Discover Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.39 CD.SEAS.C12-T04

CD.SEAS.C12-T04 Credit/Debit Prompting, Standard EMV Application List Card 12 - Test 04

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is \$0

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12
- 3. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.40 CD.SEAS.C12-T05

CD.SEAS.C12-T05 Credit/Debit Prompting, Standard EMV Application List Card 12 - Test 05

Type: Contactless

Purpose:

Test that when a Discover card with more than one Debit AID is tapped, the application:

- 1. Does not prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Does <u>not</u> prompt for PIN as the transaction amount is under the Contactless CVM Floor Limit

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A0000001524010, A0000001523010
- 4. Contactless CVM Floor limit is above \$79

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, tap Test Card 12

Pass Criteria:

- 1. User is not prompted to select 'Credit' or 'Debit'
- 2. User is not prompted to select an application
- 3. User is not prompted to enter a PIN
- 4. The 'US Debit' application is automatically selected
- 5. The transaction is approved
- 6. Receipt shows:
 - a. "Contactless" indicates card was tapped
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "No signature required" No CVM was used

3.3.12.41 CD.SEAS.C13-T01

CD.SEAS.C13-T01 Credit/Debit Prompting, Standard EMV Application List Card 13 - Test 01

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'US Debit' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000001524010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

3.3.12.42 CD.SEAS.C13-T02

CD.SEAS.C13-T02 Credit/Debit Prompting, Standard EMV Application List Card 13 - Test 02

Type: Contact

Purpose:

Test that when a Discover card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'US Debit' application
- 4. Uses Signature/No CVM as the CVM for the transaction

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000001524010

Steps:

- 1. Start a Purchase transaction for \$79.00
- 2. When prompted for card entry, insert Test Card 13
- 3. When prompted, select 'Credit'

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'US Debit' application is automatically selected
- The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000001524010" AID selected was 'US Debit'
 - c. "0005" last 4 digits of the PAN
 - d. "Signature panel" or "No signature required" Signature or No CVM was used

3.3.12.43 CD.SEAS.C14-T01

CD.SEAS.C14-T01 Credit/Debit Prompting, Standard EMV Application List Card 14 - Test 01

Type: Contact

Purpose:

Test that when a DNA card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- Automatically selects the 'DNA' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000006200620

Steps:

- 1. Start a Purchase transaction for \$10.00
- 2. When prompted for card entry, insert Test Card 14
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- User is not prompted to select an application
- 3. The 'DNA' application is automatically selected
- 4. The transaction is approved *
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000006200620" AID selected was 'DNA'
 - c. "0028" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

* Final disposition (Approved / Declined) is outside the scope of this document. For this test case to be successful, the transaction should go online but as the cryptogram doesn't need to be valid, the host may approve or decline.

3.3.12.44 CD.SEAS.C15-T01

CD.SEAS.C15-T01 Credit/Debit Prompting, Standard EMV Application List Card 15 - Test 01

Type: Contact

Purpose:

Test that when an Interac Flash card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- 1. Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- 5. Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "8644" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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3.3.12.45 CD.SEAS.C16-T01

PLEASE READ IMPORTANT NOTES AT THE BEGINING OF SECTION 3.3

CD.SEAS.C16-T01 Credit/Debit Prompting, Standard EMV Application List Card 16 - Test 01

Type: Contact

Purpose:

Test that when an Interac card with only one Debit AID is inserted, the application:

- 1. Prompts for Credit and Debit (user selects 'Debit')
- 2. Does <u>not</u> prompt for Application Selection
- 3. Automatically selects the 'Interac' application
- 4. Prompts the user to enter a PIN

Pre-Requisites:

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000002771010

Steps:

- 1. Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 16
- 3. When prompted, select 'Debit'
- 4. Enter PIN ("1234") when prompted

Pass Criteria:

- 1. User is prompted to select 'Credit' and 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Interac' application is automatically selected
- 4. The transaction is approved
- Receipt shows:
 - a. "Chip" indicates the card was inserted
 - b. "A0000002771010" AID selected was 'Interac'
 - c. "1933" last 4 digits of the PAN
 - d. "Verified by PIN" PIN CVM was used

Comments:

Account selection prompting (Chequing/Savings) is not a requirement for terminals deployed in the USA.

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Chapter 4 - USA Debit EMV Test Card Set Profiles

CAUTION

Multiple consecutive incorrect PIN entry attempts may result in the card being blocked.

This is known as being 'PIN Blocked'.

If this occurs, it will be longer be possible to enter an Offline PIN.

If this occurs, it will no longer be possible to enter an Offline PIN, which will cause all future transactions to be declined.

*** It is not possible to unblock a 'PIN Blocked' card ***

NOTICE

Interac Flash card has a '001203' BIN range. These cards are supported by all Canadian processors but are not yet supported by all U.S. and international processors.

*** Check with your acquirer account representative to determine if the Interac Flash BIN range is supported by their development host. If your processor does not yet support Interac Flash, the card will function properly at the POS but it will not obtain a host approval. ***

RECOMMENDATION

For those that are relatively new to EMV and seek assistance in understanding 'the basics'...

Consider B2's online courses – eLearning and Virtual Training.

Learn from the comfort and convenience of your office (or home-office), at your own pace.

Visit: b2ps.com/b2-university



The B2 USA Debit Test Card Set contains 16 cards with at least one card from each of the following card brands.











	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Visa
Description (Card - Types)	Global / U.S. Common	U.S. Common	Credit / Debit / U.S. Common, Dual- Funding
AID list	A000000031010 A000000980840	A0000000980840	A000000003101001 A000000003101002 A0000000980840
PAN on plastic	4761 7390 0101 0135	4761 7390 0101 0135	4761 7390 0101 0176
Expiry Date	12/2024	12/2024	12/2024
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, MSR	Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN (ATM) Online PIN (MCash) Signature (MCash) Online PIN (CBack) Signature Online PIN See card definition	Online PIN (ATM) Fail CVM Processing (MCash) Online PIN (CBack) Online PIN No CVM required See card definition	Online PIN (ATM) Online PIN (MCash) Signature (MCash) Fail CVM Processing (CBack) Signature No CVM required Fail CVM Processing See card definition
Approval Amount	\$10.00	\$10.00	\$10.00
Issuer Country Code	840 - USA	840 - USA	840 - USA
Application Currency Code	840 - USD	840 - USD	840 - USD
Language	'en' - English	'en' - English	'en' - English
Card Version	v5.x	v5.x	v7.x

Test Card 04 **Test Card 05 Test Card 06 Brand** Visa Mastercard Mastercard **Description (Card + types)** Global / Common Interlink Maestro Dual-Funding A000000043060 A000000041010 D0561111 AID list A000000033010 A000000043060 A0000000042203 D05621222 **PAN** on plastic 4761 7310 0000 0084 5413 3300 8909 9130 67999 9890 0000 2010 **Expiry Date** 12/2024 12/2025 12/2025 **Service Code** 221 220 201 Contact, Contactless, Interface Contact, MSR Contact, MSR **MSR** Online PIN (ATM) Online PIN (CBack) Offline Plaintext PIN Online PIN **CVM (Contact)** Signature Online PIN (CBack) **Default Condition:** No CVM required Online PIN Fail CVM Processing **Terminal Supports CVM** See card definition No CVM required See card definition See card definition **Approval Amount** \$10.00 \$20.00 \$20.00 **Issuer Country Code** 840 - USA 840 - USA 528 - NLD **Application Currency Code** 840 - USD 840 - USD 978 - EUR Language 'en' - English 'en' - English 'en' - English **Card Version** v5.x v6.x v5.x

	Test Card 07	Test Card 08	Test Card 09
Brand	Mastercard	Mastercard	Mastercard
Description	Credit / Int'l	U.S. Maestro - Dual- Funding	Credit / Global / U.S. Common
AID list	A0000000041010 A00000000043060	A000000042203 D0561111 A0000000042203 D0562222	A0000000041010 A0000000043060 A0000000042203
PAN on plastic	5413 3300 8902 0060	5413 3300 8909 9007	5413 3300 8902 0060
Expiry Date	12/2025	12/2025	12/2025
Service Code	201	220	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Offline Plaintext PIN Online PIN Signature No CVM required Fail CVM Processing See card definition	Online PIN (CBack) Online PIN No CVM required Fail CVM Processing See card definition	Offline Plaintext PIN Online PIN Signature No CVM required Fail CVM Processing See card definition
Approval Amount	\$20.00	\$20.00	\$20.00
Issuer Country Code	826 - GBR	840 - USA	840 - USA
Application Currency Code	826 - GBP	840 - USD	840 - USD
Language	'en' - English	'en' - English	'en' - English
Card Version	v5.x	v5.x	v5.x

	Test Card 10	Test Card 11	Test Card 12
Brand	Mastercard	Mastercard	Discover
Description	U.S. Maestro	MC+U.S. Maestro / Maestro+U.S. Maestro	Discover U.S. Debit / Discover
AID list	A0000000042203	A000000041010 A000000004220301 A0000000043060 A000000004220302	A0000001524010 A0000001523010
PAN on plastic	5413 3300 8909 9130	5413 3300 8902 0060	6011 9737 0000 0138
Expiry Date	12/2025	12/2025	05/2026
Service Code	220	201	201
Interface	Contact, Contactless, MSR	Contact, MSR	Contactless, Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN (CBack) Online PIN No CVM required See card definition	Online PIN (CBack) Offline Plaintext PIN Online PIN Signature (paper) No CVM required See card definition	Online PIN No CVM required See card definition
Approval Amount	\$20.00	\$20.00	\$79.00
Issuer Country Code	840 - USA	840 - USA	840 - USA
Application Currency Code	840 - USD	840 - USD	840 - USD
Language	'en' - English	'en' - English	ʻenesfr' (English, Spanish, French)
Card Version	v7.x	v5.x	v8.x

	Test Card 13	Test Card 14	Test Card 15
Brand	Discover	DNA	Interac
Description	Single AID	Debit Network Alliance	Canadian Debit
AID list	A0000001524010	A0000006200620	A0000002771010
PAN on plastic	6011 9737 0000 0120	4000 0000 0000 0028	0012 0300 0000 0003
Expiry Date	05/2026	12/2025	12/2028
Service Code	201	201	220
Interface	Contact, MSR	Contact, MSR	Contactless, Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN No CVM required See card definition	Online PIN (ATM) Online PIN (MCash) Online PIN No CVM required See card definition	Offline Enciphered PIN Offline Plaintext PIN Online PIN See card definition
Approval Amount	\$79.00	\$10.00	\$30.00
Issuer Country Code	840 - USA	840 - USA	124 - CAN
Application Currency Code	840 - USD	840 - USD	124 -CAD
Language	'en' - English	'en' - English	'en' - English
Card Version	v7.x	v6.x	v7.x

	Test Card 16
Brand	Mastercard
Description	Credit / Debit / U.S. Maestro
AID list	A000000004101001 A000000004101002 A0000000042203
PAN on plastic	5413 3300 8902 0060
Expiry Date	12/2025
Service Code	201
Interface	Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Offline Plaintext PIN Online PIN Signature No CVM required Fail CVM Processing See card definition
Approval Amount	\$20.00
Issuer Country Code	840 - USA
Application Currency Code	840 - USD
Language	'en' - English
Card Version	v6.x

4.1 Test Card 01 - Visa, DI, 2-AID (Visa Debit+US Debit), English, USA, USD

A Dual Interface (Contact+Contactless) 2-AID Visa debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.1.1 Contact: CVM List - Visa Debit, AID A000000031010

Cardho	Cardholder Verification Method List ('0201 4204 1E04 0205 5E00 4200 1F00')			
CVM	Verification Method	Conditions	If unsuccessful	
1	Online PIN	Unattended Cash	Fail	
2	Online PIN	Manual Cash	Next CVM	
3	Signature (paper)	Manual Cash	Fail	
4	Online PIN	Purchase with Cashback	Fail	
5	Signature (paper)	Always	Next CVM	
6	Online PIN	Always	Next CVM	
7	No CVM required	Always	Fail	

4.1.2 Contact: Application Tag data, AID A000000031010

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	56 49 53 41 20 44 45 42 49 54 20 20
		20 20 20 20 - 'VISA DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
- A	A self-self-self-self-self-self-self-self-	19 55 94 58 00 00 0F 47 61 73 90 01 01 01 35
5A	Application Primary Account Number (PAN)	47 61 73 90 01 01 01 35
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 31 20 20
		20 20 - 'USA DEBIT/Test Card 01'
5F 24	Application Expiration Date	24 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [VIS]	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
		b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04

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Tag	Element name	Data Card v5
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
0.2	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
	,	0A
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 42 04
	List	1E 04 02 05 5E 00 42 00 1F 00
94	Application File Locator (AFL)	08 01 02 00
9F 07	Application Usage Control	FF 80
		BYTE 1: b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2: b8 - Domestic cashback allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number [VIS]	00 96
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	56 69 73 61 20 44 65 62 69 74 20 20
01 12	Application Fronting Hamo	20 20 20 20 - 'Visa Debit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 24	Payment Account Reference (PAR)	56 30 30 31 30 30 31 33 30 31 36 31
		37 33 31 30 36 36 39 33 30 33 37 34
05.06	Application Crustogram (AC)	38 39 33 30 33 C4 87 AB 1C 1A 67 97 B7
9F 26 9F 27	Application Cryptogram (AC)	80
	Cryptogram Information Data (CID)	xx xx *
9F 36	Application Transaction Counter (ATC)	08 40 - USD
9F 42	Application Currency Code	02
9F 44	Application Currency Exponent	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
9F 4F	Transaction Log Format	1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00 00 00
0. 02	1.5]	
9F 56	Issuer Authentication Indicator [VSDC]	80
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 5D	Available Offline Spending Amount	00 00 00 00 00 00
5. 55	[VSDC]	
9F 68	Card Additional Processes [qVSDC	10 00 10 00
	VCPS 2.1]	
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	
BF 5A	AIP/AFL Entries Template	
BF 5B	Application Internal Data Template	DF 01 02 00 00
	11	<u>i</u>

^{*} Tag value changes with card usage

4.1.3 Contact: CVM List - U.S. Debit, AID A000000980840

Cardho	Cardholder Verification Method List ('0201 0205 4200 1F00 0000')			
CVM	Verification Method	Conditions	If unsuccessful	
1	Online PIN	Unattended Cash	Fail	
2	Online PIN	Purchase with Cashback	Fail	
3	Online PIN	Always	Next CVM	
4	No CVM required	Always	Fail	
5	Fail CVM Processing	Always	Fail	

4.1.4 Contact: Application Tag data, AID A0000000980840

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	55 53 20 44 45 42 49 54 20 20 20 20
	, , , , , , , , , , , , , , , , , , ,	20 20 20 20 - 'US DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
	·	19 55 94 58 00 00 OF
5A	Application Primary Account Number (PAN)	47 61 73 90 01 01 01 35
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 31 20 20
		20 20 - 'USA DEBIT/Test Card 01'
5F 24	Application Expiration Date	24 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [VIS]	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
		b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 98 08 40
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
٥٦	Condition Varification Mathed (CVM)	00 00 00 00 00 00 00 00 02 01 02 05
8E	Cardholder Verification Method (CVM)	42 00 1F 00 00 00 00 00 00 00
0.4	List	08 01 02 00
94	Application File Locator (AFL)	08 01 02 00

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Application Usage Control AB 80 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions NOT valid b6 - Domestic goods valid b5 - International goods NOT valid b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b8 - Domestic cash trans. valid b7 - Int'l cash transactions NOT valid b6 - Domestic goods valid b5 - International goods NOT valid b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b7 - Int'l cash transactions NOT valid b6 - Domestic goods valid b5 - International goods NOT valid b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b6 - Domestic goods valid b5 - International goods NOT valid b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b5 - International goods NOT valid b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b4 - Domestic services valid b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b3 - International services NOT valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed	
BYTE 2: b8 - Domestic cashback allowed	
b8 - Domestic cashback allowed	
b7 - International cashback NOT allowed	
9F 08 Application Version Number [VIS] 00 96	
9F 0D Issuer Action Code - Default FC 50 AC 88 00	
9F 0E Issuer Action Code - Denial 00 00 00 00 00	
9F 0F Issuer Action Code - Online FC 70 BC 98 00	
9F 10 Issuer Application Data [VSDC] xx xx 0A xx xx xx xx xx *	
9F 11 Issuer Code Table Index 01	
9F 12 Application Preferred Name 55 53 20 44 65 62 69 74 20 20 20 20	20
20 20 20 20 - 'US Debit'	
9F 13 Last Online Application Transaction xx xx *	
Counter (ATC) Register	
9F 17 Personal Identification Number (PIN) 03	
Try Counter	
9F 24 Payment Account Reference (PAR) 56 30 30 31 30 30 31 33 30 31 36 3	1
37 33 31 30 36 36 39 33 30 33 37 3	
38 39 33 30 33	
9F 26 Application Cryptogram (AC) xx	
9F 27 Cryptogram Information Data (CID) 80	
9F 36 Application Transaction Counter (ATC) xx xx *	
9F 38 Processing Options Data Object List 9F 06 05	
(PDOL)	
9F 42 Application Currency Code 08 40 - USD	
9F 44 Application Currency Exponent 02	
9F 4F Transaction Log Format 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F)F
1A 02 95 05 9C 01 9F 27 01	
9F 51 Application Currency Code [VSDC] 08 40 - USD	
9F 52 Application Default Action [VSDC VIS 00 00 00 00 00 00	
1.5]	
9F 56 Issuer Authentication Indicator [VSDC] 80	
9F 57 Issuer Country Code [VSDC] 08 40 - USA	
9F 5D Available Offline Spending Amount 00 00 00 00 00 00	
or or a remaining remainin	
[VSDC] 9F 68 Card Additional Processes (gVSDC) 10 00 80 00	
or our data reasons [4.626	
VCPS 2.1]	
BF 55 Contactless Counters Data Template	
BF 56 Counters Data Template	
BF 57 International Counters Data Template	
BF 58 Amounts Data Template	
BF 59 Profile Controls Template	
BF 5A AIP/AFL Entries Template	
BF 5B Application Internal Data Template DF 01 02 00 00	

^{*} Tag value changes with card usage

4.1.5 CTLS: Application Tag data, AID A000000031010, (qVSDC, online, ODA)

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	56 49 53 41 20 44 45 42 49 54 20 20
	• •	20 20 20 20 - 'VISA DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
		19 55 94 58 00 00 1F
5A	Application Primary Account Number	47 61 73 90 01 01 01 35
	(PAN)	24.40.24
5F 24	Application Expiration Date	24 12 31
5F 28	Issuer Country Code	08 40
5F 2D	Language Preference	65 6E
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [VCPS]	00 00 DVTF 4
		BYTE 1: b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification NOT supported
		b4 - Terminal risk mgmt NOT to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
0.4	Dedicated File (DF) Name	b7 - Is NOT Mobile handset A0 00 00 00 03 10 10
84	Dedicated File (DF) Name	01
	Application Priority Indicator	08 03 03 00
94	Application File Locator (AFL)	CO 80
9F 07	Application Usage Control [VCPS]	BYTE 1:
		b8 - Domestic cash trans, valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods NOT valid
		b5 - International goods NOT valid
		b4 - Domestic services NOT valid
		b3 - International services NOT valid
		b2 - ATMs NOT valid b1 - non-ATM terminals NOT valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback NOT allowed
9F 10	Issuer Application Data [VCPS 2.2]	xx xx 12 xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	56 69 73 61 20 44 65 62 69 74 20 20
		20 20 20 - 'Visa Debit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 24	Payment Account Reference (PAR)	56 30 30 31 30 30 31 33 30 31 36 31
		37 33 31 30 36 36 39 33 30 33 37 34
9F 26	Application Cryptogram (AC)	38 39 33 30 33 xx xx xx xx xx xx xx xx *
9F 26 9F 27	Application Cryptogram (AC) Cryptogram Information Data (CID)	80
		xx xx *
9F 36	Application Transaction Counter (ATC)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02
9F 38	Processing Options Data Object List	95 05 5F 2A 02 9A 03 9C 01 9F 37 04
05.45	(PDOL)	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
9F 4F	Transaction Log Format	1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
ər 31	Application outleticy code [1300]	00 40 00D

9F 52	Application Default Action [VSDC VIS 1.6]	00 00 00 00
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 5A	Application Program Identifier	11 08 40 08 40
9F 5D	Available Offline Spending Amount [VSDC]	00 00 00 00 00
9F 68	Card Additional Processes [qVSDC VCPS 2.2]	10 00 10 00
9F 69	Card Authentication Related Data [qVSDC]	01 00 00 00 00 00 00 BYTE 1: b8 - Online PIN NOT required b7 - Signature NOT required b6 - Do NOT go online if Offline Data Authentication fails and Reader is online capable b5 - Do NOT switch interface if Offline Data Authentication fails and Reader supports contact chip b4 - Do NOT go Online if Application Expired b3 - Do NOT switch interface for Cash Transactions b2 - Do NOT switch interface for Cashback Transactions b1 - Is valid for contactless ATM transactions BYTE 2: b8 - Consumer Device CVM NOT performed b7 - Card does NOT Support Issuer Update Processing at POS
9F 6C	Card Transaction Qualifiers [qVSDC VCPS 2.2]	00 00
9F 6E	Form Factor Indicator [qVSDC]	20 70 00 00
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	
BF 5A	AIP/AFL Entries Template	
BF 5B	Application Internal Data Template	DF 01 02 00 00

^{*} Tag value changes with card usage

4.1.6 CTLS: Application Tag data, AID A0000000980840, (qVSDC, offline)

Tag	Element name	Data	Card v4
42	Issuer Identification Number (IIN)	47 61 73	
50	Application Label	56 49 53 41 20 44 45 42 49 54	20 20
		20 20 20 20 - 'VISA DEBIT'	
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41	22 01
	•	19 55 94 58 00 00 1F	
5F 20	Cardholder Name	43 41 52 44 48 4F 4C 44 45 52	2F 56
		49 53 41 20 20 20 20 20 20 20	20 20
		20 20 - 'CARDHOLDER/VISA'	
5F 2D	Language Preference	65 6E	
5F 34	Application PAN Sequence Number	01	·
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'	

	A 11 11 1 D (11 D (2001	00.00
82	Application Interchange Profile [VCPS]	00 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification NOT supported
		b4 - Terminal risk mgmt NOT to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
0.4	D !! (DE) !!	b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10
87	Application Priority Indicator	01
9F 10	Issuer Application Data [VSDC]	xx xx 12 xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	56 69 73 61 20 44 65 62 69 74 20 20
		20 20 20 - 'Visa Debit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36		xx xx *
	Application Transaction Counter (ATC)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02
9F 38	Processing Options Data Object List	95 05 5F 2A 02 9A 03 9C 01 9F 37 04
	(PDOL)	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
0= =1	4 " " 0 0 1 5 10 5 0 1	1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00
	1.5]	
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 5A	Application Program Identifier	11 08 40 08 40
9F 5D	Available Offline Spending Amount	00 00 00 00 00 00
	[VSDC]	
9F 68	Card Additional Processes [qVSDC	10 00 10 00
31 00	VCPS 2.1]	
OE CC		00 00
9F 6C	Card Transaction Qualifiers [qVSDC	
05.05	VCPS 2.1]	00.70.00.00
9F 6E	Form Factor Indicator [qVSDC]	20 70 00 00
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	
BF 5A	AIP/AFL Entries Template	
BF 5B	Application Internal Data Template	DF 01 02 00 00
DL 3D	Application internal Data Template	DI 01 02 00 00

^{*} Tag value changes with card usage

4.2 Test Card 02 - Visa, CO, 1-AID (US Debit), English, USA, USD

A contact-only, single-AID Visa debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.2.1 Contact: CVM List - US Debit, AID - A0000000980840

Cardholder Verification Method List ('0201 0004 0205 4200 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Fail CVM Processing	Manual Cash	Fail
3	Online PIN	Purchase with Cashback	Fail
4	Online PIN	Always	Next CVM
5	No CVM required	Always	Fail

4.2.2 Contact: Application Tag data, AID A000000980840

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	55 53 20 44 45 42 49 54 - 'US DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
	·	19 55 94 58 00 00 0F
5A	Application Primary Account Number (PAN)	47 61 73 90 01 01 01 35
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 32 20 20
		20 - 'USA DEBIT/Test Card 02'
5F 24	Application Expiration Date	24 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [VIS]	BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 98 08 40
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 00 04 02 05 42 00 1F 00
8F	Certification Authority Public Key Index	92

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90 Issuer Public Key Certificate 3C 96 F7 65 8F BC 29 A2 0 BD E9 21 66 B0 F6 22 1B B 26 71 0B 9E 22 9D 16 FA E 4C 06 85 91 6E 19 F0 E3 2 1B CE 23 59 50 9A 6D 65 7 C3 73 12 6B 34 3F 9C B8 1 EA B2 D4 2D E1 9D 56 08 3 D1 4C 26 8D 40 DF 08 35 C	AD 93	0C	_
4C 06 85 91 6E 19 F0 E3 2 1B CE 23 59 50 9A 6D 65 7 C3 73 12 6B 34 3F 9C B8 1 EA B2 D4 2D E1 9D 56 08 3	93		07
1B CE 23 59 50 9A 6D 65 7. C3 73 12 6B 34 3F 9C B8 1 EA B2 D4 2D E1 9D 56 08 3		जज	
C3 73 12 6B 34 3F 9C B8 1 EA B2 D4 2D E1 9D 56 08 3	2 F.8		
EA B2 D4 2D E1 9D 56 08 3			
	_	-	
38 ED 28 BC E4 2C D0 01 3			
05 18 B7 53 C2 46 EF FB A	8F	D2	02
9B AD 5D FC F0 DA F0 7B 7	08 0	1C	46
5F FD 25 2C 70 B9 21 53 B			
CA 2F A1 FA AE 2D 01 68 A			
5C D8 05 DC 32 AA 96 4C 1 D5 D0 30 9A B0 EA 76 1B	/ BF	CD	2C
	מש ק	0.1	26
92 Issuer Public Key Remainder 50 DA 20 DD A8 95 3B 69 3: 68 31 BA 1E EA 97 F7 8F 7			
B9 8F DF 01 49 A7 B7 8F D			
94 Application File Locator (AFL) 10 01 01 00 10 02 05 01 B			
9F 07 Application Usage Control AB 80			
BYTE 1:			
b8 - Domestic cash trans. valid			
b7 - Int'l cash transactions NOT va	lid		
b6 - Domestic goods valid			
b5 - International goods NOT valid			
b4 - Domestic services valid	l: al		
b3 - International services NOT va	liu		
b1 - non-ATM terminals valid			
BYTE 2:			
b8 - Domestic cashback allowed			
b7 - International cashback NOT a	llowed	b	
9F 08 Application Version Number [VIS] 00 96			
9F 0D Issuer Action Code - Default FC 50 AC 88 00			
9F 0E Issuer Action Code - Denial 00 00 00 00 00			
9F 0F Issuer Action Code - Online FC 70 BC 98 00			
9F 10 Issuer Application Data [VSDC] xx xx 0A xx xx xx xx *			
9F 11 Issuer Code Table Index 01			
9F 12 Application Preferred Name 55 53 20 44 65 62 69 74 -	US D	ebiť	
9F 13 Last Online Application Transaction xx xx *			
Counter (ATC) Register			
9F 17 Personal Identification Number (PIN) 03			
Try Counter ` ´			
9F 1F Track 1 Discretionary Data 20 20 20 20 20 20 20 20 20	20	20	20
20 20 20 20 20 20 20 20 20 2	20	20	20
9F 26 Application Cryptogram (AC) xx			
9F 27 Cryptogram Information Data (CID) 80			
9F 32 Issuer Public Key Exponent 03			_
9F 36 Application Transaction Counter (ATC) xx xx *			
9F 44 Application Currency Exponent 02			



	T	
9F 46	ICC Public Key Certificate	03 B8 82 2C E3 88 09 BF CE 61 BF 25
		91 7B DE FE 32 14 DB 4F E2 71 C7 13
		E2 A9 F3 BC 76 B4 5F 24 F1 40 C7 12
		96 F0 43 C3 3B FB 9E 53 D3 4A 7C 96
		72 A9 A3 67 88 C0 70 3F 1F F9 23 D4
		09 FB 1B D6 BC 8B C6 22 D0 65 E7 63 EE 95 BB B3 47 87 B6 BE 70 79 CE 22
		1A DA 4D EE 8A 59 E4 54 C2 5B 00 62
		8D 4C 6C BA 91 44 33 59 35 2C 1D 70
		A4 D3 54 E4 DF 9C 07 1E 9F B8 F2 F3
		1B A1 EB 20 1F E0 3F 34 DE 83 5C 4D
		68 A8 55 06 50 24 9D 7E 4B FD 8B 43
		EB 1B F3 6E 24 42 4E BE F0 E5 BF F3
		4C 60 6E E2 C1 78 F7 AC 96 A1 AB 1D
		5E EC E9 5E 0F 23 45 F9
9F 47	ICC Public Key Exponent	03
9F 49	Dynamic Data Authentication Data	9F 37 04
00	Object List (DDOL)	
9F 4A	Static Data Authentication Tag List	82
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00 00 00
9F 52	1.5]	00 00 00 00 00
9F 53	Consecutive Transaction Limit	00
	(International) [VSDC]	
9F 54	Cumulative Total Transaction Amount	00 00 00 00 00 00
	Limit [VSDC]	
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 58	Consecutive Transaction Counter Limit	00
	[VSDC]	
9F 59	Consecutive Transaction Counter Upper	00
	Limit [VSDC]	
9F 5C	Cumulative Total Transaction Amount	00 00 00 00 00 00
	Upper Limit [VSDC]	
9F 5E	Consecutive Transaction International	00
0. 0_	Upper Limit [VSDC]	
9F 72	Consecutive Transaction Limit	00
01 12	(International-Country) [VSDC]	
DE EC		DF 11 01 01 DF 21 01 00 DF 31 01 00
BF 56	Counters Data Template	
BF 57	International Counters Data Template	DF 11 01 00 DF 21 01 00 DF 31 01 00 DF 51 01 00 DF 61 01 00
BF 58	Amounto Data Tampleta	DF 11 06 00 00 00 00 00 DF 21 06
DC 20	Amounts Data Template	00 00 00 00 00 00 DF 31 06 00 00 00
1		00 00 00

^{*} Tag value changes with card usage

4.3 Test Card 03 - Visa, CO, 3-AID (Credit+Debit+US Common, 2-Funding), English, USA, USD

A contact-only, 3-AID combination Visa credit & debit card with 2 funding accounts which has an issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.3.1 Contact: CVM List - Visa Credit, AID - A000000003101001

Cardholder Verification Method List ('0201 4204 1E04 0005 5E00 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Online PIN	Manual Cash	Next CVM
3	Signature (paper)	Manual Cash	Fail
4	Fail CVM Processing	Purchase with Cashback	Fail
5	Signature (paper)	Always	Next CVM
6	No CVM required	Always	Fail
7	Fail CVM Processing	Always	Fail

4.3.2 Contact: Application Tag data, AID A00000003101001

Tag	Element name	Data Card v7
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 20
		20 20 20 20 - 'VISA CREDIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 76 D2 41 22 01
		14 83 53 94 00 00 0F
5A	Application Primary Account Number	47 61 73 90 01 01 01 76
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 33 20 20
FF 0.4	Analization Funication Data	20 20 - 'USA DEBIT/Test Card 03'
5F 24	Application Expiration Date	08 40
5F 28	Issuer Country Code	
5F 2D	Language Preference	65 6E
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile [VIS]	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
		b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10 01
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
	,	0A
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 42 04
	List	1E 04 00 05 5E 00 1F 00 00 00

Tag	Element name	Data Card v7
94	Application File Locator (AFL)	08 01 01 00 10 01 01 01
9F 07	Application Usage Control	FF 00
0. 0.	, application coage contact	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number [VIS]	00 96
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	56 69 73 61 20 43 72 65 64 69 74 20
		20 20 20 - 'Visa Credit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	00
	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 06 07
	(PDOL)	
9F 44	Application Currency Exponent	02
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
		1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00 00 00
0= =0	1.5]	
9F 56	Issuer Authentication Indicator [VSDC]	00
9F 57	Issuer Country Code [VSDC]	08 40 - USA
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	DF 11 0B 10 00 00 00 00 00 00 00 00
		00 00 DF 12 0B 20 00 00 00 00 00 00 00 00 00 00 00 00
DE E A	AID/AEL Entring Tomplets	DF 11 0B 18 00 08 08 01 01 00 10 01
BF 5A	AIP/AFL Entries Template	01 01
BF 5B	Application Internal Data Template	DF 01 02 C0 00 DF 02 01 F1
םני ים	Application internal Data Template	

^{*} Tag value changes with card usage

4.3.3 Contact: CVM List - Visa Debit, AID A00000003101002

Cardholder Verification Method List ('0201 4204 1E04 0005 5E00 1F00 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Online PIN	Manual Cash	Next CVM
3	Signature (paper)	Manual Cash	Fail
4	Fail CVM Processing	Purchase with Cashback	Fail
5	Signature (paper)	Always	Next CVM
6	No CVM required	Always	Fail
7	Fail CVM Processing	Always	Fail

4.3.4 Contact: Application Tag data, AID A00000003101002

Tag	Element name	Data Card v7
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	56 49 53 41 20 44 45 42 49 54 20 20
		20 20 20 - 'VISA DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
	A 11 (1 D 1 A (A)	14 83 53 94 00 00 0F 47 61 73 90 01 01 01 35
5A	Application Primary Account Number (PAN)	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 33 20 20
55.04	Assiltantia Estimita Data	20 20 - 'USA DEBIT/Test Card 03'
5F 24	Application Expiration Date	
5F 28	Issuer Country Code	08 40
5F 2D	Language Preference	65 6E
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [VIS]	18 00
		BYTE 1: b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10 02
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 42 04
O⊏	List	1E 04 02 05 5E 00 42 00 1F 00 00 00
94	Application File Locator (AFL)	08 01 01 00 10 01 01 00

Tag	Element name	Data Card v7
9F 07	Application Usage Control	FF 80
0. 0.	, ppca.ic coago comic.	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number [VIS]	00 96
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	56 69 73 61 20 44 65 62 69 74 20 20
91 12	Application Freieneu Name	20 20 20 - 'Visa Debit'
9F 13	Last Online Application Transaction	xx xx *
31 13	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	00
31 17	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 06 07
31 00	(PDOL)	
9F 44	Application Currency Exponent	02
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
31 41	Transaction Log Format	1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00 00 00
• • • •	1.5]	
9F 56	Issuer Authentication Indicator [VSDC]	00
9F 57	Issuer Country Code [VSDC]	08 40 - USA
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	DF 11 0B 10 00 00 00 00 00 00 00 00
פט ום	Trome Controls Template	00 00 DF 12 0B 20 00 00 00 00 00 00
		00 00 00 00
BF 5A	AIP/AFL Entries Template	DF 11 0B 18 00 08 08 01 01 00 10 01
	· · · · · · · · · · · · · · · · ·	01 00 DF 12 0B 18 00 08 08 01 01 00
		10 02 02 00
BF 5B	Application Internal Data Template	DF 01 02 C0 00 DF 02 01 F1

^{*} Tag value changes with card usage

4.3.5 Contact: CVM List - U.S. Common Debit, AID A0000000980840

Cardholder Verification Method List ('0201 0004 0205 4200 1F00 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Fail CVM Processing	Manual Cash	Fail
3	Online PIN	Purchase with Cashback	Fail
4	Online PIN	Always	Next CVM
5	No CVM required	Always	Fail

4.3.6 Contact: Application Tag data, AID A000000980840

Tag	Element name	Data Card v7
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	55 53 20 44 45 42 49 54 20 20 20 20
	, , , , , , , , , , , , , , , , , , ,	20 20 20 20 - 'US DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 41 22 01
		14 83 53 94 00 00 0F
5A	Application Primary Account Number (PAN)	47 61 73 90 01 01 01 35
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 30 33 20 20 20 20 20 - 'USA DEBIT/Test Card 03'
5F 24	Application Expiration Data	20 20 - USA DEBIT/Test Card 03
5F 28	Application Expiration Date	08 40
5F 2D	Issuer Country Code	65 6E
5F 30	Language Preference Service Code	02 01
5F 34		01
5F 55	Application PAN Sequence Number	55 53 - 'US'
82	Issuer Country Code (alpha2 format) Application Interchange Profile [VIS]	18 00
02	Application interchange Profile [VIS]	BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Use for Visa NOT supported
		b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 98 08 40
87	Application Priority Indicator	03
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
05	0	0A
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 00 04 02 05 42 00 1F 00 00 00
0.4	List	08 01 01 00 10 02 02 00
94	Application File Locator (AFL)	08 01 01 00 10 02 02 00

Tag	Element name	Data Card v7
9F 07	Application Usage Control	AB 80
	The second confidence	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions NOT valid
		b6 - Domestic goods valid
		b5 - International goods NOT valid
		b4 - Domestic services valid
		b3 - International services NOT valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed b7 - International cashback NOT allowed
9F 08	Application Version Number [VIS]	00 96
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00
		00 00 00 00 00
9F 0E	Issuer Action Code - Denial	
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 44 65 62 69 74 20 20 20 20
		20 20 20 20 - 'US Debit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	00
	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 06 07
	(PDOL)	
9F 44	Application Currency Exponent	02
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
	-	1A 02 95 05 9C 01 9F 27 01
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS	00 00 00 00 00
	1.5]	
9F 56	Issuer Authentication Indicator [VSDC]	00
9F 57	Issuer Country Code [VSDC]	08 40 - USA
BF 55	Contactless Counters Data Template	
BF 56	Counters Data Template	
BF 57	International Counters Data Template	
BF 58	Amounts Data Template	
BF 59	Profile Controls Template	DF 11 0B 10 00 00 00 00 00 00 00 00
00	The second secon	00 00 DF 12 0B 20 00 00 00 00 00 00
		00 00 00 00
BF 5A	AIP/AFL Entries Template	DF 11 0B 18 00 08 08 01 01 00 10 01
	·	01 00 DF 12 0B 18 00 08 08 01 01 00
		10 02 02 00
BF 5B	Application Internal Data Template	DF 01 02 C0 00 DF 02 01 F1

^{*} Tag value changes with card usage

4.4 Test Card 04 - Visa, CO, 1-AID (Interlink), English, USA, USD

A contact-only, single-AID Visa Interlink debit card with an issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.4.1 Contact: CVM List - Visa Interlink, AID A000000033010

Cardholder Verification Method List ('0203 1F03')			
CVM	M Verification Method Conditions If unsuccessful		If unsuccessful
1	Online PIN	Terminal supports CVM Type	Fail
2	No CVM required	Terminal supports CVM Type	Fail

4.4.2 Contact: Application Tag data, AID A000000033010

Tag	Element name	Data Card v5
50	Application Label	49 4E 54 45 52 4C 49 4E 4B -
		'INTERLINK'
57	Track 2 Equivalent Data	47 61 73 10 00 00 00 84 D2 41 22 21
	A 1' 1' D' A (A)	13 50 61 46 89 00 0F 47 61 73 10 00 00 00 84
5A	Application Primary Account Number	47 61 73 10 00 00 00 84
	(PAN)	55 50 41 00 44 45 40 40 54 07 54 65
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65 73 74 20 43 61 72 64 20 30 34 20 20
		20 20 - 'USA DEBIT/Test Card 04'
5F 24	Application Expiration Date	24 12 31
5F 25	Application Expiration Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 21
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile [VIS]	1C 00
02	Application interchange Frome [VIS]	BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported BYTE 2:
		b8 - Use for Visa NOT supported
		b7 - Is NOT Mobile handset
84	Dedicated File (DF) Name	A0 00 00 00 03 30 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	Card Risk Management Data Object List	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	2 (CDOL2)	05 5F 2A 02 9A 03 9C 01 9F 37 04
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 03 1F 03
	List	
8F	Certification Authority Public Key Index	92

Tag	Element name	Data Card v5
90	Issuer Public Key Certificate	3C 96 F7 65 8F BC 29 A2 02 F1 91 46
	location and its year amounts	BD E9 21 66 B0 F6 22 1B BC CB 02 E3
		26 71 0B 9E 22 9D 16 FA E9 AD 0C 87
		4C 06 85 91 6E 19 F0 E3 26 93 EE 20
		1B CE 23 59 50 9A 6D 65 72 F8 EC 3F C3 73 12 6B 34 3F 9C B8 15 3D 61 B7
		EA B2 D4 2D E1 9D 56 08 31 85 A0 3D
		D1 4C 26 8D 40 DF 08 35 C5 5E AB FA
		38 ED 28 BC E4 2C D0 01 3D A9 4F 80
		05 18 B7 53 C2 46 EF FB A0 8F D2 02
		9B AD 5D FC F0 DA F0 7B 7D 80 1C 46 5F FD 25 2C 70 B9 21 53 B3 30 D9 5D
		CA 2F A1 FA AE 2D 01 68 A4 EA 8B 47
		5C D8 05 DC 32 AA 96 4C 17 BF CD 2C
		D5 D0 30 9A B0 EA 76 1B
92	Issuer Public Key Remainder	50 DA 20 DD A8 95 3B 69 3F ED 84 36
		68 31 BA 1E EA 97 F7 8F 79 2A CF 8C
00	Ciana d Otatia Application Data	B9 8F DF 01 49 A7 B7 8F DA 1C 49 67 3D 1B F8 22 20 C2 58 AF A2 7D 72 4F
93	Signed Static Application Data	OF E8 74 D7 73 89 E1 61 16 D7 AD 63
		CO 57 CO A7 EA 8B 55 06 45 61 65 E6
		DA 6E 3D 87 8F 82 A2 9C 2D 11 F7 D1
		35 51 CO 4F CB BE 60 77 8A 26 0B FF
		E5 69 17 1A 0D 0F 40 12 18 21 33 6C 5B 29 F1 2E 67 4C C3 E8 BD 82 63 8F
		2F 75 3D 29 FF C6 1F 7F C9 71 6F 5B
		82 A8 13 C8 75 BC 8E 0B 17 BF 13 06
		65 94 B6 A5 DC 54 1F 75 58 90 3F 54
		22 OF AB 90 3B 84 DC B7 DD 4E 44 3E
		05 6F A0 54 96 8E 0F 9F 9D A7 EC 92
		D4 B7 AC 52 A3 47 2E E7 6E 19 05 2A
		B9 30 C5 D4 64 3E 73 21 0B 7F E4 19 31 81 2B 1A 38 36 B6 5D
94	Application File Locator (AFL)	10 01 01 00 10 02 05 01 10 08 08 00
	` '	B0 01 01 00
9F 07	Application Usage Control	FF CO
		BYTE 1: b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number [VIS]	00 96
9F 0D	Issuer Action Code - Default	B0 50 80 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 50 80 98 00
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	49 6E 74 65 72 6C 69 6E 6B - 'Interlink'
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *
9F 17	Personal Identification Number (PIN) Try Counter	09
9F 1F	Track 1 Discretionary Data	31 33 35 30 36 30 30 31 34 36 30 30 30 30 30 30 30 30 30 30 30 30 30
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80

Tag	Element name	Data Card v5
9F 32	Issuer Public Key Exponent	03
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 44	Application Currency Exponent	02
9F 46	ICC Public Key Certificate	99 78 79 D1 6F BD 5A 24 C6 08 B9 2B
		F2 72 36 15 24 EB 92 9C 23 DD 60 FD
		65 81 96 DF AA 2B E1 0A 60 9A 72 23
		42 0E A5 69 F7 EB 8D 47 64 BF E0 08
		1F 62 8D 9B CA 3C 71 0E 11 C6 64 D7 65 FB CF 1D 04 0B 17 42 12 46 C3 14
		45 0D 39 31 0B D8 6C D5 C8 23 99 03
		A2 75 51 5C D4 6A B0 82 2E BD 47 18
		02 30 D9 0D 87 60 A4 1C 94 DC EB A5
		15 1A 66 D7 82 27 AF F8 9E AB C0 36
		B0 28 18 7F 43 9E 55 85 95 C8 F8 F6
		5E 07 1F 93 55 D7 50 3A 4D 8B 5A 7C
		B2 A0 3C FD E9 74 73 09 9A 8E 8A AF
		D2 37 BB E8 12 3E 4C 7C E9 71 A5 28 F1 FE C3 FD DF B1 E0 6A
0E 47	ICC Public Koy Exponent	03
9F 47 9F 49	ICC Public Key Exponent Dynamic Data Authentication Data	9F 37 04
9F 49	Object List (DDOL)	9F 37 04
9F 4A	Static Data Authentication Tag List	82
9F 51	Application Currency Code [VSDC]	08 40 - USD
9F 52	Application Default Action [VSDC VIS 1.5]	CO 00 00 00 00 00
9F 53	Consecutive Transaction Limit	00
9F 55	(International) [VSDC]	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00
9F 56	Issuer Authentication Indicator [VSDC]	80
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 58	Consecutive Transaction Counter Limit [VSDC]	00
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	00
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	00
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 00
BF 57	International Counters Data Template	DF 11 01 00 DF 21 01 00 DF 31 01 00 DF 51 01 00
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 00 DF 21 06
		00 00 00 00 00 00 DF 31 06 00 00 00
		00 00 00

^{*} Tag value changes with card usage

45 7 40 105 10 4 10 10 10 10 10 10 10

4.5 Test Card 05 - Mastercard, DI, 2-AID (Mastercard Debit+US Debit), English, USA, USD

A Dual Interface (Contact+Contactless), 2-AID Mastercard debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$20.00.

4.5.1 Contact: CVM List - Mastercard debit, AID A0000000041010

Cardho	Cardholder Verification Method List ('4201 0205 5E03 4203 1F00')						
CVM	Verification Method	Conditions	If unsuccessful				
1	Online PIN	Unattended Cash	Next CVM				
2	Online PIN	Purchase with Cashback	Fail				
3	Signature (paper)	Terminal supports CVM type	Next CVM				
4	Online PIN	Terminal supports CVM type	Next CVM				
5	No CVM required	Always	Fail				

4.5.2 Contact: Application Tag data, AID A0000000041010

Application Label	Tag	Element name	Data Card v6
Service Code		Issuer Identification Number (IIN)	54 13 33
Track 2 Equivalent Data	50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 44
14 83 59 49 00 0F		• •	
SA	57	Track 2 Equivalent Data	
SF 20			
73 74 20 43 61 72 64 20 30 35 20 20 20 20 -'USA DEBIT/Test Card 05'	5A	(PAN)	
20 20 - 'USA DEBIT/Test Card 05'	5F 20	Cardholder Name	
5F 24 Application Expiration Date 25 12 31 5F 25 Application Effective Date xx xx xx * 5F 28 Issuer Country Code 08 40 - USA 5F 2D Language Preference 65 6E - 'en' (English) 5F 30 Service Code 02 01 5F 34 Application PAN Sequence Number 11 5F 55 Issuer Country Code (alpha2 format) 55 53 - 'US' 82 Application Interchange Profile 18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b6 - Offline DDA NOT supported b7 - Cardholder verification supported b7 - Cardholder verification supported b8 - Issuer authentication NOT supported b7 - Cardholder verification supported b7 - Cardholder verification supported b8 - EMV Contactless NOT supported BYTE 2: b8 - EMV Contactless NOT supported B7 - Cardholder verification B7 - Card Risk Management Data Object List 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2a 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 9F 03 06 9F 37 04 9F 4C 08 B0 Card Risk Management Data Object List			
SF 25		A 11 11 E 1 11 B 1	
SF 2B			
SF 2D		• •	
5F 30 Service Code 02 01 5F 34 Application PAN Sequence Number 11 5F 55 Issuer Country Code (alpha2 format) 55 53 - 'US' 82 Application Interchange Profile 18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b6 - Offline DDA NOT supported b7 - Cardholder verification supported b8 - Terminal risk mgmt to be performed b8 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE 2: b7 - CAT RISK Management Data Object List 1 (CDOL1) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT RISK Management Data Object List 2 (CDOL2) BY - CAT R			
Section Sect			` • ,
SF 55 Issuer Country Code (alpha2 format) SF 55 Issuer SDA NOT supported	5F 30	Service Code	02 01
Application Interchange Profile	5F 34		
BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported DA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported DA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported DA / GEN AC NOT supported BYTE 2: DA - OFF OFF OFF OFF OFF OFF OFF OFF OFF O	5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
b7 - Offline SDA NOT supported	82		
b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE 2: b8 - EMV Contactless NOT supported 84 Dedicated File (DF) Name A0 00 00 00 04 10 10 87 Application Priority Indicator 8C Card Risk Management Data Object List 1 (CDOL1) 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 8D Card Risk Management Data Object List 2 (CDOL2) 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 42 01 02 05			= · · = · ·
b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE 2:			
b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE			
b3 - Issuer authentication NOT supported via EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported B			
EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE			
b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported BYTE 2: b8 - EMV Contactl			
BYTE 2: b8 - EMV Contactless NOT supported 84			
B8 - EMV Contactless NOT supported 84 Dedicated File (DF) Name A0 00 00 00 04 10 10 87 Application Priority Indicator 01			
84 Dedicated File (DF) Name A0 00 00 00 04 10 10 87 Application Priority Indicator 01 8C Card Risk Management Data Object List 1 (CDOL1) 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 8D Card Risk Management Data Object List 2 (CDOL2) 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 2F			- · · ·
87 Application Priority Indicator 01 8C Card Risk Management Data Object List 1 (CDOL1) 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 8D Card Risk Management Data Object List 2 (CDOL2) 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 2 05 05 9F 37 04 9F 4C 08 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 00 42 01 02 05	84	Dedicated File (DF) Name	
8C	87	\ /	01
1 (CDOL1) 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 8D	8C		9F 02 06 9F 03 06 9F 1A 02 95 05 5F
9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 8D			
8D Card Risk Management Data Object List 2 (CDOL2) 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 2 (CDOL2) 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 00 42 01 02 05		()	
2 (CDOL2) 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 42 01 02 05			
oz da di dida volinication (o vin)		2 (CDOL2)	
List 5E 03 42 03 1F 00	8E	Cardholder Verification Method (CVM)	
		List	5E 03 42 03 1F 00

Tag	Element name	Data Card v6
94	Application File Locator (AFL)	10 01 03 00
94	Application File Locator (AFL)	10 01 03 00
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2: b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
0. 10	Advance]	xx xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 73 74 65 72 63 61 72 64 20 44
	77	65 62 69 74 - 'Mastercard Debit'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 24	Payment Account Reference (PAR)	35 30 30 31 41 42 43 44 45 46 47 48
		49 4A 4B 4C 4D 4E 4F 50 51 52 53 54
9F 26	Application Cryptogram (AC)	55 56 57 58 59 xx xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	00 OF
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
0	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14
9F 6E	Third Party Data [Mastercard]	08 40 00 00 30 30 00
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 50 17 79 00
		A0 00 00 00 04 10 10 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	06 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	06 FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	03
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00 00

Tag	Element name	Data Card v6
CD	Card Issuer Action Code (Contactless) -	00 58 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	06 F8 00
	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	08 00 00
5.4	Decline [M/Chip Advance]	00 40 00 00 00 00 40 00 00 00 40
D1	Accumulator 1 Currency Conversion	08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 08 40 00 00 08 40 00 00
	Table [Mastercard]	00
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF
		FF FF FF FF FF
D5	Application Control [M/Chip Advance]	80 00 80 00 C6 02 00 10
D6	Default ARPC Response Code [M/Chip Advance]	00 10
D7	Application Control [M/Chip Advance]	00 00 80 00 E6 02
D9	Application File Locator (Contactless)	08 01 03 00
DE	Log Data Table [M/Chip Advance]	00 00 00 00 00 00 00 00 00
DF 02	Security Limits Status (Contact) [M/Chip	00
D1 02	Advance]	
DF 11	Accumulator 1 Control (Contact)	C1
	[M/Chip Advance]	
DF 12	Accumulator 1 Control (Contactless)	C1
	[M/Chip Advance]	
DF 14	Accumulator 2 Control (Contact)	00
DE 45	[M/Chip Advance]	00
DF 15	Accumulator 2 Control (Contactless)	00
DF 16	[M/Chip Advance] Accumulator 2 Currency Code	08 40 - USD
טר וט	[Mastercard]	06 40 - 03D
DF 17	Accumulator 2 Currency Conversion	08 40 00 00 00 08 40 00 00 00 08 40
J	Table [Mastercard]	00 00 00 08 40 00 00 00 08 40 00 00
	-	00
DF 18	Accumulator 2 Lower Limit [Mastercard]	00 00 00 00 00 00
DF 19	Accumulator 2 Upper Limit [Mastercard]	00 00 00 00 00 00
DF 1A	Counter 1 Control (Contact) [M/Chip Advance]	
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1
D1 10	Advance]	
DF 1D	Counter 2 Control (Contact) [M/Chip	00
	Advance]	
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00
DF 24	Advance] MTA Currency Code [M/Chip Advance]	08 40
DF 24	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
DI 23	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
0	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	

Tag	Element name	Data Card v6
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	03
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	01
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	10 01 01 00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
1	Advance]	

^{*} Tag value changes with card usage

4.5.3 Contact: CVM List - U.S. Maestro, AID A0000000042203

Cardhol	Cardholder Verification Method List ('4205 4203 1F03 0000')							
CVM	Verification Method	Conditions	If unsuccessful					
1	Online PIN	Purchase with Cashback	Next CVM					
2	Online PIN	Terminal supports CVM type	Next CVM					
3	No CVM required	Terminal supports CVM type	Fail					
4	Fail CVM Processing	Always	Fail					

4.5.4 Contact: Application Tag data, AID A0000000042203

Tag	Element name	Data	Card v6
42	Issuer Identification Number (IIN)	54 13 33	
50	Application Label	55 53 20 4D 41 45 53 54 52 4F	20 20
		20 20 20 20 - 'US MAESTRO'	
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51	22 01
	•	14 83 59 49 00 OF	
5A	Application Primary Account Number	54 13 33 00 89 09 91 30	
	(PAN)		
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F	54 65
		73 74 20 43 61 72 64 20 30 35	20 20
		20 20 - 'USA DEBIT/Test Card 05'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	

Tag	Element name	Data Card v6
5F 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4	De l'este LETE (DE) Nove	b8 - EMV Contactless NOT supported A0 00 00 00 04 22 03
84	Dedicated File (DF) Name	02
87	Application Priority Indicator	
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (CDOL1)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 42 05 42 03
	List	1F 03 00 00 00 00
94	Application File Locator (AFL)	10 01 02 00 10 04 04 00
94	Application File Locator (AFL)	10 01 02 00 10 04 04 00
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 4D 61 65 73 74 72 6F 20 20
		20 20 20 - 'US Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 24	Payment Account Reference (PAR)	35 30 30 31 41 42 43 44 45 46 47 48
		49 4A 4B 4C 4D 4E 4F 50 51 52 53 54 55 56 57 58 59
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	00 10
9F 42	Application Currency Code	08 40 - USD
9F 4Z 9F 4D	i	08 40 - USD 0B 0A
3F 4D	Transaction Log Entry	V2 V

Tag	Element name	Da	ta									Car	d v6
9F 4F	Transaction Log Format	9F	27	01								03	9F
				9F	52	06	DF	3E	01	9 F	21	03	9 F
25.25			14		00	20	20	00					
9F 6E	Third Party Data [Mastercard]			00					00	F۸	1 77	70	00
9F 7E	Application Life Cycle Data [Mastercard]			0B 00								79	
				00									
				00									
C3	Card Issuer Action Code (Contact) -	00	00	00									
	Decline [M/Chip Advance]												
C4	Card Issuer Action Code (Contact) -	06	50	00									
	Default [M/Chip Advance]												
C5	Card Issuer Action Code (Contact) -	06	FB	00									
	Online [M/Chip Advance]												
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
	[Mastercard]												
C8	CRM Country Code [Mastercard]			- U									
C9	Accumulator 1 Currency Code	08	40	- U	SD								
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]			00									
СВ	Accumulator 1 Upper Limit [Mastercard]			00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	06	58	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	F8	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	08	00	00									
D.4	Decline [M/Chip Advance]	00	40	00	00	00	00	40	00	00	00	00	40
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	00	•	00	-10	00	00	00	00		00	00
D3	Additional Check Table [Mastercard]	00	00	00	FF	FF	FF	FF	FF	FF	FF	FF	FF
	-			FF									
D5	Application Control [M/Chip Advance]			80	00	C6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]			80									
D9	Application File Locator (Contactless)			02				_					
DE	Log Data Table [M/Chip Advance]		00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
DE	Advance]	~1											
DF 11	Accumulator 1 Control (Contact)	C1											
DE 40	[M/Chip Advance]	C1											
DF 12	Accumulator 1 Control (Contactless)	CI											
DF 14	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	"											
DF 15	Accumulator 2 Control (Contactless)	00											
טר וס	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	NΩ	40	- U	SD								
וט וט	[Mastercard]	"	-10	J									
DF 17	Accumulator 2 Currency Conversion	08	40	00	00	00	08	40	00	00	00	08	40
5' ''	Table [Mastercard]			00									
	. asio [masteroard]	00											
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											_
	Advance]												

Tag	Element name	Data Card v6
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1
DE 16	Advance]	61
DF 1D	Counter 2 Control (Contact) [M/Chip	00
טר זט	Advance]	
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
DF IE		
DE 4E	Advance]	00
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00 00 00 00 00 00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
DE 04	Advance]	08 40
DF 24	MTA Currency Code [M/Chip Advance]	
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	03
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	01
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	10 01 01 00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.5.5 CTLS: CVM List - Mastercard debit, AID A000000041010 (PayPass)

Cardho	Cardholder Verification Method List ('0205 5E03 0203 1F03 0000')						
CVM	Verification Method	Conditions	If unsuccessful				
1	Online PIN	Purchase with Cashback	Fail				
2	Signature (paper)	Terminal supports CVM type	Next CVM				
3	Online PIN	Terminal supports CVM type	Fail				
4	No CVM required	Terminal supports CVM type	Fail				
5	Fail CVM Processing	Always	Fail				

4.5.6 CTLS: Application Tag data, AID A000000041010 (PayPass)

Tag	Element name	Data Card v6
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 44
		45 42 49 54 - 'MASTERCARD DEBIT'
56	Track 1 Equivalent Data [Mastercard]	42 35 34 31 33 33 33 30 30 38 39 30
		39 39 31 33 30 5E 20 2F 5E 32 35 31
		32 32 30 31 31 34 38 33 35 39 34 39 30 30 30 30 30 30 30 30 30 30 30 30
		30 30 30 30 30 30 30 30 30 30 30
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51 22 01
07	Track 2 Equivalent Bata	14 83 59 49 00 OF
5A	Application Primary Account Number (PAN)	54 13 33 00 89 09 91 30
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 80
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 5E 03
	List	02 03 1F 03 00 00
94	Application File Locator (AFL)	08 01 03 00

	Florida	Data Carl C
Tag	Element name	Data Card v6
9F 07	Application Usage Control	FF C0 BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B4 50 84 00 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B4 70 84 80 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 73 74 65 72 63 61 72 64 20 44
0	, pp. causin received realise	65 62 69 74 - 'Mastercard Debit'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 24	Payment Account Reference (PAR)	35 30 30 31 41 42 43 44 45 46 47 48
31 24	ayment Account Reference (FAR)	49 4A 4B 4C 4D 4E 4F 50 51 52 53 54
		55 56 57 58 59
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	00 OB
9F 42	Application Currency Code	08 40 - USD
9F 4A	Static Data Authentication Tag List	82
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
0	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14
9F 62	Track 1 Bitmap for CVC3 (PCVC3 Track	00 00 00 00 00
	1) [Mastercard]	
9F 63	Track 1 Bitmap for UN and ATC	00 00 00 00 00 00
	(PUNATC Track 1) [Mastercard]	
9F 64	Track 1 Number of ATC Digits (NATC	00
	Track 1) [Mastercard]	
9F 65	Track 2 Bitmap for CVC3 (PCVC3 Track	00 00
01 00	2) [Mastercard]	
9F 66	Track 2 Bitmap for UN and ATC	00 00
91 00	(PUNATC Track 2) [Mastercard]	
9F 67	Track 2 Number of ATC Digits (NATC	02
95 01	, ·	\ \frac{\sigma_{2}}{2}
OF CD	Track 2 [Mastercard]	54 13 33 00 89 09 91 30 D2 51 22 01
9F 6B	Track 2 Equivalent Data [Mastercard]	14 83 59 49 00 00 0F
9F 6C	Application Version [Mastercard]	00 01
9F 6E	Third Party Data [Mastercard]	08 40 00 00 30 30 00
		04 10 0B 14 00 01 00 00 50 17 79 00
9F 7E	Application Life Cycle Data [Mastercard]	A0 00 00 00 04 10 10 00 00 00 00 00 00
		00 00 00 00 00 96 00 97 02 00 5A 5A
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
	Dodino [W/Onip / tavanoo]	

Tag	Element name	Data Card v6
C4	Card Issuer Action Code (Contact) -	06 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	06 FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	03
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	00 58 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	06 F8 00
	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	08 00 00
	Decline [M/Chip Advance]	
D1	Accumulator 1 Currency Conversion	08 40 00 00 00 08 40 00 00 00 08 40
	Table [Mastercard]	00 00 00 08 40 00 00 00 08 40 00 00
D2	Additional Chapter Table [Mastercord]	00 00 00 FF FF FF FF FF FF FF FF
D3	Additional Check Table [Mastercard]	FF FF FF FF FF FF
D5	Application Control [M/Chip Advance]	80 00 80 00 C6 02
D6	Default ARPC Response Code [M/Chip	00 10
	Advancel	
D7	Application Control [M/Chip Advance]	00 00 80 00 E6 02
DF 02	Security Limits Status (Contact) [M/Chip	00
J. J.	Advance]	

^{*} Tag value changes with card usage

4.5.7 CTLS: CVM List - U.S. Maestro, AID A0000000042203 (PayPass)

Cardholder Verification Method List ('0205 4203 1F03 0000')							
CVM	Verification Method	Conditions	If unsuccessful				
1	Online PIN	Purchase with Cashback	Fail				
2	Online PIN	Terminal supports CVM type	Next CVM				
3	No CVM required	Terminal supports CVM type	Fail				
4	Fail CVM Processing	Always	Fail				

4.5.8 CTLS: Application Tag data, AID A0000000042203 (PayPass)

Tag	Element name	Data	Card v5
42	Issuer Identification Number (IIN)	54 13 33	
50	Application Label	55 53 20 4D 41 45 53 54 52	4F 20 20
		20 20 20 20 - 'US MAESTRO'	
56	Track 1 Equivalent Data [Mastercard]	42 35 34 31 33 33 33 30 30	38 39 30
		39 39 31 33 30 5E 20 2F 5E	32 35 31
		32 32 30 31 31 34 38 33 35	39 34 39
		30 30 30 30 30 30 30 30	30 30 30
		30 30 30 30	
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2	51 22 01
	•	14 83 59 49 00 OF	
5A	Application Primary Account Number	54 13 33 00 89 09 91 30	
	(PAN)		
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	

Tag	Element name	Data Card v5
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 80
	- 11	BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
84	Dedicated File (DF) Name	b8 - EMV Contactless supported A0 00 00 00 04 22 03
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (00021)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
0.	2 (CDOL2)	00 00 00 00 00 00 00 00 02 05 42 03
8E	Cardholder Verification Method (CVM)	1F 03 00 00 00 00 00 00 02 03 42 03
94	List Application File Locator (AFL)	08 01 02 00 08 04 04 00
9 4 9F 07	Application Usage Control	FF C0
95 07	Application Usage Control	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B4 50 84 00 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B4 70 84 80 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 4D 61 65 73 74 72 6F 20 20
		20 20 20 - US Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
05.00	Try Counter	00
9F 23	Counter 1 Upper Limit [Mastercard]	25 20 20 21 41 42 42 44 45 46 47 49
9F 24	Payment Account Reference (PAR)	35 30 30 31 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F 50 51 52 53 54
		55 56 57 58 59
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	00 0D
9F 42	Application Currency Code	08 40 - USD
9F 4A	Static Data Authentication Tag List	82

Tog	Element name	Da	to									Car	d v5
Tag	Element name	Da	0A									Uai	d v5
9F 4D	Transaction Log Entry			01	ΩE	02	06	5 E	2A	02	07	0.3	OF
9F 4F	Transaction Log Format								01				
			14	J -	J_	00	-	J <u>_</u>	0-	7 -		03	J -
9F 62	Track 1 Bitmap for CVC3 (PCVC3 Track			00	00	00	00						
01 02	1) [Mastercard]												
9F 63	Track 1 Bitmap for UN and ATC	00	00	00	00	00	0.0						
31 03	(PUNATC Track 1) [Mastercard]		• •		• •		• •						
9F 64	Track 1 Number of ATC Digits (NATC	00											
91 04	Track 1 Number of ATC Digits (NATC Track 1) [Mastercard]	"											
9F 65	Track 2 Bitmap for CVC3 (PCVC3 Track	00	00										
95 00		"	00										
OF 66	2) [Mastercard]	00	00										
9F 66	Track 2 Bitmap for UN and ATC	00	00										
05.07	(PUNATC Track 2) [Mastercard]	00											
9F 67	Track 2 Number of ATC Digits (NATC	02											
25.25	Track 2) [Mastercard]	- 4											01
9F 6B	Track 2 Equivalent Data [Mastercard]			33 59					30	D2	21	22	01
9F 6C	Application Version [Mastercard]		01	39	49	00	00	OF					
9F 6E	Third Party Data [Mastercard]	08	40	00	00	30	30	٥٥					
		04	10		14	00		00	00	50	17	79	00
9F 7E	Application Life Cycle Data [Mastercard]								00			_	
									97				
									00				
C3	Card Issuer Action Code (Contact) -	00	00	00									
	Decline [M/Chip Advance]												
C4	Card Issuer Action Code (Contact) -	06	50	00									
	Default [M/Chip Advance]												
C5	Card Issuer Action Code (Contact) -	06	FB	00									
	Online [M/Chip Advance]												
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	- U	SA								
C9	Accumulator 1 Currency Code			- U									
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
СВ	Accumulator 1 Upper Limit [Mastercard]	00	00	00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	06	58	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	F8	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	08	00	00									
•	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	40	00	00	00	08	40	00	00	00	08	40
	Table [Mastercard]								00				
	. sale [matteredia]	00											
D3	Additional Check Table [Mastercard]							FF	FF	FF	FF	FF	FF
				FF									
D5	Application Control [M/Chip Advance]			80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]		00	80	00	E6	02						
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												

^{*} Tag value changes with card usage

4.6 Test Card 06 - Maestro, CO, 1-AID (2-Funding), English, NLD, EUR

A contact-only, single-AID Maestro debit card with 2 funding accounts with an Issuer Country Code of 'NLD' and Currency Code of 'EUR'.

The recommended transaction amount to generate a host approval is \$20.00.

4.6.1 Contact: CVM List - Maestro Debit, AID A000000043060D0561111

Cardholder Verification Method List ('4103 0203 0000')							
CVM	Verification Method	Method Conditions					
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM				
2	Online PIN	Terminal supports CVM type	Fail				
3	Fail CVM Processing	Always	Fail				

4.6.2 Contact: Application Tag data, AID A0000000043060D0561111

Tag	Element name	Data Card v5
50	Application Label	4D 41 45 53 54 52 4F 31 20 20 20 20
		20 20 20 - 'MAESTRO1'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 01 0D 25 12 22
		01 48 35 94 90 0F
5A	Application Primary Account Number (PAN)	67 99 99 89 00 00 02 01 0F
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 36 20 20
55.04	A 11 (1 E 1 (1 E 1	20 20 - 'USA DEBIT/Test Card 06' 25 12 31
5F 24	Application Expiration Date	xx xx xx *
5F 25	Application Effective Date	
5F 28	Issuer Country Code	05 28 - NLD
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	31
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 30 60 D0 56 11 11
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14
8D	Cord Rick Management Date Chicat List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
טט	Card Risk Management Data Object List	JI OR OR UZ 93 U3 9F 37 U4 9F 4C U0
0.5	2 (CDOL2)	00 00 00 00 00 00 00 00 41 03 02 03
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 02 03
0.4	List	08 01 01 00
94	Application File Locator (AFL)	09 01 01 00

Tag	Element name	Data Card v5
9F 07	Application Usage Control	FF C0
01 01	7 Application Coago Control	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0A	Application Selection Registered	00 01 01 01
	Proprietary Data	
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 14 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 65 73 74 72 6F 31 20 20 20 20
		20 20 20 - 'Maestro1'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	09 78 - EUR
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
		36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 50 17 79 00
91 / 1	Application Life Cycle Data [Mastercard]	A0 00 00 00 04 30 60 17 10 13 00 00
		00 00 00 00 00 80 00 88 01 06 A5 5A
		00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	7F 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	3F FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	05 28 - NLD
C9	Accumulator 1 Currency Code	09 78 - EUR
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	00 00 00
0.5	Default [M/Chip Advance]	00.00.00
CE	Card Issuer Action Code (Contactless) -	00 00 00
	Online [M/Chip Advance]	

Tag	Element name	Da	ta									Car	d v5
CF	Card Issuer Action Code (Contactless) -		00	00								.	<u> </u>
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	09	78	00	00	00	09	78	00	00	00	09	78
	Table [Mastercard]	00	00	00	09	78	00	00	00	09	78	00	00
	A 1 100 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1	00											
D3	Additional Check Table [Mastercard]			FF				F.F.	FF	F.F.	F.F.	F.F.	F.F.
D5	Application Control [M/Chip Advance]			80									
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	00											
DE 44	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact)	00											
DF 15	[M/Chip Advance] Accumulator 2 Control (Contactless)	00											
DF 13	[M/Chip Advance]	"											
DF 16	Accumulator 2 Currency Code	09	99										
Di 10	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	00	09	99	00	00	00	09	99
	Table [Mastercard]	00	00	00	09	99	00	00	00	09	99	00	00
	-	00											
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]	C1	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip Advance]	CI											
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
DF 21	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]			00									
DF 23	MTA CVM (Contactless) [M/Chip	00	00	00	00	00	00						
DE 04	Advance]	00	70										
DF 24	MTA NicCVM (Contact) [M/Chip		78	00	00	00	00						
DF 25	MTA NoCVM (Contact) [M/Chip	00	00	00	00	00	00						
DF 26	Advance] MTA NoCVM (Contactless) [M/Chip	00	00	00	00	00	0.0						
D1 20	Advance]					•••							
DF 27	Number Of Days Offline Limit [M/Chip	00	00										
-· - ·	Advance]												
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 29	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 2B	Accumulator 2 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												

Tag	Element name	Data Card v5
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
<u></u>	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.6.3 Contact: CVM List - Maestro Debit, AID A000000043060D0562222

Cardhol	Cardholder Verification Method List ('4103 0203 0000')					
CVM	Verification Method	Conditions	If unsuccessful			
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM			
2	Online PIN	Terminal supports CVM type	Fail			
3	Fail CVM Processing	Always	Fail			

4.6.4 Contact: Application Tag data, AID A000000043060D0562222

Tag	Element name	Data Card v5
50	Application Label	4D 41 45 53 54 52 4F 32 20 20 20 20
	• •	20 20 20 - 'MAESTRO2'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 02 8D 25 12 22
	-	01 48 35 94 90 OF
5A	Application Primary Account Number	67 99 99 89 00 00 02 02 8F
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 36 20 20
		20 20 - 'USA DEBIT/Test Card 06'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	05 28 - NLD
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	32

Tag	Element name	Data Card v5
82	Application Interchange Profile	18 00
	, , , , , , , , , , , , , , , , , , ,	BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 30 60 D0 56 22 22
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
OD	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 02 03
OL	List	00 00 00 00
94	Application File Locator (AFL)	08 01 01 00
94	Application File Locator (AFL)	08 01 01 00
9F 07	Application Usage Control	FF CO
95 07	Application Usage Control	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0A	Application Selection Registered	00 01 01 01
	Proprietary Data	
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 14 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 65 73 74 72 6F 32 20 20 20 20
0. 12		20 20 - 'Maestro2'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	09 78 - EUR
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Entry Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
31 4 F	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
	1	7C 14

Tag	Element name	Da	ta									Car	d v5
9F 7E	Application Life Cycle Data [Mastercard]			0В	14	00	01	00	00	50	17	79	
_	,,	-		00									
				00									
Ca	Card laguer Action Code (Contact)		00	00	00	00	00	00	00	00	00	00	00
C3	Card Issuer Action Code (Contact) - Decline [M/Chip Advance]	00	00	00									
C4	Card Issuer Action Code (Contact) -	7F	50	00									
	Default [M/Chip Advance]												
C5	Card Issuer Action Code (Contact) -	3 F	FB	00									
	Online [M/Chip Advance]												
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
	[Mastercard]												
C8	CRM Country Code [Mastercard]			- N									
C9	Accumulator 1 Currency Code	09	78	- E	UR								
CA	[Mastercard]	00	00	00	00	00	00						
CA CB	Accumulator 1 Lower Limit [Mastercard] Accumulator 1 Upper Limit [Mastercard]			00									
CD	Card Issuer Action Code (Contactless) -		00		50	50	50						
	Default [M/Chip Advance]		50	50									
CE	Card Issuer Action Code (Contactless) -	00	00	00									
	Online [M/Chip Advance]	"		- 0									
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	09	78	00	00	00	09	78	00	00	00	09	78
	Table [Mastercard]		00	00	09	78	00	00	00	09	78	00	00
Do	-	00		00									-
D3	Additional Check Table [Mastercard]			00 FF				F.E.	F.E.	F.E.	r.E.	r.E.	F.E.
D5	Application Control [M/Chip Advance]			80									
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]		00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
D= :-	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	00											
DF 14	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
01 13	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
5, 10	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion			00									
	Table [Mastercard]		00	00	09	99	00	00	00	09	99	00	00
D= :-		00		00									
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		UU	00	UU	UU	UU						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
DF 1B	Advance] Counter 1 Control (Contactless) [M/Chip	00											
טר ום	Advance	30											
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance												
L		<u> </u>											

Tag	Element name	Data Card v5
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance	
DF 24	MTA Currency Code [M/Chip Advance]	09 78 - EUR
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
D= 00	(Contactless) [M/Chip Advance]	00.00.00
DF 2C	Counter 1 CVR Dependency Data	00 00 00
DE OD	(Contact) [M/Chip Advance]	00 00 00
DF 2D	Counter 1 CVR Dependency Data	00 00 00
DE OF	(Contactless) [M/Chip Advance]	00 00 00
DF 2E	Counter 2 CVR Dependency Data	00 00 00
DF 2F	(Contact) [M/Chip Advance] Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
DI 30	Advance]	
DF 35	Security Limits Status (Contactless)	00
D1 00	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.7 Tost Card 07 - Mastercard Int'l CO 2-AID (Credit Dobit)

4.7 Test Card 07 - Mastercard Int'l, CO, 2-AID (Credit+Debit), English, GBR, GBP

A contact-only, 2-AID International Mastercard combination credit & debit card with an Issuer Country Code of 'GBR' and Currency Code of 'GBP'.

The recommended transaction amount to generate a host approval is \$20.00.

4.7.1 Contact: CVM List - Mastercard credit, AID A0000000041010

Cardho	Cardholder Verification Method List ('4103 4203 5E03 5F03 0000')				
CVM	Verification Method	Conditions	If unsuccessful		
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM		
2	Online PIN	Terminal supports CVM type	Next CVM		
3	Signature (paper)	Terminal supports CVM type	Next CVM		
4	No CVM required	Terminal supports CVM type	Fail		
5	Fail CVM Processing	Always	Fail		

4.7.2 Contact: Application Tag data, AID A000000041010

Tag	Element name	Data Card v5
50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 20
		20 20 20 - 'MASTERCARD'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 51 22 01
		14 83 59 49 00 0F
5A	Application Primary Account Number	54 13 33 00 89 02 00 60
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 37 20 20
55.04	A 11 11 E 1 11 B 1	20 20 - 'USA DEBIT/Test Card 07'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 26 - GBR
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	11
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	

Cardholder Verification Method (CVM)	Tag	Element name	Data Card v5
List			00 00 00 00 00 00 00 00 41 03 42 03
94 Application File Locator (AFL)			5E 03 5F 03 00 00
94 Application File Locator (AFL)	94	Application File Locator (AFL)	08 01 01 00
BYTE 1:	94		08 01 01 00
B8	9F 07	Application Usage Control	
b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed b7 - Inter			
b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International goods valid b4 - Domestic services valid b3 - International goods valid b2 - ATM valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowe			
b5 - International goods valid b4 - Domestic services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International b8 00 00 00 00 00 00 00 00 00 00 00 00 00			
b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International Cashback NOT allowed b7 - Internat			
b2 - ATMs valid b1 - non-ATM terminals valid b1 - non-ATM terminals valid b1 - non-ATM terminals valid b2 - Domestic cashback NOT allowed b7 - International b7 - I			b4 - Domestic services valid
11 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed NOT on 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
BYTE 2:			
B8 - Domestic cashback NOT allowed D7 - International Code - D8 - D			
9F 08			b8 - Domestic cashback NOT allowed
PF OA Application Selection Registered Proprietary Data			
Proprietary Data Proprietary Data 9F 0D			
9F 0D	9F 0A		00 01 01 02
SF OE Issuer Action Code - Denial 00 00 00 00 00 00	05.5		70 50 70 00 00
SF OF Issuer Action Code - Online B0 70 BC 98 00			
9F 10			
Section Advance			
9F 11 Issuer Code Table Index 9F 12 Application Preferred Name 4D 61 73 74 65 72 63 61 72 64 20 20 20 20 20 20 -'Mastercard' 9F 14 Counter 1 Lower Limit [Mastercard] 00 00 00 00 00 00 00	9F 10		
9F 12 Application Preferred Name 4D 61 73 74 65 72 63 61 72 64 20 20 20 20 20 - 'Mastercard' 9F 14 Counter 1 Lower Limit [Mastercard] 00 9F 17 Personal Identification Number (PIN) 09 Try Counter 09 9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 Application Cryptogram (AC) xx	OF 11	<u> </u>	
Section Sect			
9F 14	95 12	Application Preferred Name	
PF 17	9F 14	Counter 1 Lower Limit [Mastercard]	
Try Counter 9F 23			09
9F 23			
9F 27 Cryptogram Information Data (CID) 80 9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 Application Currency Code 08 26 - GBP 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14 9F 7E Application Life Cycle Data [Mastercard] 04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 00 00 00 00 00 00 00 00	9F 23		00
9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 Application Currency Code 08 26 - GBP 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14 9F 7E Application Life Cycle Data [Mastercard] 04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 00 00 00 00 00 00 00 00	9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 42 Application Currency Code 08 26 - GBP 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14 9F 7E Application Life Cycle Data [Mastercard] 04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 00 00 00 00 00 00 00 00	9F 27	Cryptogram Information Data (CID)	
9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14 9F 7E Application Life Cycle Data [Mastercard] 04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 00 00 00 00 00 00 00 00	9F 36	Application Transaction Counter (ATC)	xx xx *
9F 4F			
36			
Section Sect	9F 4F	Transaction Log Format	
9F 7E Application Life Cycle Data [Mastercard] 04 10 08 14 00 01 00 00 50 17 79 00 A0 00 00 00 00 00 00 00 00 00 00 00			
A0 00 00 00 04 10 10 00 00 00 00 00 00 00 00 00 00 00	9F 7F	Application Life Cycle Data [Mastercard]	
C3	01 7 2	Application Life Cycle Data [Mastercara]	AO 00 00 00 04 10 10 00 00 00 00 00
C3 Card Issuer Action Code (Contact) - Decline [M/Chip Advance] C4 Card Issuer Action Code (Contact) - Default [M/Chip Advance] C5 Card Issuer Action Code (Contact) - Online [M/Chip Advance] C6 PIN Try Limit [M/Chip Advance] C7 CDOL1 Related Data Length [Mastercard] C8 CRM Country Code [Mastercard] C9 Accumulator 1 Currency Code O0 00 00 00 0			
Decline [M/Chip Advance]	00	Conditions Action Condition	
C4 Card Issuer Action Code (Contact) - Default [M/Chip Advance] C5 Card Issuer Action Code (Contact) - Online [M/Chip Advance] C6 PIN Try Limit [M/Chip Advance] C7 CDOL1 Related Data Length [Mastercard] C8 CRM Country Code [Mastercard] C9 Accumulator 1 Currency Code O6 00 00 09 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	C3	,	00 00 00
Default [M/Chip Advance]	C4		06 00 00
C5 Card Issuer Action Code (Contact) - 06 00 00 C6 PIN Try Limit [M/Chip Advance] 09 C7 CDOL1 Related Data Length [Mastercard] 08 26 - GBR C8 CRM Country Code [Mastercard] 08 26 - GBP	C4		
Online [M/Chip Advance] C6 PIN Try Limit [M/Chip Advance] C7 CDOL1 Related Data Length [Mastercard] C8 CRM Country Code [Mastercard] C9 Accumulator 1 Currency Code O8 26 - GBR O8 26 - GBP	C5		06 00 00
C6 PIN Try Limit [M/Chip Advance] 09 C7 CDOL1 Related Data Length [Mastercard] 42 [Mastercard] 08 26 - GBR C9 Accumulator 1 Currency Code 08 26 - GBP			
C7	C6		09
[Mastercard] C8			
C8 CRM Country Code [Mastercard] 08 26 - GBR C9 Accumulator 1 Currency Code 08 26 - GBP			
C9 Accumulator 1 Currency Code 08 26 - GBP	C8		08 26 - GBR
		[Mastercard]	
CA Accumulator 1 Lower Limit [Mastercard] 00 00 00 00 00 00	CA		
CB Accumulator 1 Upper Limit [Mastercard] 00 00 00 00 00 00	CB	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00 00

Tag	Element name	Data Card v5
CD	Card Issuer Action Code (Contactless) -	00 00 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	00 00 00
	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	00 00 00
	Decline [M/Chip Advance]	
D1	Accumulator 1 Currency Conversion	08 26 00 00 00 08 26 00 00 00 08 26 00 00 00 08 26 00 00
	Table [Mastercard]	00
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF
	-	FF FF FF FF FF
D5	Application Control [M/Chip Advance]	84 00 80 00 C6 02
D6	Default ARPC Response Code [M/Chip	00 10
D7	Advance]	00 00 00 00 00 00
D7 D9	Application Control [M/Chip Advance] Application File Locator (Contactless)	00 00 00 00 00 00
DE DE	Log Data Table [M/Chip Advance]	00 00 00 00 00 00 00 00
DF 02	Security Limits Status (Contact) [M/Chip	00
DI 02	Advance]	
DF 11	Accumulator 1 Control (Contact)	C1
	[M/Chip Advance]	
DF 12	Accumulator 1 Control (Contactless)	00
DE 44	[M/Chip Advance]	00
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00
DF 15	Accumulator 2 Control (Contactless)	00
Di 13	[M/Chip Advance]	
DF 16	Accumulator 2 Currency Code	09 99
	[Mastercard]	
DF 17	Accumulator 2 Currency Conversion	09 99 00 00 00 09 99 00 00 00 09 99
	Table [Mastercard]	00 00 00 09 99 00 00 00 09 99 00 00
DF 18	Accumulator 2 Lower Limit [Mastercard]	00 00 00 00 00 00
DF 19	Accumulator 2 Upper Limit [Mastercard]	00 00 00 00 00 00
DF 1A	Counter 1 Control (Contact) [M/Chip	C1
5, \	Advancel	
DF 1B	Counter 1 Control (Contactless) [M/Chip	00
	Advance]	
DF 1D	Counter 2 Control (Contact) [M/Chip	00
	Advance]	
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
DE 4E	Advance]	00
DF 1F	Counter 2 Llower Limit [Mastercard]	00
DF 21 DF 22	Counter 2 Upper Limit [Mastercard]	00 00 00 00 00 00
DF 22	MTA CVM (Contact) [M/Chip Advance] MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
DF 23	Advance	
DF 24	MTA Currency Code [M/Chip Advance]	08 26
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
DE CC	(Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	

Tag	Element name	Data Card v5
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.7.3 Contact: CVM List - Maestro debit, AID A000000043060

Cardholder Verification Method List ('4103 4203 0000')					
CVM	Verification Method	Conditions	If unsuccessful		
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM		
2	Online PIN	Terminal supports CVM type	Next CVM		
3	Fail CVM Processing	Always	Fail		

4.7.4 Contact: Application Tag data, AID A0000000043060

Tag	Element name	Data Card v5
50	Application Label	4D 41 45 53 54 52 4F 20 20 20 20 20
	••	20 20 20 - 'MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 25 12
		22 01 48 35 94 90 0F
5A	Application Primary Account Number	67 99 99 89 00 00 02 00 05 1F
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 37 20 20
		20 20 - 'USA DEBIT/Test Card 07'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 26 - GBR
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	12

Tag	Element name	Data Card v5
82	Application Interchange Profile	18 00
02	, application interesting or reme	BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 30 60
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03
0D	Card Pick Management Data Object List	9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08
8D	Card Risk Management Data Object List 2 (CDOL2)	J_ JI JI JZ JJ JJ JE J/ JE 40 00
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 42 03
OL	List	00 00 00 00
94	Application File Locator (AFL)	08 01 02 00
9F 07	Application Usage Control	FF CO
91 07	Application osage control	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid b2 - ATMs valid
		b2 - ATMS Valid b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0A	Application Selection Registered	00 01 01 01
	Proprietary Data	
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 14 xx
	Advance]	xx xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 65 73 74 72 6F 20 20 20 20 20
		20 20 20 - 'Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 26 - GBP
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
		36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14

Tag	Element name	Da	ta									Car	d v5
9F 7E	Application Life Cycle Data [Mastercard]			0в	14	00	01	00	00	50	17	79	
	, , ,			00									
				00									
00	Condition Astion Code (Contest)		00	00	00	00	00	00	00	00	00	00	00
C3	Card Issuer Action Code (Contact) -	00	00	00									
C4	Decline [M/Chip Advance]	75	50	00									
C4	Card Issuer Action Code (Contact) -	/ E	50	00									
C5	Default [M/Chip Advance] Card Issuer Action Code (Contact) -	3 12	FB	00									
Co	,	JE	FD	00									
CC	Online [M/Chip Advance]	09											
C6 C7	PIN Try Limit [M/Chip Advance] CDOL1 Related Data Length	42											
C/	[Mastercard]												
C8	CRM Country Code [Mastercard]	00	26	- G	RP								
C9	Accumulator 1 Currency Code			- G									
Ca	[Mastercard]	08	20	- 0	וט								
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	0.0	0.0	0.0						
CB	Accumulator 1 Upper Limit [Mastercard]			00									
CD	Card Issuer Action Code (Contactless) -		00										
	Default [M/Chip Advance]		20	50									
CE	Card Issuer Action Code (Contactless) -	00	00	0.0									
CL	Online [M/Chip Advance]		•	•									
CF	Card Issuer Action Code (Contactless) -	00	00	00									
01	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	26	00	00	00	08	26	00	00	00	08	26
-	Table [Mastercard]			00									
	Table [Masterdard]	00											
D3	Additional Check Table [Mastercard]			00				FF	FF	FF	FF	FF	FF
				FF									
D5	Application Control [M/Chip Advance]		10	80	00	Cb	02						
D6	Default ARPC Response Code [M/Chip Advance]	00	10										
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)	00	-			00	00						
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00			-	-	-	-					
DI 02	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]	-											
DF 12	Accumulator 1 Control (Contactless)	00											
D1 12	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09		00									
	Table [Mastercard]		00	00	09	99	00	00	00	09	99	00	00
DE 12	-	00	00	00	00	00	00						
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		υÜ	00	υÜ	υÜ	υÜ						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
DE 45	Advance]	00											
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
DE 45	Advance]	^^											
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												

Tag	Element name	Data Card v5
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00
	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 26 - GBP
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
D= 0=	Advance]	20.00
DF 27	Number Of Days Offline Limit [M/Chip	00 00
DE 00	Advance]	00 00 00
DF 28	Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
DI 29	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
D1 2/1	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
DE 00	(Contactless) [M/Chip Advance]	01
DF 30	Interface Enabling Switch [M/Chip	01
DF 35	Advance] Security Limits Status (Contactless)	00
DF 33	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
D1 37	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

Test Card 08 - U.S. Maestro, CO, 1-AID (2-Funding), English, USA, USD 4.8

A contact-only, single AID Mastercard (U.S. Maestro) debit card with 2 funding accounts with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$20.00.

4.8.1 Contact: CVM List - Mastercard U.S. Checking, AID A000000042203D0561111

Cardholder Verification Method List ('0205 4203 1F03 0000')						
CVM	Verification Method	Conditions	If unsuccessful			
1	Online PIN	Purchase with Cashback	Fail			
2	Online PIN	Terminal supports CVM type	Next CVM			
3	No CVM required	Terminal supports CVM type	Fail			
4	Fail CVM Processing	Always	Fail			

4.8.2 Contact: Application Tag data, AID A000000042203D0561111

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 43 48 45 43 4B 49 4E 47 20
		20 20 20 20 - 'US CHECKING'
57	Track 2 Equivalent Data	54 13 33 00 89 09 90 07 D2 51 22 20
- A		14 83 59 49 00 0F 54 13 33 00 89 09 90 07
5A	Application Primary Account Number (PAN)	54 13 33 00 89 09 90 07
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 38 20 20
55.04	A 11 11 E 1 11 B 1	20 20 - 'USA DEBIT/Test Card 08' 25 12 31
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	31
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4	Dedicated File (DF) Name	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 D0 56 11 11
84	Dedicated File (DF) Name	01
87	Application Priority Indicator	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
8C	Card Risk Management Data Object List	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (CDOL1)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 42 03
-	List	1F 03 00 00
94	Application File Locator (AFL)	08 01 01 00
<u> </u>	pp	

Tag	Element name	Data Card v5
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
05.00	Application Varsian Number	b7 - International cashback allowed
9F 08	Application Version Number	B0 50 9C 88 00
9F 0D	Issuer Action Code - Default	00 00 00 00 00
9F 0E	Issuer Action Code - Denial	B0 70 9C 98 00
9F 0F	Issuer Action Code - Online	
9F 10	Issuer Application Data [M/Chip	xx 10 xx
QE 11	Advance] Issuer Code Table Index	01
9F 11 9F 12	Application Preferred Name	55 53 20 43 68 65 63 6B 69 6E 67 20
95 12	Application Freieneu Name	20 20 20 - 'US Checking'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
		36 02 9F 52 06 DF 3E 01 9F 21 03 9F
05.75	Application Life Cycle Data [Mastercard]	7C 14 04 10 0B 14 00 01 00 00 50 17 79 00
9F 7E	Application Life Cycle Data [Mastercard]	AO 00 00 00 04 22 03 00 00 00 00 00
		00 00 00 00 00 80 00 88 01 06 A5 5A
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	06 00 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	06 00 00
000	Online [M/Chip Advance]	0.2
C6	PIN Try Limit [M/Chip Advance]	03
C7	CDOL1 Related Data Length	42
Co	[Mastercard]	08 40 - USA
C8 C9	CRM Country Code [Mastercard]	08 40 - USD
Ca	Accumulator 1 Currency Code [Mastercard]	00 40 - 030
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00 00
CB	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	00 00 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	00 00 00
-	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	00 00 00
-	Decline [M/Chip Advance]	
		ı

Tag	Element name	Da	ta									Cai	d v5
D1	Accumulator 1 Currency Conversion			00	00	00	08	40	00	00	00		
	Table [Mastercard]	00	00	00	80	40	00	00	00	80	40	00	00
		00											
D3	Additional Check Table [Mastercard]			00 FF				FF	FF	FF	FF	FF	FF
D5	Application Control [M/Chip Advance]			80									
D6	Default ARPC Response Code [M/Chip		10										
00	Advance]												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	00											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion			00									
	Table [Mastercard]	00	00	00	09	99	00	00	00	09	99	00	00
DF 18	Accumulator 2 Lower Limit [Mastercard]		00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
	Counter 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 22	MTA CVM (Contact) [M/Chip Advance]			00									
DF 23	MTA CVM (Contactless) [M/Chip Advance]	00	00	00	00	00	00						
DF 24	MTA Currency Code [M/Chip Advance]	08	40										
DF 25	MTA NoCVM (Contact) [M/Chip			00	0.0	0.0	0.0						
D1 23	Advance]		- 0	- 0		- 0	- 0						
DF 26	MTA NoCVM (Contactless) [M/Chip	00	00	00	00	00	00						
2. 20	Advance]												
DF 27	Number Of Days Offline Limit [M/Chip	00	00										
	Advance]												
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 29	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 2B	Accumulator 2 CVR Dependency Data	00	00	00									
DE CC	(Contactless) [M/Chip Advance]	00	0.0	0.0									
DF 2C	Counter 1 CVR Dependency Data	00	00	UU									
	(Contact) [M/Chip Advance]												

Tag	Element name	Data Card v5
DF 2D	Counter 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2E	Counter 2 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 2F	Counter 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 30	Interface Enabling Switch [M/Chip Advance]	01
DF 35	Security Limits Status (Contactless) [M/Chip Advance]	00
DF 37	Security Limits Status Common [M/Chip Advance]	00
DF 3C	CVR Issuer Discretionary Data (Contact) [M/Chip Advance]	00
DF 3D	CVR Issuer Discretionary Data (Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip Advance]	00
DF 40	Read Record Filter (Contactless) [M/Chip Advance]	00
DF 41	DS Management Control [M/Chip Advance]	20

^{*} Tag value changes with card usage

4.8.3 Contact: CVM List - Mastercard U.S. Savings, AID A0000000042203D0562222

Cardhol	Cardholder Verification Method List (0205 4203 1F03 0000')										
CVM	Verification Method	Conditions	If unsuccessful								
1	Online PIN	Purchase with Cashback	Fail								
2	Online PIN	Terminal supports CVM type	Next CVM								
3	No CVM required	Terminal supports CVM type	Fail								
4	Fail CVM Processing	Always	Fail								

4.8.4 Contact: Application Tag data, AID A0000000042203D0562222

Tag	Element name	Data Card v
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 53 41 56 49 4E 47 53 20 20
		20 20 20 20 - 'US SAVINGS'
57	Track 2 Equivalent Data	54 13 33 00 89 09 90 15 D2 51 22 20
		14 83 59 49 00 OF
5A	Application Primary Account Number (PAN)	54 13 33 00 89 09 90 15
55.00	/	55 53 41 20 44 65 62 69 74 2F 54 65
5F 20	Cardholder Name	73 74 20 43 61 72 64 20 30 38 20 20
		20 20 - 'USA DEBIT/Test Card 08'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	32
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'

82	Tag	Element name	Data Card v5
BYTE 1:			18 00
B6 - Offline DDA NOT supported			
B5 - Cardholder verification supported			
b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via External Auth command b2 - On device Cardholder verification NOT supported b1 - Combined DDA / GEN AC NOT supported b1 - Combined DDA / GEN AC NOT supported b1 - Combined DDA / GEN AC NOT supported b1 - Combined DDA / GEN AC NOT supported b1 - Combined DDA / GEN AC NOT supported b2 - On 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
B3 - Issuer authentication NOT supported via External Auth command 12 - On device Cardholder verification NOT supported by 1 - Combined DDA / GEN AC NOT supported by 1 - Combined DDA / GEN AC NOT supported by 1 - Combined DDA / GEN AC NOT supported by 1 - Combined DDA / GEN AC NOT supported by 1 - Combined DDA / GEN AC NOT supported BYTE 2: 87 - Application Priority Indicator 02 - 88 - EMV mode NOT supported DDA / GEN AC NOT supported by 1 - Combined DDA / GEN AC NOT supported DDA / GEN AC NOT suppor			
External Auth command 12 - On device Cardholder verification NOT supported bt - Combined DDA / GEN AC NOT supported bt - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV mode NOT supported A0 00 00 00 04 22 03 00 56 22 22 b8 - EMV mode NOT supported A0 00 00 00 04 22 03 00 56 22 22 b8 - EMV mode NOT supported A0 00 00 00 00 04 22 03 00 56 22 22 b8 - EMV mode NOT supported A0 00 00 00 00 04 22 03 00 56 22 22 b8 - EMV mode NOT supported A0 00 00 00 00 00 04 22 03 05 55 b8 - DA 00 00 00 00 00 00 00 00 00 00 00 00 00			
B2			
Supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: 85 - EMV mode NOT supported BYTE 2: 86 - EMV mode NOT supported BYTE 2: 87 Application Priority Indicator 02 88 - EMV mode NOT supported 87 Application Priority Indicator 02 88 - EMV mode NOT supported 87 Application Priority Indicator 02 98 - 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 40 08 9F 34 03 9F 21 03 9F 7C 14 9F 02 06 9F 03 05 9F 37 04 9F 35 01 9F 45 02 9F 40 08 9F 34 03 9F 21 03 9F 7C 14 9F 02 03 05 05 9F 37 04 9F 4C 08 25 05 9F 37 04 9F 27 05 9F 37 04 9F 27 05 9F 27 05 9F 37 04 9F 37 05 05 9F 37 04 9F 37 05 05 9F 37 05 9F			
BYTE 2: b8 - EMV mode NOT supported			
B - EMV mode NOT supported A0 00 00 00 04 22 03 D0 56 22 22			b1 - Combined DDA / GEN AC NOT supported
B4			- · ·:
Section Sect			b8 - EMV mode NOT supported
SC			
1 (CDOL1)			
Record Risk Management Data Object List 2 (CDOL2)	8C	,	
SD		1 (CDOL1)	
Section Card Risk Management Data Object List 2 (CDOL2)			
2 (CDOL2)	8D	Card Risk Management Data Object List	
SE			
Section Sect	8F		00 00 00 00 00 00 00 00 02 05 42 03
94 Application File Locator (AFL) 08 01 01 00	"-	· ,	
94 Application File Locator (AFL) 08 01 01 00 9F 07 Application Usage Control FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed b7 - Int	94		08 01 01 00
9F 07 Application Usage Control FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b3 - International services valid b3 - International services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback a		i	08 01 01 00
BYTE 1:			FF CO
b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International B7 - International Cashback allowed b7 - International Cashback	0. 0.	, application coage control	BYTE 1:
b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International goods valid b3 - International goods valid b3 - International services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International D0 D8 D8 D8 D8 D8 D8 D8 D8 D8 D8 D8 D9			b8 - Domestic cash trans. valid
b5 - International goods valid b4 - Domestic services valid b3 - International services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allo			
b4 - Domestic services valid b3 - International services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashba			
b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed b7 - Internation			
b2 - ATMs valid b1 - non-ATM terminals valid BYTE b8 - Domestic cashback allowed b7 - International cashback allowed b8 - Domestic cashback allowed b7 - International cashback allowed b7 - International cashback allowed b8 - Domestic cashback allowed b8 - International cashback allowed b8 - Vol 8 & 00 00 00 00 00 00 00			
b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed b9 - International cashback allo			
BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed b8 0 - USD b8 00 - USD b8 00 - USD b9			
b7 - International cashback allowed			
9F 08 Application Version Number 00 02 9F 0D Issuer Action Code - Default B0 50 9C 88 00 9F 0E Issuer Action Code - Denial 00 00 00 00 00 9F 0F Issuer Action Code - Online B0 70 9C 98 00 9F 10 Issuer Application Data [M/Chip Advance] xx 10 xx			
9F 0D			
9F 0E Issuer Action Code - Denial 00 00 00 00 00 9F 0F Issuer Action Code - Online B0 70 9c 98 00 9F 10 Issuer Application Data [M/Chip Advance] xx 10 xx	-		
9F 0F Issuer Action Code - Online B0 70 9C 98 00 9F 10 Issuer Application Data [M/Chip Advance] xx 10 xx	9F 0D		
9F 10 Issuer Application Data [M/Chip Advance] xx 10 xx			
Advance] 9F 11	-		
9F 11	9F 10	_ · · ·	
9F 12 Application Preferred Name 55 53 20 53 61 76 69 6E 67 73 20 20 20 20 20 - 'US Savings' 9F 14 Counter 1 Lower Limit [Mastercard] 00 9F 17 Personal Identification Number (PIN) Try Counter 03 9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 Application Cryptogram (AC) xx		-	
20 20 20 20 - 'US Savings' 9F 14			
9F 14 Counter 1 Lower Limit [Mastercard] 00 9F 17 Personal Identification Number (PIN) 03 Try Counter 000 9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 Application Cryptogram (AC) xx	9F 12	Application Preferred Name	
9F 17 Personal Identification Number (PIN) Try Counter 9F 23 Counter 1 Upper Limit [Mastercard] 9F 26 Application Cryptogram (AC) 9F 27 Cryptogram Information Data (CID) 9F 36 Application Transaction Counter (ATC) 9F 42 Application Currency Code 9F 4D Transaction Log Entry 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F	05 4 4	Country 1 Louis Limit Masters	Ţ
Try Counter 9F 23			
9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 Application Cryptogram (AC) xx	95 17		03
9F 26 Application Cryptogram (AC) xx	0E 22		00
9F 27 Cryptogram Information Data (CID) 80 9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 Application Currency Code 08 40 - USD 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 Application Currency Code 08 40 - USD 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
9F 42 Application Currency Code 08 40 - USD 9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
36 02 9F 52 06 DF 3E 01 9F 21 03 9F			
	95 45	Transaction Log Format	

Tag	Element name	Da	ta									Car	d v5
9F 7E	Application Life Cycle Data [Mastercard]			0в	14	00	01	00	00	50	17	79	
_	[masterdard]	A0	00	00	00	04	22	03	00	00	00	00	00
				00									
00	Condition Artists On the (October)		00	00	υ0	υ0	υ0	υ0	υ0	υ0	υ0	00	υÜ
C3	Card Issuer Action Code (Contact) -	00	00	00									
C4	Decline [M/Chip Advance] Card Issuer Action Code (Contact) -	06	00	00									
C4	Default [M/Chip Advance]	08	00	00									
C5	Card Issuer Action Code (Contact) -	06	00	0.0									
CS	Online [M/Chip Advance]		00	00									
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
01	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	- U	SA								
C9	Accumulator 1 Currency Code			- U									
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
СВ	Accumulator 1 Upper Limit [Mastercard]	00	00	00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	00	00	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	00	00	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	00	00	80	40	00	00	00	08	40	00	00
D3	Additional Check Table [Mastercard]	00	00	00	नम	प्रम	प्रम	नम	पप	पप	पप	ਸਬ	ਸ਼ਸ਼
DS	Additional Check Table [Mastercard]			FF									
D5	Application Control [M/Chip Advance]	80	00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]		00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
DE 40	[M/Chip Advance]	00											
DF 12	Accumulator 1 Control (Contactless)	00											
DE 44	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact)	"											
DF 15	[M/Chip Advance] Accumulator 2 Control (Contactless)	00											
ר וט	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	00	09	99	00	00	00	09	99
	Table [Mastercard]			00									
<u></u>	-	00											
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		00	00	00	υ٥	υΟ						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
DE 45	Advance]	^^											
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
DE 4D	Advance]	00											
DF 1D	Counter 2 Control (Contact) [M/Chip Advance]	00											
	Auvancej												

Tag	Element name	Data Card v5
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00
	Advance	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
DE 00	(Contact) [M/Chip Advance]	00.00.00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
DF 2A	(Contactless) [M/Chip Advance] Accumulator 2 CVR Dependency Data	00 00 00
DF ZA	(Contact) [M/Chip Advance]	00 00 00
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
01 20	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
DE OF	Advance]	00
DF 35	Security Limits Status (Contactless)	00
DE 27	[M/Chip Advance]	00
DF 37	Security Limits Status Common [M/Chip Advance]	00
DF 3C	CVR Issuer Discretionary Data	00
Di 30	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
] . 05	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.9 Test Card 09 - Mastercard, CO, 3-AID (Credit+Maestro x2), English, USA, USD

A contact-only, 3-AID combination Mastercard Credit, Maestro and U.S. Maestro with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$20.00.

4.9.1 Contact: CVM List - Mastercard credit, AID A0000000041010

Cardho	Cardholder Verification Method List ('4103 4203 5E03 1F00 0000')										
CVM	Verification Method	Conditions	If unsuccessful								
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM								
2	Online PIN	Terminal supports CVM type	Next CVM								
3	Signature (paper)	Terminal supports CVM type	Next CVM								
4	No CVM required	Terminal supports CVM type	Fail								
5	Fail CVM Processing	Always	Fail								

4.9.2 Contact: Application Tag data, AID A0000000041010

Tag	Element name	Data Card v5
50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 20
		20 20 20 20 - 'MASTERCARD'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 51 22 01
		14 83 59 49 00 0F
5A	Application Primary Account Number	54 13 33 00 89 02 00 60
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 39 20 20
		20 20 - 'USA DEBIT/Test Card 09'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	11
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03
8D	Cord Biok Management Date Chiest List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
טט	Card Risk Management Data Object List 2 (CDOL2)	91 VA GA 02 93 03 9F 37 04 9F 4C 06
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 42 03
	List	5E 03 1F 00 00 00
L		<u>l</u>

Tag	Element name	Data Card v5
94	Application File Locator (AFL)	08 01 01 00
94	Application File Locator (AFL)	08 01 01 00
9F 07	Application Usage Control	FF 00
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denaul	00 00 00 00 00
9F 0F	Issuer Action Code - Defilar	B0 70 BC 98 00
9F 10		xx 14 xx
95 10	Issuer Application Data [M/Chip Advance]	** ** ** ** ** ** ** ** ** ** ** ** **
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 73 74 65 72 63 61 72 64 20 20
91 12	Application Freieneu Name	20 20 20 - 'Mastercard'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
0	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 04 10 10 00 00 00 00 00
		00 00 00 00 00 80 00 88 01 06 A5 5A
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	1F 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	3F FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	00 00 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	00 00 00
	Online [M/Chip Advance]	

Tag	Element name	Da	ta									Car	d v5
CF	Card Issuer Action Code (Contactless) -		00	00								0 0	<u> </u>
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	40	00	00	00	08	40	00	00	00	08	40
	Table [Mastercard]		00	00	80	40	00	00	00	80	40	00	00
	A 1 100 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1 1 T 1	00											
D3	Additional Check Table [Mastercard]			FF				F.F.	FF	F.F.	F.F.	F.F.	F.F.
D5	Application Control [M/Chip Advance]			80									
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	00											
DE 4.4	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
Di 13	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	00	09	99	00	00	00	09	99
	Table [Mastercard]		00	00	09	99	00	00	00	09	99	00	00
DE 40	A second later O. Lever Limit [Mantagener]	00	00	00	00	00	00						
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19 DF 1A	Accumulator 2 Upper Limit [Mastercard] Counter 1 Control (Contact) [M/Chip	C1	00	00	00	00	00						
DETA	Advance	01											
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
DF 21	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]			00									
DF 23	MTA CVM (Contactless) [M/Chip	00	00	00	00	00	00						
DF 24	Advance] MTA Currency Code [M/Chip Advance]	08	40										
DF 25	MTA NoCVM (Contact) [M/Chip			00	0.0	00	0.0						
DI 23	Advance		-			-							
DF 26	MTA NoCVM (Contactless) [M/Chip	00	00	00	00	00	00						
20	Advance]												
DF 27	Number Of Days Offline Limit [M/Chip	00	00										
	Advance]	L											
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 29	Accumulator 1 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
DE CD	(Contact) [M/Chip Advance]	00	00	00									
DF 2B	Accumulator 2 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												

Tag	Element name	Data Card v5
DF 2C	Counter 1 CVR Dependency Data	00 00 00
D. 20	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
D= 4:	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
1	Advance]	

^{*} Tag value changes with card usage

4.9.3 Contact: CVM List - Maestro debit, AID A0000000043060

Cardholder Verification Method List ('4103 0203 0000')							
CVM	Verification Method	If unsuccessful					
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM				
2	Online PIN	Terminal supports CVM type	Fail				
3	Fail CVM Processing	Always	Fail				

4.9.4 Contact: Application Tag data, AID A0000000043060

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	67 99 99
50	Application Label	4D 41 45 53 54 52 4F 20 20 20 20 20
		20 20 20 - 'MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 25 12
		22 01 48 35 94 90 0F
5A	Application Primary Account Number	67 99 99 89 00 00 02 00 05 1F
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 39 20 20
		20 20 - 'USA DEBIT/Test Card 09'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	12
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'

Tag	Element name	Data Card v5
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2: b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 30 60
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
00	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	(ODOLI)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 02 03
	List	
94	Application File Locator (AFL)	08 01 02 00
94	Application File Locator (AFL)	08 01 02 00
9F 07	Application Usage Control	FF C0 BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx x *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 65 73 74 72 6F 20 20 20 20 20
OF 4.4	Countar 1 Lawer Limit [Mastersard]	20 20 20 - 'Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	03
9F 17	Personal Identification Number (PIN)	
9F 23	Try Counter Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	08 0A
9F 4F	Transaction Log Entry Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
9F 4F	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14

Tag	Element name	Da	ıta									Car	d v5
9F 7E	Application Life Cycle Data [Mastercard]	04		0в	14	00	01	00	00	50	17	79	00
				00								00	
			00			00				01			5A
00	Condition Code (Contact)			00	00	00	00	00	00	00	00	00	00
C3	Card Issuer Action Code (Contact) -	00	00	00									
C4	Decline [M/Chip Advance]	1 5	50	٥٥									
C4	Card Issuer Action Code (Contact) -	IF	50	00									
C5	Default [M/Chip Advance] Card Issuer Action Code (Contact) -	उस	FB	0.0									
CS	Online [M/Chip Advance]	JE		00									
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
01	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	- U	SA								
C9	Accumulator 1 Currency Code	-		- U:									
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
СВ	Accumulator 1 Upper Limit [Mastercard]	00	00	00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	06	50	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	FB	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	00	00	08	40	00	00	00	08	40	00	00
D3	Additional Check Table [Mastercard]	00	00	0.0	FF	प्रम	प्रम	प्रम	पप	FF	ਸ਼ਸ਼	ਸ਼ਸ਼	ਸ਼ਸ਼
D3	Additional Check Table [Mastercard]			FF			FF						
D5	Application Control [M/Chip Advance]	84	00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]			80									
D9	Application File Locator (Contactless)			01									
DE	Log Data Table [M/Chip Advance]		00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
DE 40	[M/Chip Advance]	C1											
DF 12	Accumulator 1 Control (Contactless) [M/Chip Advance]	01											
DF 14	Accumulator 2 Control (Contact)	00											
DF 14	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
51 15	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09		00									
	Table [Mastercard]		00	00	09	99	00	00	00	09	99	00	00
DE 40	Appropriator O Louise Limit IMantage II	00	00	00	00	00	00						
DF 18	Accumulator 2 Lower Limit [Mastercard]	00		00									
DF 19	Accumulator 2 Upper Limit [Mastercard]	C1	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip Advance]	C1											
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
ם וט	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance												
		1											

Tag	Element name	Data Card v5
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
D. 20	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
D= 00	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
DE OF	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
DEAF	(Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip	00
DE 40	Advance]	00
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.9.5 Contact: CVM List - U.S. Maestro, AID A000000042203

Cardholder Verification Method List ('0205 4203 1F03')							
CVM	If unsuccessful						
1	Online PIN	Purchase with Cashback	Fail				
2	Online PIN	Terminal supports CVM type	Next CVM				
3	No CVM required	Terminal supports CVM type	Fail				

4.9.6 Contact: Application Tag data, AID A0000000042203

		_
Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	67 99 99
50	Application Label	55 53 20 4D 41 45 53 54 52 4F 20 20
		20 20 20 - 'US MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 25 12
		22 01 48 35 94 90 0F
5A	Application Primary Account Number	67 99 99 89 00 00 02 00 05 1F
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 39 20 20
55.04	A 11 11 E 1 11 B 1	20 20 - 'USA DEBIT/Test Card 09'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	12
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
84	Dedicated File (DF) Name	b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	b8 - EMV mode NOT supported A0 00 00 00 04 22 03
87	Application Priority Indicator	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03
	Application Priority Indicator Card Risk Management Data Object List	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F
87	Application Priority Indicator	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03
87	Application Priority Indicator Card Risk Management Data Object List	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01
87	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03
87 8C	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14
87 8C 8D	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08
87 8C	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14
87 8C 8D 8E	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00
87 8C 8D 8E 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00
87 8C 8D 8E 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1:
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1:
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2:
87 8C 8D 8E 94 94	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL)	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed
87 8C 8D 8E 94 94 9F 07	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL) Application Usage Control	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed
87 8C 8D 8E 94 94 9F 07	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL) Application Usage Control	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed 00 02
87 8C 8D 8E 94 94 9F 07	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL) Application Usage Control Application Usage Control	D8 - EMV mode NOT supported A0 00 00 00 04 22 03
87 8C 8D 8E 94 94 9F 07	Application Priority Indicator Card Risk Management Data Object List 1 (CDOL1) Card Risk Management Data Object List 2 (CDOL2) Cardholder Verification Method (CVM) List Application File Locator (AFL) Application File Locator (AFL) Application Usage Control	b8 - EMV mode NOT supported A0 00 00 00 04 22 03 03 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 00 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed 00 02

9F 10 Issuer Application Data [M/Chip Advance] Xx Xx Xx Xx Xx Xx Xx X	Tag	Element name	Da	ta									Car	d v5
Advance					хx	хx	хx	хx	хx	хx	хx	хx	хx	хх
9F 12			хx	хx	хx	хx	хx	хx	*					
Section Sect	9F 11	Issuer Code Table Index	01											
9F 14 Counter 1 Lower Limit [Mastercard]	9F 12	Application Preferred Name									72	6F	20	20
Personal Identification Number (PIN) Try Counter Try Counter Try Counter Try Counter Personal Identification Number (PIN) Try Counter Personal Identification Number (PIN) Personal Identification Number (PIN) Personal Identification Counter (ATC) Personal Identification Cryptogram (AC) Xxx xxx xx x				20	20	20	- 'L	IS M	aes	tro'				
Try Counter														
SF 23	9F 17		03											
SP 26 Application Cryptogram (AC) SV XX	25.00													
SF 27														
Section Sect				ХX	ХX	ХX	ХX	ХX	xx	xx				
9F 42					<u> </u>									
9F 4D Transaction Log Entry 0B 0A 9F 4F Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 7C 14 9F 7F Application Life Cycle Data [Mastercard] 04 10 0B 14 00 01 00 00 50 17 79 00 00 00 00 00 00 00 00 00 00 00 00 00						<u>en</u>								
Fig.					- 0	SU								
9F 7E			-		01	٥r	02	06	517	21	02	QΣ	Λ3	0F
PF 7E	95 45	Transaction Log Format												
A0			7C	14										
Card Issuer Action Code (Contact) - Decline [M/Chip Advance]	9F 7E	Application Life Cycle Data [Mastercard]												
C3														
C3													_	_
Decline [M/Chip Advance]	C3	Card Issuer Action Code (Contact) -							-	-	-	-	-	
C4		· · · · · · · · · · · · · · · · · · ·												
Default [M/Chip Advance]	C4		06	50	00									
C5		,												
Online [M/Chip Advance]	C5		06	FB	00									
C6														
C7	C6		03											
C8 CRM Country Code [Mastercard] 08 40 - USA C9 Accumulator 1 Currency Code [Mastercard] 08 40 - USD CA Accumulator 1 Lower Limit [Mastercard] 00 00 00 00 00 00 CB Accumulator 1 Upper Limit [Mastercard] 00 00 00 00 00 00 CD Card Issuer Action Code (Contactless) - Default [M/Chip Advance] 06 50 00 CE Card Issuer Action Code (Contactless) - Online [M/Chip Advance] 06 FB 00 CF Card Issuer Action Code (Contactless) - Decline [M/Chip Advance] 00 00 00 00 D1 Accumulator 1 Currency Conversion Table [Mastercard] 08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 00 00 00 00 00 00 00 00 00	C7		42											
C9		[Mastercard]												
[Mastercard] CA		CRM Country Code [Mastercard]												
CA Accumulator 1 Lower Limit [Mastercard] 00	C9		08	40	- U	SD								
CB		•												
CD														
Default [M/Chip Advance]						00	00	00						
CE Card Issuer Action Code (Contactless) - Online [M/Chip Advance] 06 FB 00 CF Card Issuer Action Code (Contactless) - Decline [M/Chip Advance] 00 00 00 D1 Accumulator 1 Currency Conversion Table [Mastercard] 08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 00 00 00 00 00 00 00 00 00	CD		06	50	00									
Online [M/Chip Advance]	05		0.6	TP C	00									
CF Card Issuer Action Code (Contactless) - Decline [M/Chip Advance] 00 00 00 D1 Accumulator 1 Currency Conversion Table [Mastercard] 00 00 00 00 08 40 00 00 00 00 00 00 00 00 00 00 00 00	CE		06	rb	00									
Decline [M/Chip Advance]	CE		00	00	00									
D1	Cr		"	00	00									
Table [Mastercard]	D1		08	40	00	00	00	08	40	00	00	00	08	40
D3	5 '													
FF		-												
D5	D3	Additional Check Table [Mastercard]							FF	FF	FF	FF	FF	FF
D6 Default ARPC Response Code [M/Chip Advance] 00 10 D7 Application Control [M/Chip Advance] 80 00 80 00 c6 02 D9 Application File Locator (Contactless) 08 01 01 00 08 03 03 00 DE Log Data Table [M/Chip Advance] 00 00 00 00 00 00 00 00 00 DF 02 Security Limits Status (Contact) [M/Chip Advance] 00 00 00 00 00 00 00 00 00 DF 11 Accumulator 1 Control (Contact) [M/Chip Advance] C1 DF 12 Accumulator 1 Control (Contactless) C1	DE	Application Control MA/Object Advances												
Advance					30	50	<u> </u>	υZ						
D7 Application Control [M/Chip Advance] 80 00 80 00 c6 02 D9 Application File Locator (Contactless) 08 01 01 00 08 03 03 00 DE Log Data Table [M/Chip Advance] 00 00 00 00 00 00 00 00 00 00 DF 02 Security Limits Status (Contact) [M/Chip Advance] 00 DF 11 Accumulator 1 Control (Contact) [M/Chip Advance] C1 DF 12 Accumulator 1 Control (Contactless) C1	סט	·	"	10										
D9 Application File Locator (Contactless) 08 01 01 00 08 03 03 00 DE Log Data Table [M/Chip Advance] 00 00 00 00 00 00 00 00 00 00 00 DF 02 Security Limits Status (Contact) [M/Chip Advance] 00 00 00 00 00 00 00 00 00 00 00 00 00	D7		80	00	80	00	C6	02						
DE Log Data Table [M/Chip Advance] 00 00 00 00 00 00 00 00 00 DF 02 Security Limits Status (Contact) [M/Chip Advance] DF 11 Accumulator 1 Control (Contact) [M/Chip Advance] DF 12 Accumulator 1 Control (Contactless)									03	00				
DF 02 Security Limits Status (Contact) [M/Chip Advance] DF 11 Accumulator 1 Control (Contact) [M/Chip Advance] DF 12 Accumulator 1 Control (Contactless)											00			
Advance] DF 11				-	-	-	-							
DF 11 Accumulator 1 Control (Contact) C1 [M/Chip Advance] DF 12 Accumulator 1 Control (Contactless) C1	32													
[M/Chip Advance] DF 12 Accumulator 1 Control (Contactless) C1	DF 11		C1											
DF 12 Accumulator 1 Control (Contactless) C1														
	DF 12		C1											

Tag	Element name	Data Card v5
DF 14	Accumulator 2 Control (Contact)	00
	[M/Chip Advance]	
DF 15	Accumulator 2 Control (Contactless)	00
	[M/Chip Advance]	
DF 16	Accumulator 2 Currency Code	09 99
	[Mastercard]	
DF 17	Accumulator 2 Currency Conversion	09 99 00 00 00 09 99 00 00 00 09 99 00 00
	Table [Mastercard]	00
DF 18	Accumulator 2 Lower Limit [Mastercard]	00 00 00 00 00 00
DF 19	Accumulator 2 Upper Limit [Mastercard]	00 00 00 00 00
DF 1A	Counter 1 Control (Contact) [M/Chip	C1
	Advance]	
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1
	Advance]	
DF 1D	Counter 2 Control (Contact) [M/Chip	00
DE (=	Advance]	
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
DF 1F	Advance]	00
DF 1F DF 21	Counter 2 Lower Limit [Mastercard] Counter 2 Upper Limit [Mastercard]	00
DF 21	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactle IM/Chip Advance MTA CVM (Contactless) IM/Chip	00 00 00 00 00 00
Di 23	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
DE 00	(Contact) [M/Chip Advance]	00.00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
DF 2A	(Contactless) [M/Chip Advance] Accumulator 2 CVR Dependency Data	00 00 00
DF ZA	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
D1 25	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
5=	(Contact) [M/Chip Advance]	00.00
DF 2F	Counter 2 CVR Dependency Data	00 00 00
DE 00	(Contactless) [M/Chip Advance]	01
DF 30	Interface Enabling Switch [M/Chip Advance]	<u></u>
DF 35	Security Limits Status (Contactless)	00
ן טט וט	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	

Tag	Element name	Data	Card v5
DF 3F	Read Record Filter (Contact) [M/Chip	00	
	Advance]		
DF 40	Read Record Filter (Contactless)	00	
	[M/Chip Advance]		
DF 41	DS Management Control [M/Chip	20	
	Advance]		

^{*} Tag value changes with card usage

4.10 Test Card 10 - Mastercard, DI, 1-AID (US Maestro), English, USA, USD

A Dual Interface (Contact+Contactless), single-AID Mastercard U.S. Maestro debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$20.00.

4.10.1 Contact: CVM List - U.S. Maestro, AID A0000000042203

Cardholder Verification Method List ('0205 4203 1F03')						
CVM	Verification Method	If unsuccessful				
1	Online PIN	Purchase with Cashback	Fail			
2	Online PIN	Terminal supports CVM type	Next CVM			
3	No CVM required	Terminal supports CVM type	Fail			

4.10.2 Contact: Application Tag data, AID A0000000042203

Tag	Element name	Data Card v7
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 4D 41 45 53 54 52 4F - US
		MAESTRO'
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51 22 20
		08 08 10 79 00 00 0F
5A	Application Primary Account Number	54 13 33 00 89 09 91 30
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 30 20 20
		20 20 - 'USA DEBIT/Test Card 10'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	13
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'

Tag	Element name	Data Card v7
82	Application Interchange Profile [M/Chip,	18 00
02	PayPass	BYTE 1:
	Tayl dooj	b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4	D	b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 22 03
87	Application Priority Indicator	
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (CDOL1)	9F 45 02 9F 4C 08 9F 34 03
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 42 03
	List	1F 03
8F	Certification Authority Public Key Index	FA
90	Issuer Public Key Certificate	18 89 B9 97 E6 FC E8 4B 4A E7 AB 87
	•	43 1C BD B3 DF 8C 1D 5A 55 A7 F6 0D
		29 59 AF 3A 51 04 E7 58 83 17 ED 74
		08 66 68 CF 1A 05 47 84 F7 49 3C 6D 74 7F A7 96 EC 14 D3 33 A6 8E C7 E0
		08 62 95 9A 0B D0 F0 48 20 80 B7 1A
		C1 B7 62 5B 1B 8B 1F 35 A6 69 19 99
		BA 78 F5 92 E2 3F 95 E9 96 09 D1 08
		CF 1C 0E 30 8A 8B F6 4F BD E8 37 D3
		CE 13 8A 50 DC 50 AF 4B 41 EE 53 D9
		8A 11 B6 A8 1D DD 44 CC 43 0C 1E F3 BB 9D 1D 75 A0 2F AA 9C 81 4A FC 58
92	Issuer Public Key Remainder	D3 52 41 07
94	Application File Locator (AFL)	08 02 04 01 18 01 01 00 20 01 01 00
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00
9F 10	Issuer Application Data [M/Chip 4]	xx 14 xx
		xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 4D 61 65 73 74 72 6F - 'US
05.11	1	Maestro'
9F 14	Lower Consecutive Offline Limit	00
9F 17	Personal Identification Number (PIN)	01
	Try Counter	

Tag	Element name	Data Card v
9F 1F	Track 1 Discretionary Data	30 36 32 39 33 30 34 32 33 30 30 30
31 11	Track i discretionary data	30 30 30 30 30 30 30 30 30 30 30 30
9F 23	Upper Consecutive Offline Limit	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 32	Issuer Public Key Exponent	03
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 44	Application Currency Exponent	02
9F 46	ICC Public Key Certificate	4C BF 13 28 20 81 6C 78 CE AF C1 CE
		16 A9 C7 FC B7 22 5E 07 27 F2 71 A9
		12 89 4C EE B7 B4 DD 99 54 F1 C8 71
		BE 2C 88 37 9A D5 6C 07 3F 2F 3F 05
		67 6D 68 26 0A B4 36 30 BD 28 7E 26 1B 42 20 1C 14 F6 FA FE 20 0F 1C 11
		3E C6 04 5A 36 CE B8 DF 56 70 C0 6E
		06 51 5F D6 88 F2 AF D2 5F B5 D1 38
		C3 C3 1F 5E 04 59 92 B9 F4 00 91 C0
		03 6C F1 A4
9F 47	ICC Public Key Exponent	03
9F 48	ICC Public Key Remainder	F3 25 B3 BD AC FB F2 AD 0D 2C A1 DE
		FF 97 C7 E4 A6 3C E0 4C 97 FE 9B 6E
		A9 86 C7 1C 35 71 2E 0E 6C 1D 89 4E
05.40	Daniel Data A. Haatianii a Data	5F 9F D6 99 82 C7
9F 49	Dynamic Data Authentication Data	9F 37 04
05.44	Object List (DDOL)	82
9F 4A	Static Data Authentication Tag List	82
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF FF FF FF
01 72	Application Elio Oyolo Bata [Madtordara]	FF
		FF FF FF FF 00 04 00 00 02 60 00 00
		38 4A 02 11 50 35 43 44 30 37 32 20
C3	Card Issuer Action Code - Decline	00 00 00
	[Mastercard]	
C4	Card Issuer Action Code - Default	06 50 00
	[Mastercard]	
C5	Card Issuer Action Code - Online	06 FB 00
	[Mastercard]	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00
C7	CDOL1 Related Data Length	2B
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	CRM Currency Code [M/Chip4]	08 40 - USD
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00
СВ	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40
		00 01 00 08 40 00 01 00 08 40 00 01
		00
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF
D.F.	Application Control (84/OL): 1	FF FF FF FF FF
D5	Application Control [M/Chip]	82 00
D6	Default ARPC Response Code [M/Chip4]	00 10
DF 02	Security Limits Status [Mastercard]	00

^{*} Tag value changes with card usage

4.10.3 CTLS: CVM List - U.S. Maestro, AID A0000000042203 (PayPass)

Cardho	Cardholder Verification Method List ('0205 4203 1F03')						
CVM	Verification Method	If unsuccessful					
1	Online PIN	Purchase with Cashback	Fail				
2	Online PIN	Terminal supports CVM type	Next CVM				
3	No CVM required	Terminal supports CVM type	Fail				

4.10.4 Contactless: Application Tag data, AID A0000000042203

Tag	Element name	Data Card v7
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 4D 41 45 53 54 52 4F - US
		MAESTRO'
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51 22 20
- A	Analization Drive and Assessed November	08 08 10 79 00 00 0F 54 13 33 00 89 09 91 30
5A	Application Primary Account Number (PAN)	
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 34	Application PAN Sequence Number	13
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	19 80
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC supported
		BYTE 2:
0.4	Dedicated File (DF) Name	b8 - EMV Contactless supported A0 00 00 04 22 03
84 87	Dedicated File (DF) Name	01
	Application Priority Indicator	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
8C	Card Risk Management Data Object List	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (CDOL1)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 42 03
	List	1F 03
8F	Certification Authority Public Key Index	EF

Tag	Element name	Data Card v7
90	Issuer Public Key Certificate	5B 2E 1F EF 4D 7D 2C 16 16 12 21 F7
	•	97 2F E6 99 B7 82 44 E0 73 C8 AC 75
		86 CE D1 76 EF 7B 93 AC 19 0B 05 70
		40 E1 18 4F 2F 55 AC 70 D2 AA C3 94 BE 22 6A 26 50 D3 CA ED 90 60 88 C5
		3A 88 B8 3C 46 1F 37 6D 89 10 B8 51
		81 54 F3 08 EE ED 23 BC 15 7C FA BA
		6E 51 26 9F 01 6D 59 FE 21 A6 F9 10
		F2 85 13 0D EA F6 A4 78 BE 77 9D 2B
		AD 08 E1 2E D6 A5 93 71 5A 18 72 15
		C5 63 28 1C B2 B7 2E 5B 14 05 5D 2D D8 30 4A C2 20 2E 53 96 D0 4C 5C 79
		55 0B 4D E9 FA DA CB 35 F3 19 06 C5
		A4 42 27 29 D6 A5 A8 F5 E1 4C B9 0D
		B7 05 49 4B 3D B1 0D E6 19 F3 B0 3E
		64 96 FE 79 F4 6E 64 97 2A 46 34 A0
		35 EF 7E 50 20 49 40 36 03 E0 BC FC
		33 C3 87 BB 6D 72 CF F8 33 89 7E 81
		F5 02 3F F4 D6 A9 CC 0C 89 E8 78 3F
		07 B7 F0 55 3E 9D D3 59 B6 5B 62 3A F1 CE 27 8D 65 3C 37 07
92	Issuer Public Key Remainder	14 3E 90 B8 B5 E6 2B E5 A9 0D 5A 4E
92	Issuel Fublic Key Kemaindei	F1 5C 77 40 4D 29 94 48 98 77 85 D7
		E8 80 C2 CD
94	Application File Locator (AFL)	10 01 01 01 18 01 01 00 20 01 02 00
94	Application File Locator (AFL)	08 02 04 01 18 01 01 00 20 01 01 00
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed
9F 08	Application Version Number	b7 - International cashback allowed
9F 0D	Issuer Action Code - Default	B4 50 84 00 00
9F 0E	Issuer Action Code - Denal	00 00 00 00 00
9F 0F	Issuer Action Code - Definal	B4 70 84 80 00
9F 10	Issuer Application Data [M/Chip	01 14 A0 40 03 24 00 00 01 02 00 00
91 10	Advance	00 00 00 00 00 FF
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 4D 61 65 73 74 72 6F - 'US
01 12		Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 27	Cryptogram Information Data (CID)	80
9F 32	Issuer Public Key Exponent	03
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 44	Application Currency Exponent	02
31 44	Application Guiterity Exponent	- -

Tag	Element name	Da	ta									Car	d v7
9F 46	ICC Public Key Certificate			55	04	BB	DA	53	3 A	EC	41	FF	
	The state of the s											34	
												01	
		_		_		_			_			AF	_
												45	
												7F BC	
												F5	
												A1	
		51	84	DA	AC	DE	AC	5C	ΕO	14	3D	71	26
											_	E1	
												58	
												FE A9	
												61	
												79	
		8F	74	02	В5	4A	в9	1C	4C	EE	FE	F5	D4
		C0	52	04	5F	28	E 7	39	вв	F3	E9	C3	FF
												D9	
a= 4=	100 5 1 11 14 5		D1	DF	ED	71	40	65	FA	3В	A4	D0	23
9F 47	ICC Public Key Exponent	03											
9F 4A	Static Data Authentication Tag List	82	0-										
9F 4D	Transaction Log Entry		0A	01	0-	00	0.0	F ==	0.7	00	0-	03	0=
9F 4F	Transaction Log Format											03	
			14	ЭE	J2	00	DE	211	01	ЭE	21	03	ЭE
9F 5D	Application Capabilities Information		00	00									
0. 02	[M/Chip Advance]												
9F 60	CVC3track1 [Mastercard]	хx	хx	*									
9F 61	CVC3track2 [Mastercard]	хx	хx	*									
9F 6E	Third Party Data [Mastercard]	08	40	31	31	30	30	00	00	00	00	00	00
										00	00	00	00
				00									
9F 70	Protected Data Envelope 1 [M/Chip	20	20		20							20 20	
	Advance]			20						20	20	20	20
9F 71	Protected Data Envelope 2 [M/Chip	20	20	20	20					20	20	20	20
	Advance]	20	20	20	20	20	20	20	20	20	20	20	20
	-			20									
9F 72	Protected Data Envelope 3 [M/Chip											20	
	Advance]			20						20	20	20	20
9F 73	Protected Data Envelope 4 [M/Chip		20	20	20	20				20	20	20	20
91 13	Advance]	-										20	
	Advancej			20									
9F 74	Protected Data Envelope 5 [M/Chip											20	
	Advance]									20	20	20	20
05.75	Hannata at ad Data Estado de 184/012			20						20	20	20	20
9F 75	Unprotected Data Envelope 1 [M/Chip	20										20 20	
	Advance]			20						20	20	20	20
9F 76	Unprotected Data Envelope 2 [M/Chip									20	20	20	20
	Advance]											20	
	-			20									
9F 77	Unprotected Data Envelope 3 [M/Chip	20		20			20		20			20	
	Advance]			20 20						20	20	20	20
9F 78	Unprotected Data Envelope 4 [M/Chip			20						20	20	20	20
3F /0	Onprotected Data Envelope 4 [M/Cnip Advance]											20	
	Advancej			20									
9F 79	Unprotected Data Envelope 5 [M/Chip	20	20	20	20	20	20	20	20			20	
	Advance]									20	20	20	20
	-	20	20	20	20	20	20	20	20				

Tag	Element name	Da	ta									Car	d v7
9F 7E	Application Life Cycle Data [Mastercard]			0C	12	00	09	00	00	FF	FF	FF	FF
• • • •	rippindanon zino oyono ziana (maonondana)	FF	FF	FF	FF	FF	FF	FF	$\mathbf{F}\mathbf{F}$	FF	FF	FF	FF
				FF					00		60	00	00
				02	11	50	35	43	44	30	37	32	20
C3	Card Issuer Action Code (Contact) - Decline [M/Chip Advance]	00	00	00									
C4	Card Issuer Action Code (Contact) -	06	50	00									
C4	Default [M/Chip Advance]	00	50	00									
C5	Card Issuer Action Code (Contact) -	06	FB	00									
	Online [M/Chip Advance]												
C6	PIN Try Limit [M/Chip Advance]	03											
C7	CDOL1 Related Data Length	42											
0.	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	– U	SA								
C9	Accumulator 1 Currency Code	08	40	- U	SD								
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00									
СВ	Accumulator 1 Upper Limit [Mastercard]	00			00	00	00						
CD	Card Issuer Action Code (Contactless) -	06	58	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	F8	00									
05	Online [M/Chip Advance]	00		^^									
CF	Card Issuer Action Code (Contactless) -	08	00	00									
D4	Decline [M/Chip Advance]	00	40	00	Λ1	00	00	40	00	Λ1	00	00	40
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	-		•		•	-		•			0 -
D3	Additional Check Table [Mastercard]	00	00	00	FF	FF	FF	FF	FF	FF	FF	FF	FF
				FF			FF						
D5	Application Control [M/Chip Advance]			80	00	86	02						
D6	Default ARPC Response Code [M/Chip	00	10										
D7	Application Control [M/Chip Advance]	02	00	40	٥٥	86	02						
D9	Application Control [M/Chip Advance] Application File Locator (Contactless)			01				01	00	20	01	02	00
DE	Log Data Table [M/Chip Advance]			00							-	-	
DF 02	Security Limits Status (Contact) [M/Chip	00											
5, 02	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
	[M/Chip Advance]		•										
DF 16	Accumulator 2 Currency Code	09	99										
DE 47	[Mastercard]	09	0.0	00	01	00	00	0.0	00	01	00	0.0	0.0
DF 17	Accumulator 2 Currency Conversion			00									
	Table [Mastercard]	00		- 0				-	. .	- -	- -	- -	
DF 18	Accumulator 2 Lower Limit [Mastercard]	00		00									
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
	Advance]	<u> </u>											
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												

Tag	Element name	Data Card v7
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance	
DF 24	MTA Currency Code [M/Chip Advance]	09 99
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
D= 00	(Contactless) [M/Chip Advance]	00.00.00
DF 2C	Counter 1 CVR Dependency Data	00 00 00
DE ab	(Contact) [M/Chip Advance]	00 00 00
DF 2D	Counter 1 CVR Dependency Data	00 00 00
DF 2E	(Contactless) [M/Chip Advance] Counter 2 CVR Dependency Data	00 00 00
DI ZL	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	03
J. 00	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00 00 00 00
	Advance]	
DF 40	Read Record Filter (Contactless)	08 03 03 00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.11 Test Card 11 - Mastercard, CO, 4-AID (MC+USM/Maestro+USM), English, USA, USD

A contact-only, 4-AID Mastercard debit card with a pair of multi-funding accounts (Mastercard-U.S. Maestro / Maestro-U.S. Maestro) with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$20.00.

4.11.1 Contact: CVM List - Mastercard debit, AID A0000000041010

Cardho	Cardholder Verification Method List ('0205 4103 4203 5E03 1F00')						
CVM	Verification Method	Conditions	If unsuccessful				
1	Online PIN	Purchase with Cashback	Fail				
2	Offline Plaintext PIN	Terminal supports CVM type	Next CVM				
3	Online PIN	Terminal supports CVM type	Next CVM				
4	Signature (paper)	Terminal supports CVM type	Next CVM				
5	No CVM required	Always	Fail				

4.11.2 Contact: Application Tag data, AID A0000000041010

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 44
		45 42 49 54 - 'MASTERCARD DEBIT'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 51 22 01 14 83 59 49 00 0F
5A	Application Primary Account Number (PAN)	54 13 33 00 89 02 00 60
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 31 31 20 20
55.04	A 11 / 5 / 7 B /	20 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via External Auth command b2 - On device Cardholder verification NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	1 (0001)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14

Tag	Element name	Data Card v5
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 05 41 03 42 03 5E 03 1F 00 00 00
94	Application File Locator (AFL)	08 01 02 00
9F 07	Application Usage Control	FF C0 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip Advance]	xx 10 xx
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 73 74 65 72 63 61 72 64 20 44 65 62 69 74 - 'Mastercard Debit'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN) Try Counter	09
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 50 17 79 00 A0 00 00 00 04 10 10 00 00 00 00 00 00 00 00 00 00 88 01 06 A5 5A 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) - Decline [M/Chip Advance]	00 00 00
C4	Card Issuer Action Code (Contact) - Default [M/Chip Advance]	06 00 00
C5	Card Issuer Action Code (Contact) - Online [M/Chip Advance]	3F FB 00
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length [Mastercard]	42
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code [Mastercard]	08 40 - USD
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00 00
CD	Card Issuer Action Code (Contactless) - Default [M/Chip Advance]	06 50 00

Tag	Element name	Da	ta									Car	d v5
CE	Card Issuer Action Code (Contactless) -		FB	00									
OL	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
D1	Decline [M/Chip Advance]	08	40	00	00	00	ΛQ	40	00	00	00	08	40
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	00	00	00	40	00	00	00	00		00	00
D3	Additional Check Table [Mastercard]	00	00	00	नन	नन	ਜਜ	77	FF	FF	FF	FF	नन
53	Additional Officer Table [Mastercard]	FF		FF			FF						
D5	Application Control [M/Chip Advance]	84	00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	80	00	80	00	С6	02						
D9	Application File Locator (Contactless)	08	01			08	03	03	00				
DE	Log Data Table [M/Chip Advance]	00	00				00	00		00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
DF 02	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
D1 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
DI 10	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09	aa	00	٥٥	00	na	aa	00	00	00	09	99
DF 17				00									
	Table [Mastercard]	00	• •		•••		••	• •	• •	•		•••	
DF 18	Accumulator 2 Lower Limit [Mastercard]	00	00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
	Advancel												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
DF 21	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]		00	00	00	00	00						
DF 23	MTA CVM (Contactless) [M/Chip			00									
D1 23	Advance]		- •	- •	- •	- •	- •						
DF 24	MTA Currency Code [M/Chip Advance]	08	40										
DF 25	MTA NoCVM (Contact) [M/Chip			00	٥٥	00	٥٥						
DF 20	Advance]		50	50	55	55	55						
DF 26	MTA NoCVM (Contactless) [M/Chip	00	ΩΩ	00	Ω٥	٥٥	٥٥						
DF 20	` ,	"	00	00	00	00	00						
DE 07	Advance]	00	00										
DF 27	Number Of Days Offline Limit [M/Chip	"	50										
DE CC	Advance]	00	00	00									
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
DE CC	(Contact) [M/Chip Advance]			^^									
DF 29	Accumulator 1 CVR Dependency Data	00	00	υÜ									
	(Contactless) [M/Chip Advance]		•	•									
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												

Tag	Element name	Data Card v5
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
DE 05	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
DE 40	Advance]	00
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.11.3 Contact: CVM List - U.S. checking, AID A000000004220301

Cardholder Verification Method List ('0205 4203 1F03')									
CVM	Verification Method	Conditions	If unsuccessful						
1	Online PIN	Purchase with Cashback	Fail						
2	Online PIN	Terminal supports CVM type	Next CVM						
3	No CVM required	Terminal supports CVM type	Fail						

4.11.4 Contact: Application Tag data, AID A000000004220301

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 43 48 45 43 4B 49 4E 47 20
		20 20 20 - 'US CHECKING'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 51 22 01
		14 83 59 49 00 OF
5A	Application Primary Account Number	54 13 33 00 89 02 00 60
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 31 31 20 20
		20 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'

Card v5 Tag Element name Data 18 00 82 Application Interchange Profile BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via External Auth command b2 - On device Cardholder verification NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV mode NOT supported A0 00 00 00 04 22 03 01 Dedicated File (DF) Name 84 02 87 Application Priority Indicator 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 8C Card Risk Management Data Object List 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 1 (CDOL1) 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 8D Card Risk Management Data Object List 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 94 Application File Locator (AFL) FF CO 9F 07 **Application Usage Control** BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed Application Version Number 00 02 9F 08 B0 50 9C 88 00 9F 0D Issuer Action Code - Default 00 00 00 00 00 9F 0E Issuer Action Code - Denial 9F 0F Issuer Action Code - Online B0 70 9C 98 00 xx 10 xx 9F 10 Issuer Application Data [M/Chip xx xx xx xx xx ** Advance] 01 9F 11 Issuer Code Table Index 55 53 20 43 68 65 63 6B 69 6E 67 20 9F 12 **Application Preferred Name** 20 20 20 - 'US Checking' 00 9F 14 Counter 1 Lower Limit [Mastercard] 9F 17 Personal Identification Number (PIN) 09 Try Counter 9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 Application Cryptogram (AC) xx xx xx xx xx xx xx ** 80 Cryptogram Information Data (CID) 9F 27 9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 **Application Currency Code** 08 40 - USD 9F 4D 0B 0A Transaction Log Entry Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 9F 4F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14

Tag	Element name	Da	ta									Car	d v5
9F 7E	Application Life Cycle Data [Mastercard]			0в	14	00	01	00	00	50	17	79	
				00									
				00									
00	Condition of Astinia Condition		00	00	υ0	υ0	υ0	υ0	υ0	00	υ0	UΟ	00
C3	Card Issuer Action Code (Contact) -	00	00	00									
C4	Decline [M/Chip Advance]	06	50	00									
C4	Card Issuer Action Code (Contact) -	00	50	00									
C5	Default [M/Chip Advance] Card Issuer Action Code (Contact) -	06	FB	0.0									
03	Online [M/Chip Advance]			•									
C6	PIN Try Limit [M/Chip Advance]	09											
C7	CDOL1 Related Data Length	42											
01	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	- U	SA								
C9	Accumulator 1 Currency Code			- U									
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
СВ	Accumulator 1 Upper Limit [Mastercard]	00	00	00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	06	50	00									
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	FB	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion			00									
	Table [Mastercard]	00	00	00	80	40	00	00	00	80	40	00	00
D3	Additional Check Table [Mastercard]		٥٥	00	ਸ਼ਸ਼	FF	ਸਾਸ	ਸਾਸ	FF	FF	FF	ਸਾਸ	ਸਾਸ
DS	Additional Check Table [Mastercard]			FF									
D5	Application Control [M/Chip Advance]	80	00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	80		80									
D9	Application File Locator (Contactless)	08		01		08		03					
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
DE 12	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
DE 44	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact)	00											
DE 1E	[M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
DF 16	[M/Chip Advance] Accumulator 2 Currency Code	0.9	99										
DF 10	Mastercard		,,										
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	00	09	99	00	00	00	09	99
2' ''	Table [Mastercard]			00									
		00											
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
DE 15	Advance]	00											
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												

Tag	Element name	Data Card v5
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
]	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
D. 20	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
D= 00	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
DE 00	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
DEAF	(Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip	
DE 40	Advance]	00
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.11.5 Contact: CVM List - Maestro debit, AID A000000043060

Cardholder Verification Method List ('0205 4103 0203 0000') CVM **Verification Method Conditions** If unsuccessful 1 Fail Online PIN Purchase with Cashback 2 Offline Plaintext PIN Terminal supports CVM type Next CVM 3 Online PIN Terminal supports CVM type Fail Fail 4 No CVM required Always

4.11.6 Contact: Application Tag data, AID A0000000043060

Tag	Element name	Data Card v5
42	Issuer Identification Number (IIN)	67 99 99
50	Application Label	4D 41 45 53 54 52 4F 20 20 20 20 20
		20 20 20 - 'MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 25 12
		22 01 48 35 94 90 0F
5A	Application Primary Account Number (PAN)	67 99 99 89 00 00 02 00 05 1F
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 31 31 20 20
55.04	A 11 (1 E 1 (1 E 1	20 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	12
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4		b8 - EMV mode NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 30 60
87	Application Priority Indicator	03
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 41 03 02 03 00 00 00 00
	List	
94	Application File Locator (AFL)	08 01 02 00

Tag	Element name	Data Card v5
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback allowed b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 65 73 74 72 6F 20 20 20 20 20
		20 20 20 - 'Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	08 40 - USD
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 50 17 79 00
		A0 00 00 00 04 30 60 00 00 00 00 00
		00 00 00 00 00 80 00 88 01 06 A5 5A
C3	Card Issuer Action Code (Contact)	00 00 00 00 00 00 00 00 00 00 00 00
03	Card Issuer Action Code (Contact) - Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	06 00 00
U-7	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	3F FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
СВ	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	06 50 00
0.5	Default [M/Chip Advance]	0.5 = 0.0
CE	Card Issuer Action Code (Contactless) -	06 FB 00
05	Online [M/Chip Advance]	00 00 00
CF	Card Issuer Action Code (Contactless) -	00 00 00
	Decline [M/Chip Advance]	

Tag	Element name	Da	ta									Cai	d v5
D1	Accumulator 1 Currency Conversion			00	00	00	08	40	00	00	00		
	Table [Mastercard]	00	00	00	80	40	00	00	00	80	40	00	00
		00											
D3	Additional Check Table [Mastercard]				FF			FF	FF	FF	FF	FF	FF
D5	Application Control [M/Chip Advance]				00								
D6	Default ARPC Response Code [M/Chip		10										
00	Advance]												
D7	Application Control [M/Chip Advance]	80	00	80	00	C6	02						
D9	Application File Locator (Contactless)	08			00			03	00				
DE	Log Data Table [M/Chip Advance]								00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
DE 47	[Mastercard]	00	90	00	00	00	00	90	00	00	00	00	00
DF 17	Accumulator 2 Currency Conversion								00				
	Table [Mastercard]	00			•••							•••	
DF 18	Accumulator 2 Lower Limit [Mastercard]	00	00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
DE 45	Advance]	00											
DF 1E	Counter 2 Control (Contactless) [M/Chip Advance]	00											
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]		00	00	00	00	00						
DF 23	MTA CVM (Contactless) [M/Chip				00								
D. 20	Advance]												
DF 24	MTA Currency Code [M/Chip Advance]	08	40										
DF 25	MTA NoCVM (Contact) [M/Chip	00	00	00	00	00	00						
	Advance]												
DF 26	MTA NoCVM (Contactless) [M/Chip	00	00	00	00	00	00						
	Advance]												
DF 27	Number Of Days Offline Limit [M/Chip	00	00										
	Advance]												
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
D= 65	(Contact) [M/Chip Advance]			^^									
DF 29	Accumulator 1 CVR Dependency Data	00	UÜ	00									
DECA	(Contactless) [M/Chip Advance]	00	0.0	00									
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
DF 2B	(Contact) [M/Chip Advance] Accumulator 2 CVR Dependency Data	00	00	იი									
DF ZD	(Contactless) [M/Chip Advance]	"	50	50									
DF 2C	Counter 1 CVR Dependency Data	00	00	00									
51 20	(Contact) [M/Chip Advance]												
L	(Solitably [ivi/ Ship / lavarioo]	l											

Tag	Element name	Data Card v5
DF 2D	Counter 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2E	Counter 2 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 2F	Counter 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 30	Interface Enabling Switch [M/Chip Advance]	01
DF 35	Security Limits Status (Contactless) [M/Chip Advance]	00
DF 37	Security Limits Status Common [M/Chip Advance]	00
DF 3C	CVR Issuer Discretionary Data (Contact) [M/Chip Advance]	00
DF 3D	CVR Issuer Discretionary Data (Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip Advance]	00
DF 40	Read Record Filter (Contactless) [M/Chip Advance]	00
DF 41	DS Management Control [M/Chip Advance]	20

^{*} Tag value changes with card usage

4.11.7 Contact: CVM List - U.S. Savings debit, AID A000000004220302

Cardholder Verification Method List ('0205 4203 1F03')									
CVM	Verification Method	Conditions	If unsuccessful						
1	Online PIN	Purchase with Cashback	Fail						
2	Online PIN	Terminal supports CVM type	Next CVM						
3	No CVM required	Terminal supports CVM type	Fail						

4.11.8 Contact: Application Tag data, AID A000000004220302

Tag	Element name	Data	Card v4
42	Issuer Identification Number (IIN)	67 99 99	
50	Application Label	55 53 20 53 41 56 49 4E 47 53	20 20
		20 20 20 - 'US SAVINGS'	
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D	25 12
		22 01 48 35 94 90 0F	
5A	Application Primary Account Number	67 99 99 89 00 00 02 00 05 1F	
	(PAN)		
5F 20	Cardholder Name	55 53 41 20 44 65 62 69 74 2F	
		73 74 20 43 61 72 64 20 31 31	20 20
		20 20 - 'USA DEBIT/Test Card 11'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 20	
5F 34	Application PAN Sequence Number	12	
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'	

Card v4 Tag Element name Data 18 00 82 Application Interchange Profile BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported via External Auth command b2 - On device Cardholder verification NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV mode NOT supported A0 00 00 00 04 22 03 02 84 Dedicated File (DF) Name 04 87 Application Priority Indicator 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 8C Card Risk Management Data Object List 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 1 (CDOL1) 9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 8D Card Risk Management Data Object List 8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00 08 01 01 00 08 03 03 00 94 Application File Locator (AFL) FF CO 9F 07 **Application Usage Control** BYTE 1: b8 - Domestic cash trans, valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed 00 02 9F 08 **Application Version Number** Issuer Action Code - Default B0 50 9C 88 00 9F 0D 00 00 00 00 00 9F 0E Issuer Action Code - Denial 9F 0F Issuer Action Code - Online B0 70 9C 98 00 xx 10 xx 9F 10 Issuer Application Data [M/Chip xx xx xx xx xx ** Advance] 01 9F 11 Issuer Code Table Index 55 53 20 53 61 76 69 6E 67 73 20 20 9F 12 **Application Preferred Name** 20 20 20 - 'US Savings' 00 9F 14 Counter 1 Lower Limit [Mastercard] 9F 17 Personal Identification Number (PIN) 09 Try Counter 9F 23 Counter 1 Upper Limit [Mastercard] 00 9F 26 xx xx xx xx xx xx xx ** Application Cryptogram (AC) 80 Cryptogram Information Data (CID) 9F 27 9F 36 Application Transaction Counter (ATC) xx xx * 9F 42 **Application Currency Code** 08 40 - USD 9F 4D 0B 0A Transaction Log Entry Transaction Log Format 9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 9F 4F 36 02 9F 52 06 DF 3E 01 9F 21 03 9F 7C 14

Tag	Element name	Da	ta									Car	d v4
9F 7E	Application Life Cycle Data [Mastercard]	04		0в	14	00	01	00	00	50	17	79	00
0. 72	rippilodilon Elio Oyolo Bala [Maotorodia]	A0	00	00	00	04	30	60	00	00	00	00	00
				00							06		5 A
				00	00	00	00	00	00	00	00	00	00
C3	Card Issuer Action Code (Contact) -	00	00	00									
0.1	Decline [M/Chip Advance]	0.6											
C4	Card Issuer Action Code (Contact) -	06	50	00									
0.5	Default [M/Chip Advance]	0.0											
C5	Card Issuer Action Code (Contact) -	06	FB	00									
00	Online [M/Chip Advance]	09											
C6	PIN Try Limit [M/Chip Advance]	42											
C7	CDOL1 Related Data Length	42											
C8	[Mastercard] CRM Country Code [Mastercard]	0.0	40	- U:	2 /								
C9	Accumulator 1 Currency Code			- U:									
C9	[Mastercard]	08	40	- 0,	30								
CA	Accumulator 1 Lower Limit [Mastercard]	00	0.0	00	0.0	0.0	0.0						
CB	Accumulator 1 Upper Limit [Mastercard]	00				00							
CD	Card Issuer Action Code (Contactless) -		50										
	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	FB	00									
02	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	40	00	00	00	08	40	00	00	00	08	40
	Table [Mastercard]		00	00	80	40	00	00	00	80	40	00	00
		00											
D3	Additional Check Table [Mastercard]	00 EE	00 EE	FF	FF	FF	FF	F.F.	FF	F.F.	F.F.	FF	F.F.
D5	Application Control [M/Chip Advance]			80									
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	80	00	80	00	С6	02						
D9	Application File Locator (Contactless)	08	01	01	00	08	03	03	00				
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00											
	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
DE ::	[M/Chip Advance]	^-											
DF 14	Accumulator 2 Control (Contact)	00											
DE 45	[M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
DF 16	[M/Chip Advance]	nο	99										
טר זט	Accumulator 2 Currency Code [Mastercard]	09	99										
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	0.0	0.9	99	0.0	00	00	0.9	99
	Table [Mastercard]			00									
	•	00											
DF 18	Accumulator 2 Lower Limit [Mastercard]	00		00									
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
DE 45	Advance]	00											
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												

Tag	Element name	Data Card v4
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00
	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00
D= 0=	Advance]	20.00
DF 27	Number Of Days Offline Limit [M/Chip	00 00
DE 00	Advance]	00 00 00
DF 28	Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
DI 29	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
D1 2/1	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
DE 00	(Contactless) [M/Chip Advance]	01
DF 30	Interface Enabling Switch [M/Chip	
DF 35	Advance] Security Limits Status (Contactless)	00
DF 33	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
D1 37	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

^{*} Tag value changes with card usage

4.12 Test Card 12 - Discover, DI, 2-AID (U.S. Debit, Discover), Eng/Spa/Fre, USA, USD

A Dual Interface (Contact+Contactless), 2-AID Discover debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$79.00.

4.12.1 Contact: CVM List - Discover U.S. Debit, AID A0000001524010

Cardholder Verification Method List ('0203 1F03')									
CVM	Verification Method	ation Method Conditions							
1	Online PIN	Terminal supports CVM Type	Fail						
2	No CVM required	Terminal supports CVM Type	Fail						

4.12.2 Contact: Application Tag data, AID A0000001524010

Tag	Element name	Data Card v8
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	55 53 20 44 45 42 49 54 20 20 20 20
		20 20 20 - 'US DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 01 38 D2 60 52 01
		10 00 01 05 00 00 0F
5A	Application Primary Account Number (PAN)	60 11 97 37 00 00 01 38
5F 20	Cardholder Name	55 41 54 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 32 20 20
FF 04	Application Funination Data	20 20 - 'USA DEBIT/Test Card 12' 26 05 31
5F 24	Application Expiration Date	
5F 25	Application Effective Date	XX XX XX
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E 65 73 66 72 - 'enesfr' (English,
55.00	0	Spanish, French)
5F 30	Service Code	01
5F 34	Application PAN Sequence Number	
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US' 18 00
82	Application Interchange Profile	BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 01 52 40 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
0.0	Cord Dials Management Data Object List	9F 34 03 91 0A 8A 02 95 05 9F 37 04
8D	Card Risk Management Data Object List 2 (CDOL2)	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 03 1F 03
94	Application File Locator (AFL)	08 01 01 00 10 01 01 00 18 01 01 00

Tag	Element name	Da	ta									Car	d v8
9F 07	Application Usage Control		C0										
	1,	BY	TE 1	1:									
									tions	val	id		
		-	b7 - Int'l cash transactions valid										
		b6 - Domestic goods valid b5 - International goods valid											
								valio valio					
		-						valic es v					
				Ms			51 V IC	CS V	allu				
		b1-	Ter	min	als c	the	tha	n AT	ΓMs	valio	t		
		BY	TE 2	2:									
									owe				
.=				erna	tion	al ca	ashb	ack	allo	wed			
9F 08	Application Version Number		01										
9F 0D	Issuer Action Code - Default			C4									
9F 0E	Issuer Action Code - Denial			00									
9F 0F	Issuer Action Code - Online			C4									
9F 10	Issuer Application Data [DPAS]		06	ХX	ХX	ХX	ХX	ХX	хx	*			
9F 17	Personal Identification Number (PIN)	03											
	Try Counter												
9F 26	Application Cryptogram (AC)	<u> </u>	ХX	ХX	ХX	ХX	ХX	ХX	ХX	*			
9F 27	Cryptogram Information Data (CID)	80											
9F 36	Application Transaction Counter (ATC)		хx										
9F 38	Processing Options Data Object List	_		06	9F	1A	02	5F	2A	02	9A	03	9F
	(PDOL)	<u> </u>	01										
9F 4D	Transaction Log Entry		0A										
9F 4F	Transaction Log Format								03				
									02 06				
				9F			JE	U.S	00	ЭĒ	J	00	JE
9F 78	Application State [D-PAS]	01			<u> </u>	_ - _							
C1	Application Configuration Options	15	48										
	[DPAS]												
C2	Issuer Life Cycle Data (ILCD) [DPAS]								00				
	. , , -								00				
									00				
Ca	Currency Conversion Codes 4 IDDAC1			00			UU	UU	00	UU	UU	UU	UU
C3 C4	Currency Conversion Codes 1 [DPAS]			00									
	Currency Conversion Codes 2 [DPAS]		00	00	<u> </u>	00							
C5	Card Action Code - Denial [DPAS]		1F										
C6	Card Action Code - Default [DPAS]		1F										
C7	Card Action Code - Online [DPAS]		40										
D2	CRM Country Code [DPAS]		40										
D3	CRM Currency Code [DPAS]			/11	00	00	/11	7. 0	11	प्रक	01	01	
DF 11	PDOL Check Table - Profile (PDOLP) [DPAS]	01	υy	41 T	00	00	41	ΑU	TT	r Ľ	υI	υı	
DF 20	Transaction Profile Objects(TPO0)	00	18	00	08	01	01	00	10	01	01	00	18
	[DPAS]								00				
	-1								00				
									00				
			00	00	00	00	00	00	00	υO	υO	00	UÜ
DE 24	Transaction Profile Objects/TDO4)			00	ΩR	01	01	00	10	01	01	00	1.8
DF 21	Transaction Profile Objects(TPO1)								00				
	[DPAS]								00				
									00				
				00	00	00	00	00	00	00	00	00	00
		00	00										

^{*} Tag value changes with card usage

4.12.3 Contact: CVM List - Discover Debit, AID A0000001523010

Cardho	Cardholder Verification Method List ('0201 0203 1E03 1F03')									
CVM	Verification Method	Conditions	If unsuccessful							
1	Online PIN	Unattended Cash	Next CVM							
2	Online PIN	Terminal supports CVM type	Fail							
3	Signature (paper)	Terminal supports CVM type	Fail							
4	No CVM required	Terminal supports CVM type	Fail							

4.12.4 Contact: Application Tag data, AID A0000001523010

Tag	Element name	Data Card v8
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	44 49 53 43 4F 56 45 52 20 44 45 42
		49 54 20 20 - 'DISCOVER DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 01 38 D2 60 52 01
		10 00 01 05 00 00 0F
5A	Application Primary Account Number (PAN)	60 11 97 37 00 00 01 38
5F 20	Cardholder Name	55 41 54 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 32 20 20
55.04	A - P - C - F - P - C - D - C	20 20 - 'USA DEBIT/Test Card 12' 26 05 31
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E 65 73 66 72 - 'enesfr' (English,
55.00	0	Spanish, French)
5F 30	Service Code	01
5F 34	Application PAN Sequence Number	
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	10 00 BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 01 52 30 10
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 34 03
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 02 03
	List	42 03 1E 03 1F 03
94	Application File Locator (AFL)	08 01 01 00 10 01 01 00 18 02 02 00

Tag	Element name	Data Card v8
9F 07	Application Usage Control	FF C0
31 01	Application osage control	BYTE 1:
		b8 - Domestic cash transactions valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid b2 - ATMs valid
		b1- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 01
9F 0D	Issuer Action Code - Default	B0 68 C4 E8 00
9F 0E	Issuer Action Code - Denial	00 10 00 00 00
9F 0F	Issuer Action Code - Online	B0 68 C4 F8 00
9F 10	Issuer Application Data [DPAS]	xx 06 xx xx xx xx xx *
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 02 06 9F 1A 02 5F 2A 02 9A 03 9F
	(PDOL)	35 01
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
		34 03 9F 52 06 9F 1A 02 95 05 9C 01
		8A 02 9F 37 04 9F 03 06 9F 53 08 9F 66 04 9F 71 02
9F 78	Application State [D-PAS]	01
C1	Application Configuration Options	15 48
	[DPAS]	
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Currency Conversion Codes 1 [DPAS]	08 40 00 01 00
C4	Currency Conversion Codes 2 [DPAS]	08 40 00 01 00
C5	Card Action Code - Denial [DPAS]	01 00
C6	Card Action Code - Definal [DFAS]	2E 1F
C7	Card Action Code - Deladit [DFAS]	FE 1F
D2	CRM Country Code [DPAS]	08 40
D3	CRM Currency Code [DPAS]	08 40
DF 11	PDOL Check Table - Profile (PDOLP)	01 09 41 00 00 41 A0 11 FF 01 01
	[DPAS]	
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 10 01 01 00 18
2. 20	[DPAS]	01 01 00 00 00 00 00 00 00 00 00 00
	[]	00 00 00 00 00 00 00 00 00 00 00 01
		00 FE 1F 2E 1F 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
DF 21	Transaction Profile Objects(TPO1)	E0 10 00 08 01 01 00 10 01 01 00 18
טר בו	[DPAS]	02 02 00 00 00 00 00 00 00 00 00 00
	[DI 70]	00 00 00 00 00 00 00 00 00 00 00 01
		00 FE 1F 2E 1F 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		* Tog value changes with card upogs

^{*} Tag value changes with card usage

Online)

Cardholder Verification Method List ('0203 1F03')									
CVM	Verification Method	Verification Method Conditions							
1	Online PIN	Terminal supports CVM type	Fail						
2	No CVM required	Terminal supports CVM type	Fail						

4.12.6 CTLS: Application Tag data, AID A0000001524010 (D-PAS EMV, Online)

Tag	Element name	Data Card v8
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	55 53 20 44 45 42 49 54 20 20 20 20
		20 20 20 20 - 'US DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 01 38 D2 60 52 01
		10 00 01 05 00 00 0F
5A	Application Primary Account Number	60 11 97 37 00 00 01 38
	(PAN)	14 10 50 10 15 50 15 50 00 10 11 50
5F 20	Cardholder Name	44 49 53 43 4F 56 45 52 20 43 41 52 44 4D 45 4D 42 45 52 20 - DISCOVER
		CARDMEMBER'
5F 24	Application Expiration Date	26 05 31
5F 25	Application Expiration Date Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E 65 73 66 72 - 'enesfr' (English,
3F ZD	Language Freierence	Spanish, French)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [DPAS	10 00
02	CL]	BYTE 1:
	32)	b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt NOT to be performed
		b3 - Issuer authentication NOT supported via EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
84	Dedicated File (DF) Name	A0 00 00 01 52 40 10
87	Application Priority Indicator	01
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 03 1F 03
	List	
94	Application File Locator (AFL)	08 01 02 00 18 01 01 00
9F 07	Application Usage Control	FF C0
		BYTE 1:
		b8 - Domestic cash transactions valid b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1- Terminals other than ATMs valid
		BYTE 2: b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 01
9F 10	Issuer Application Data [DPAS CL]	xx 15 xx xx xx xx xx xx xx *
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
	1 11 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1

Tag	Element name	Data Card v8
9F 38	Processing Options Data Object List	9F 66 04 9F 02 06 9F 03 06 9F 1A 02
	(PDOL)	5F 2A 02 9A 03 9C 01 9F 37 04
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
		34 03 9F 52 06 9F 1A 02 95 05 9C 01
		8A 02 9F 37 04 9F 03 06 9F 53 08 9F
9F 71	Cord Processing Postuirements [DDAC]	66 04 9F 71 02 00 89
95 71	Card Processing Requirements [DPAS]	BYTE 2 (Permanent Data):
		b8 - Do switch to other interface if unable to
		process online
		b7 - Do NOT process online if CDA failed
		b6 - Do NOT decline/switch other interface if
		CDA failed b5 - Issuer Update Processing NOT supported
		b4 - Do process online if card expired
		b3 - Do NOT decline if card expired
		b2 - CVM Fallback to Signature NOT allowed
		b1 - CVM Fallback to 'No CVM' allowed
9F 78	Application State [D-PAS]	01
BF 51	Contactless D-PAS MS and ZIP Default	82 02 00 00 94 04 08 01 01 00
	Profile	03 88
C0	Contactless Application Configuration	03 88
	Options (CL-ACO)	00 00 00 00 00 00 00 00 00 00 00
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
C3	Currency Conversion Codes 1 [DPAS]	08 40 00 01 00
C4	Currency Conversion Codes 2 [DPAS]	08 40 00 01 00
C8	Lower Consecutive Offline Amount	00 00 00 00 00 00
	(LCOA) Limit [DPAS]	
C9	Upper Consecutive Offline Amount Limit	00 00 00 00 00
	(UCOA) [DPAS]	
CA	Single Transaction Amount (STA) Limit	00 00 00 00 00
	[DPAS]	
СВ	Lower Consecutive Offline Limit (LCOL)	00
00	[DPAS]	00
CC	Upper Consecutive Offline Transaction	00
CD	Limit (UCOL) [DPAS] Number of Consecutive Offline	00
CD	Transactions (NCOT) [DPAS]	
CE	Cumulative Offline Amount [DPAS]	00 00 00 00 00 00
D1	Offline Balance [DPAS]	00 00 00 00 00 00
D2	CRM Country Code [DPAS]	08 40 - USA
D3	CRM Currency Code [DPAS]	08 40 - USD
D3	CVM-Accumulator [DPAS]	00 00 00 00 00 00
D5	CVM-Cum limit 1	00 00 00 00 00 00
D6	CVM-Cum limit 2	00 00 00 00 00 00
D7	CVM-STA limit 1	00 00 00 00 00 00
D8	CVM-STA limit 1	00 00 00 00 00 00
D9	CVM-Counter	00
DA	CVM-Cons limit 1	00
DB	CVM-Cons limit 2	00
DE	Counter and Accumulator Control	C1 01 09 01 01 00
	Options (CACO) [D-PAS]	
DF 11	PDOL Check Table - Profile (PDOLP)	01 09 41 00 00 41 A0 11 FF 01 01
	[DPAS]	

Tag	Element name	Da	ta									Car	d v8
DF 21	Transaction Profile Objects(TPO1)	40	40	00	10	00	08	01	02	00	00	00	00
	[DPAS]	00	00	00	00	00	00	00	00	00	00		00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	A0	8B	00	00	00	00	00	00	00
		00	•••	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	00	00	00	00	00	00	00
		00	00	00	00	00	04	02					
DF 30	CRM-CAC Switch Interface [D-PAS]	00	00	00									
DF 31	CRM-CAC Denial [D-PAS]	00	00	00									
DF 32	CRM-CAC Online [D-PAS]	C8	7E	FF									
DF 33	CRM-CAC Default [D-PAS]	98	3E	EB									
DF 34	CVM Card Action Codes - Online	40	80										
DF 35	CVM Card Action Codes - Signature	00	80										
DF 40	CL-Accumulator	00	00	00	00	00	00						
DF 41	CL-Cum Limit	00	00	00	00	00	00						
DF 42	CL-STA	00	00	00	00	00	00						
DF 43	CL-Counter	00											
DF 44	CL-Cons Limit	00											

^{*} Tag value changes with card usage

4.12.7 CTLS: Application Tag data, AID A0000001523010 (D-PAS EMV, Online)

Tag	Element name	Data Card v8
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	44 49 53 43 4F 56 45 52 20 44 45 42
		49 54 20 20 - 'DISCOVER DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 01 38 D2 60 52 01
- A	Analization Drive and Assessed November	10 00 01 05 00 00 0F 60 11 97 37 00 00 01 38
5A	Application Primary Account Number (PAN)	
5F 20	Cardholder Name	44 49 53 43 4F 56 45 52 20 43 41 52
		44 4D 45 4D 42 45 52 20 - DISCOVER
55.04	A 11 / 12 F 1 / 12 F 1	CARDMEMBER'
5F 24	Application Expiration Date	26 05 31
5F 25	Application Effective Date	xx xx xx
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E 65 73 66 72 - 'enesfr' (English,
55.00		Spanish, French)
5F 30	Service Code	
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile [DPAS	10 00
	CL]	BYTE 1:
		b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt NOT to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
84	Dedicated File (DF) Name	A0 00 00 01 52 30 10
87	Application Priority Indicator	02
94	Application File Locator (AFL)	08 01 02 00

Tag	Element name	Data Card v8
9F 07	Application Usage Control	FF C0 BYTE 1: b8 - Domestic cash transactions valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1- Terminals other than ATMs valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback allowed
9F 08	Application Version Number	00 01
9F 10	Issuer Application Data [DPAS CL]	xx 15 xx xx xx xx xx xx xx *
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9A 03 9C 01 9F 37 04
9F 4D	Transaction Log Entry	0B 0A
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 34 03 9F 52 06 9F 1A 02 95 05 9C 01 8A 02 9F 37 04 9F 03 06 9F 53 08 9F 66 04 9F 71 02
9F 71	Card Processing Requirements [DPAS]	BYTE 2 (Permanent Data): b8 - Do switch to other interface if unable to process online b7 - Do NOT process online if CDA failed b6 - Do NOT decline/switch other interface if CDA failed b5 - Issuer Update Processing NOT supported b4 - Do process online if card expired b3 - Do NOT decline if card expired b2 - CVM Fallback to Signature allowed b1 - CVM Fallback to 'No CVM' allowed
9F 78	Application State [D-PAS]	01
BF 51	Contactless D-PAS MS and ZIP Default Profile	82 02 00 00 94 04 08 01 01 00
C0	Contactless Application Configuration Options (CL-ACO)	03 88
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00 00 00 00 00
C3	Currency Conversion Codes 1 [DPAS]	08 40 00 01 00
C4 C8	Currency Conversion Codes 2 [DPAS] Lower Consecutive Offline Amount (LCOA) Limit [DPAS]	08 40 00 01 00 00 00 00 00 00 00
C9	Upper Consecutive Offline Amount Limit (UCOA) [DPAS]	00 00 00 00 00
CA	Single Transaction Amount (STA) Limit [DPAS]	00 00 00 00 00
СВ	Lower Consecutive Offline Limit (LCOL) [DPAS]	00
CC	Upper Consecutive Offline Transaction Limit (UCOL) [DPAS]	00
CD	Number of Consecutive Offline Transactions (NCOT) [DPAS]	00
CE	Cumulative Offline Amount [DPAS]	00 00 00 00 00

Tag	Element name	Data Card v
D1	Offline Balance [DPAS]	00 00 00 00 00 00
D2	CRM Country Code [DPAS]	08 40 - USA
D3	CRM Currency Code [DPAS]	08 40 - USD
D4	CVM-Accumulator [DPAS]	00 00 00 00 00 00
D5	CVM-Cum limit 1	00 00 00 00 00 00
D6	CVM-Cum limit 2	00 00 00 00 00 00
D7	CVM-STA limit 1	00 00 00 00 00 00
D8	CVM-STA limit 2	00 00 00 00 00 00
D9	CVM-Counter	00
DA	CVM-Cons limit 1	00
DB	CVM-Cons limit 2	00
DE	Counter and Accumulator Control	C1 01 09 01 01 00
	Options (CACO) [D-PAS]	
DF 11	PDOL Check Table - Profile (PDOLP)	01 09 41 00 00 41 A0 11 FF 01 01
	[DPAS]	
DF 21	Transaction Profile Objects(TPO1)	40 40 00 10 00 08 01 02 00 00 00 00
	[DPAS]	00 00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 A0 8B 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 04 02
DF 30	CRM-CAC Switch Interface [D-PAS]	00 00 00
DF 31	CRM-CAC Denial [D-PAS]	00 00 00
DF 32	CRM-CAC Online [D-PAS]	C8 7E FF
DF 33	CRM-CAC Default [D-PAS]	98 3E EB
DF 34	CVM Card Action Codes - Online	40 80
DF 35	CVM Card Action Codes - Signature	00 80
DF 40	CL-Accumulator	00 00 00 00 00 00
DF 41	CL-Cum Limit	00 00 00 00 00 00
DF 42	CL-STA	00 00 00 00 00
DF 43	CL-Counter	00
DF 44	CL-Cons Limit	00

^{*} Tag value changes with card usage

4.13 Test Card 13 - Discover, CO, 1-AID (U.S. Debit), English, USA, USD

A contact-only, single-AID Discover debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$79.00.

4.13.1 Contact: CVM List - Discover U.S. Debit, AID A0000001524010

Cardholder Verification Method List ('4203 1F03 0000')			
CVM	VM Verification Method Conditions If unsuccessful		If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	No CVM required	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

4.13.2 Contact: Application Tag data, AID A0000001524010

Tag	Element name	Data Card v7
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	55 53 20 44 45 42 49 54 20 20 20 20
		20 20 20 - 'US DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 01 20 D2 60 52 01
- A	Application Drivers Assessed Number	10 00 01 92 00 00 0F 60 11 97 37 00 00 01 20
5A	Application Primary Account Number (PAN)	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 33 20 20
<i>EE</i> 04	Application Expiration Data	20 20 - 'USA DEBIT/Test Card 13' 26 05 31
5F 24	Application Expiration Date	xx xx xx *
5F 25	Application Effective Date	08 40 - USA
5F 28	Issuer Country Code	
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00 BYTF 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 01 52 40 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 34 03
8D	Cord Rick Management Date Chicat List	91 0A 8A 02 95 05 9F 37 04
	Card Risk Management Data Object List 2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 03 1F 03
	List	00 00 00 00
94	Application File Locator (AFL)	08 01 01 00 10 01 02 00 18 01 01 00

Tag	Element name	Data	Card v7
9F 07	Application Usage Control	AB CO	
		BYTE 1:	
		b8 - Domestic cash trans. valid	
		b7 - Int'l cash transactions NOT valid	
		b6 - Domestic goods valid	
		b5 - International goods NOT valid	
		b4 - Domestic services valid b3 - International services NOT valid	
		b2 - ATMs valid	
		b1 - non-ATM terminals valid	
		BYTE 2:	
		b8 - Domestic cashback allowed	
		b7 - International cashback allowed	
9F 0D	Issuer Action Code - Default	B0 68 C4 E8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	B0 68 C4 F8 00	
9F 10	Issuer Application Data [DPAS]	xx 06 xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 53 20 44 65 62 69 74 20 20	20 20
		20 20 20 20 - 'US Debit'	
9F 17	Personal Identification Number (PIN)	03	
	Try Counter		
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36	
		34 03 9F 52 06 9F 1A 02 95 05 8A 02	90 01
9F 78	Application State [D-PAS]	01	
C1	Application Configuration Options	15 40	
	[DPAS]		
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00	
		00 00 00 00 00 00 00 00 00	
		00 00 00 00 00 00 00 00 00	
		00 00 00 00 00 00 00 00 00	00 00
C3	Currency Conversion Codes 1 [DPAS]	08 40 00 01 00	
C4	Currency Conversion Codes 2 [DPAS]	08 40 00 01 00	
C5	Card Action Code - Denial [DPAS]	01 00	
C6	Card Action Code - Default [DPAS]	2E 1F	
C7	Card Action Code - Online [DPAS]	FE 1F	
D2	CRM Country Code [DPAS]	08 40 - USA	
D3	CRM Currency Code [DPAS]	08 40 - USD	
DF 11	PDOL Check Table - Profile (PDOLP)	01 09 41 00 00 41 A0 00 0F 01	L 01
	[DPAS]		
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 10 01 02	
	[DPAS]	01 01 00 00 00 00 00 00 00 00	
		00 00 00 00 00 00 00 00 00 00 00 00 00	
		00 00 00 00 00 00 00 00 00	
		00 00	

^{*} Tag value changes with card usage

4.14 Test Card 14 - DNA, CO, 1 AID (DNA), English, USA, USD

A contact-only, single-AID Debit Network Alliance debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.14.1 Contact: CVM List - DNA, AID A0000006200620

Cardho	Cardholder Verification Method List ('0201 0204 0203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful	
1	Online PIN	Unattended Cash	Fail	
2	Online PIN	Manual Cash	Fail	
3	Online PIN	Terminal supports CVM type	Fail	
4	No CVM required	Always	Fail	

4.14.2 Contact: Application Tag data, AID A0000006200620

Tag	Element name	Data Card v6
50	Application Label	44 4E 41 - 'DNA'
57	Track 2 Data [Discover]	40 00 00 00 00 00 00 28 D2 51 22 01
		56 78 00 00 00 35 1F
5A	Application Primary Account Number (PAN)	40 00 00 00 00 00 00 28
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 34 20 20
55.04	A 11 / 12 F 1 / 12 F 1	20 20 - 'USA DEBIT/Test Card 14'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported
		b6 - Offline DDA NOT supported b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 06 20 06 20
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
0.0	0 18:14	9F 34 03
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 02 04
	List	02 03 1F 03
94	Application File Locator (AFL)	08 01 01 00 18 01 02 01

Tag	Element name	Data Card v6
9F 07	Application Usage Control	FF 00
	77	BYTE 1:
		b8 - Domestic cash transactions valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid b2 - ATMs valid
		b1- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number	00 01
9F 0D	Issuer Action Code - Default	F0 40 E4 28 00
9F 0E	Issuer Action Code - Denial	00 10 00 00 40
9F 0F	Issuer Action Code - Online	F0 68 FC F8 00
9F 10	Issuer Application Data [DPAS]	xx xx A0 xx xx xx x *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	44 65 62 69 74 - 'Debit'
9F 17	Personal Identification Number (PIN)	03
	Try Counter	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
		34 03 9F 52 06 9F 1A 02 95 05 9C 01
		8A 02 9F 37 04 9F 03 06 9F 53 08 9F 66 04 9F 71 02 9F 6C 02
9F 78	Application State [D-PAS]	00
C1	Application Configuration Options	15 60
01	[DPAS]	
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00 00 00
	, (= , [=]	00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Currency Conversion Codes 1 [DPAS]	08 40 00 00 02
C4	Currency Conversion Codes 2 [DPAS]	08 40 00 00 02
D0	Issuer Application Data ObjectList (IADOL) [DPAS]	
D2	CRM Country Code [DPAS]	08 40 - USA
D3	CRM Currency Code [DPAS]	08 40 - USD
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 18 01 02 01 00
	[DPAS]	00 00 00 00 00 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 01
		00 F6 1F 22 0B 00 00 00 00 00 00 00 00 00 00 00 00
		00 00
	1	1

^{*} Tag value changes with card usage

4.15 Test Card 15 - Interac, DI, 1-AID (Interac), English, CAN, CAD

A Dual Interface (Contact+Contactless), 1-AID(Interac) Interac (Canadian) debit card with an Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

All Merchant Type Indicator (MTI) Limits (tags 9F52, 9F54, 9F55, 9F56, 9F57) set to \$50.01 The recommended transaction amount to generate a host approval is \$30.00.

4.15.1 Contact: CVM List - Interac, AID A0000002771010

Cardho	Cardholder Verification Method List ('0403 0103 0203')			
CVM	CVM Verification Method Conditions If unsuccessful		If unsuccessful	
1	Offline Enciphered PIN	Termina supports CVM type	Fail	
2	Offline Plaintext PIN	Termina supports CVM type	Fail	
3	Online PIN	Termina supports CVM type	Fail	

4.15.2 Contact: Application Tag data, AID A0000002771010

Tag	Element name	Data Card v7
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'
57	Track 2 Equivalent Data	00 12 03 00 00 00 00 03 D2 81 22 20
	·	08 97 74 00 00 00 1F
5A	Application Primary Account Number (PAN)	00 12 03 00 00 00 00 03
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 35 20 20
FF 04	Application Funitation Data	20 20 - 'USA DEBIT/Test Card 15'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	01 24 - CAN
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	01
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'
82	Application Interchange Profile	19 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02
		9F 4C 08 9F 34 03
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 04 03 01 03 02 03
8F	Certification Authority Public Key Index	07

Tag	Element name	Data Card v7
90	Issuer Public Key Certificate	7E 37 FF 15 A4 88 1C 32 6D 5F 61 E4
	•	D7 4A 00 39 24 76 D5 44 80 B9 16 92
		4A 70 65 B7 B3 40 F3 1F A4 86 84 E1
		99 CE 82 DA 3F F6 OC 77 4A 13 DO 0B
		C8 46 7B 87 1C 9E 00 40 28 FA 44 D9 55 38 0E D5 50 F9 F0 C8 B0 3B 3F 9A
		CE OF FA FA 8B A6 B4 OC F9 69 A9 72
		AF C9 D1 EC 56 25 AO OB B8 OE EO 38
		6E 57 22 BD FC 5C 7D 89 0C 71 5F 54
		67 4F CE B2 0B 5E 0E 80 E8 77 0B 59
		9E A4 E6 15 D8 60 2D 30 37 F4 CB B2
		CC 6F 4D B2 99 34 78 FC CE 47 A5 23
		59 AA 00 A4 94 C5 87 BB D3 2F 3B 64
		A9 2E F8 77 47 25 66 A1 A7 24 F2 0B
		BB C8 24 26 9C 34 80 22 EF E7 83 85 13 A7 AD 3B DE 7B 2B 3D B8 8F 5F B3
		A1 DA 45 B8 38 14 16 A1 0F 77 7E 55
		07 B8 05 48 33 D3 99 97 C1 5B 34 34
		E0 86 A7 B6 7F 6B B0 29 60 E1 F5 59
		20 DC 2E 12 38 91 DA 23 34 03 AA D3
		97 75 0F 44 56 09 CD 2A
94	Application File Locator (AFL)	08 01 04 00 10 01 01 01 18 01 04 01
9F 07	Application Usage Control	FF 00
		BYTE 1:
		b8 - Domestic cash transactions valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	FC 78 FC A8 40
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC F8 FC F8 70
9F 10	Issuer Application Data [InteracFlash]	xx 02 xx
		xx xx xx xx xx xx xx xx xx *
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	99
	Try Counter	
9F 27	Cryptogram Information Data (CID)	80
9F 32	Issuer Public Key Exponent	01 00 01
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 42	Application Currency Code	01 24 - CAD
9F 44	Application Currency Exponent	02
<u> </u>	i	1

Tag	Element name	Da	ta									Car	d v7
9F 46	ICC Public Key Certificate	55	DF	E1	E2	CD	4F	10	63	CD	CE	9F	D8
	•						FC					82	1A
							52					45	
							В1						
		_	_		_		AC						
							64						
							DD						
							B1						
							DC D2						
							09						
							97		. –				
							60						
							A6						
		_					7B		-	. •		-	0.5
9F 47	ICC Public Key Exponent	01	00	01									
9F 48	ICC Public Key Remainder	4A	69	14	C9	E8	EA	10	F 7	E 3	7D		
9F 4A	Static Data Authentication Tag List	82											
9F 4D	Transaction Log Entry	0B	0 A										
9F 4F	Transaction Log Format	9F	02	06	5F	2A	02	9A	03	9F	36	02	9F
	3	1A	02	95	05	9C	01	8A	02				
9F 62	Card Product Code [InteracFlash]	00	01										
9F 70	Form Factor Indicator [InteracFlash]	00											
DF 62	Application Selection Flag [Canada]	80	80										

^{*} Tag value changes with card usage

4.15.3 CTLS: Application Tag data, AID A0000002771010 (Flash)

Tag	Element name	Data Card v7
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'
57	Track 2 Equivalent Data	00 12 03 00 00 00 00 03 D2 81 22 20 08 97 74 00 00 00 1F
5A	Application Primary Account Number (PAN)	00 12 03 00 00 00 00 03
5F 24	Application Expiration Date	28 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	01 24 - CAN
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	01
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'
82	Application Interchange Profile	01 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification NOT supported b4 - Terminal risk mgmt NOT to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02 9F 4C 08 9F 34 03
8F	Certification Authority Public Key Index	07

Tag	Element name	Data Card v7
90	Issuer Public Key Certificate	7E 37 FF 15 A4 88 1C 32 6D 5F 61 E4
	,	D7 4A 00 39 24 76 D5 44 80 B9 16 92
		4A 70 65 B7 B3 40 F3 1F A4 86 84 E1
		99 CE 82 DA 3F F6 0C 77 4A 13 D0 0B C8 46 7B 87 1C 9E 00 40 28 FA 44 D9
		55 38 0E D5 50 F9 F0 C8 B0 3B 3F 9A
		CE OF FA FA 8B A6 B4 OC F9 69 A9 72
		AF C9 D1 EC 56 25 AO OB B8 OE EO 38
		6E 57 22 BD FC 5C 7D 89 0C 71 5F 54
		67 4F CE B2 0B 5E 0E 80 E8 77 0B 59
		9E A4 E6 15 D8 60 2D 30 37 F4 CB B2
		CC 6F 4D B2 99 34 78 FC CE 47 A5 23 59 AA 00 A4 94 C5 87 BB D3 2F 3B 64
		A9 2E F8 77 47 25 66 A1 A7 24 F2 0B
		BB C8 24 26 9C 34 80 22 EF E7 83 85
		13 A7 AD 3B DE 7B 2B 3D B8 8F 5F B3
		A1 DA 45 B8 38 14 16 A1 OF 77 7E 55
		07 B8 05 48 33 D3 99 97 C1 5B 34 34
		E0 86 A7 B6 7F 6B B0 29 60 E1 F5 59 20 DC 2E 12 38 91 DA 23 34 03 AA D3
		97 75 0F 44 56 09 CD 2A
94	Application File Locator (AFL)	08 01 04 00 10 01 05 03
9F 07	Application Usage Control	FF 00
0. 0.	7 Application Stage States	BYTE 1:
		b8 - Domestic cash transactions valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid
		b5 - International goods valid b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
05.00	A 1' (') A 1	b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02 FC F8 FC F8 00
9F 0D	Issuer Action Code - Default	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00 FC F8 FC F8 00
9F 0F	Issuer Action Code - Online	00
9F 10	Issuer Application Data [InteracFlash]	XX U2 XX
9F 13	Last Online Application Transaction	xx xx *
00	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	99
	Try Counter	
9F 27	Cryptogram Information Data (CID)	80
9F 32	Issuer Public Key Exponent	01 00 01
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 59 03 9F 5A 01 9F 02 06 9F 1A 02
	(PDOL)	5F 2A 02 9F 37 04 9F 58 01
9F 42	Application Currency Code	01 24 - CAD
	Application Currency Exponent	02

Tag	Element name	Da	ta									Car	d v7
9F 46	ICC Public Key Certificate	E8	14	8E	63	62	E5	81	A 3	37	9C	7E	26
	•					-	43	-				_	-
				_		-	E1					-	-
				-	-		D2			_	-		-
					_		F9 E4	_	-		_		-
					-		7C			-			
							14					_	_
			-	_			D9		-	-			
		01	55	91	ΑD	03	72	7A	F1	A4	СЗ	8B	A2
		39	FD	64	79	0E	8E	29	64	10	4B	66	7F
		_					E2						
		_	-			_	38		_	_	_		
							44			СВ	DA	Α6	16
					2B	F6	FD	DD	ED				
9F 47	ICC Public Key Exponent		00										
9F 48	ICC Public Key Remainder		69	14	C9	E8	EA	10	F7	E3	7D		
9F 4A	Static Data Authentication Tag List	82											
9F 4D	Transaction Log Entry	0В	0A										
9F 4F	Transaction Log Format						02			9F	36	02	9F
							01						
9F 52	Merchant Type Indicator Limits 01		00						99				
9F 54	Merchant Type Indicator Limits 02						01					99	
9F 55	Merchant Type Indicator Limits 03	00	00	00	02	50	01	99	99	99	99	99	99
9F 56	Merchant Type Indicator Limits 04	00	00	00	02	50	01	99	99	99	99	99	99
9F57	Merchant Type Indicator Limits 05	00	00	00	02	50	01	99	99	99	99	99	99
9F 62	Card Product Code [InteracFlash]	00	01										
9F 63	Card Transaction Information	00	10	00	00								
	[InteracFlash]												
9F 70	Form Factor Indicator [InteracFlash]	00											
DF 62	Application Selection Flag [Canada]	80	80										

^{*} Tag value changes with card usage

4.16 Test Card 16 - Mastercard, CO, 3-AID, English, USA, USD

A contact-only, 3-AID Mastercard Credit / Debit card with an Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$10.00.

4.16.1 Contact: CVM List - Mastercard, AID A000000004101001

Cardholder Verification Method List ('4103 4203 5E03 1F00 0000')							
CVM	Verification Method	Conditions	If unsuccessful				
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM				
2	Online PIN	Terminal supports CVM type	Next CVM				
3	Signature (Paper)	Terminal supports CVM type	Next CVM				
4	No CVM required	Always	Fail				
5	Fail CVM Processing	Always	Fail				

4.16.2 Contact: Application Tag data, AID A000000004101001

Tag	Element name	Data C	ard v6
50	Application Label	4D 41 53 54 45 52 43 41 52 44 4	3 52
		45 44 49 54 - MASTERCARDCREDIT	-,

Tag	Element name	Data Card v6
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 51 22 01
	•	14 83 59 49 00 0F
5A	Application Primary Account Number (PAN)	54 13 33 00 89 02 00 60
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 36 20 20 20 20 - 'USA DEBIT/Test Card 16'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10 01
87	Application Priority Indicator	01
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 42 03 5E 03 1F 00 00 00
94	List Application File Locator (AFL)	08 01 01 00 10 01 02 00
94	Application File Locator (AFL)	08 01 01 00 10 01 02 00
9F 07	Application Usage Control	FF 00
0. 0.	, ipplication deage dentite.	BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid b6 - Domestic goods valid
		b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid b1 - non-ATM terminals valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
0=		b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 BC 88 00 00 00 00 00 00
9F 0E 9F 0F	Issuer Action Code - Denial Issuer Action Code - Online	B0 70 BC 98 00
9F 10	Issuer Application Data [M/Chip	xx 14 xx
5. 10	Advance	xx xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	4D 61 73 74 65 72 63 61 72 64 43 72
		65 64 69 74 - 'MastercardCredit'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
	Try Counter	

Tag	Element name	Da	ta									Car	d v6
9F 23	Counter 1 Upper Limit [Mastercard]	00											
9F 26	Application Cryptogram (AC)	2B	FB	AF	1A	64	BF	F4	32				
9F 27	Cryptogram Information Data (CID)	80											
9F 36	Application Transaction Counter (ATC)	хx	хx	*									
9F 42	Application Currency Code	08	40	- U	SD								
9F 4D	Transaction Log Entry	0в	0A										
9F 4F	Transaction Log Format	9F	27	01	9F	02	06	5F	2A	02	9A	03	9F
	G			9F	52	06	DF	3E	01	9F	21	03	9 F
			14				^1			10			
9F 7E	Application Life Cycle Data [Mastercard]									12 00	00	02	
										00			
										00			
C3	Card Issuer Action Code (Contact) -		00										
	Decline [M/Chip Advance]												
C4	Card Issuer Action Code (Contact) -	1F	50	00									
	Default [M/Chip Advance]												
C5	Card Issuer Action Code (Contact) -	3F	FB	00									
	Online [M/Chip Advance]												
C6	PIN Try Limit [M/Chip Advance]	09											
C7	CDOL1 Related Data Length	42											
	[Mastercard]												
C8	CRM Country Code [Mastercard]	08	40	- U	SA								
C9	Accumulator 1 Currency Code		40										
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
СВ	Accumulator 1 Upper Limit [Mastercard]	00	00	00	00	00	00						
CD	Card Issuer Action Code (Contactless) -	00	00	00									
-	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	00	00	00									
	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	40	00	01	01	08	40	00	01	01	08	40
	Table [Mastercard]		01	01	80	40	00	01	01	80	40	00	01
		01											
D3	Additional Check Table [Mastercard]	00	00	00		FF		FF	FF	FF	F'F'	F'F'	F'F'
D5	Application Control [M/Chip Advance]					C6							
D6	Default ARPC Response Code [M/Chip		10	-									
Do	Advance]	"	10										
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)	00	-	00			-						
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00	-	00			-						
DF 02	Advance]	"											
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												ļ
DF 12	Accumulator 1 Control (Contactless)	00											
۱۷ ال	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
5, 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	08	40	- [J	SD								
51 10	[Mastercard]	"	-0	J									
L	[masteroard]												

Tag	Element name	Da	ta									Cai	d v6
DF 17	Accumulator 2 Currency Conversion			00	01	01	08	40	00	01	01		
	Table [Mastercard]	00							01				
	-	01											
DF 18	Accumulator 2 Lower Limit [Mastercard]			00									
DF 19	Accumulator 2 Upper Limit [Mastercard]		00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
DE 40	Advance]	00											
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
DF 1D	Advance]	00											
טר זט	Counter 2 Control (Contact) [M/Chip Advance]	00											
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
DF 21	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]	00	00	00	00	00	00						
DF 23	MTA CVM (Contactless) [M/Chip	00	00	00	00	00	00						
	Advance]												
DF 24	MTA Currency Code [M/Chip Advance]		40										
DF 25	MTA NoCVM (Contact) [M/Chip	00	00	00	00	00	00						
	Advance]												
DF 26	MTA NoCVM (Contactless) [M/Chip	00	00	00	00	00	00						
	Advance]												
DF 27	Number Of Days Offline Limit [M/Chip	99	99										
	Advance]												
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
DE 00	(Contact) [M/Chip Advance]	00	00										
DF 29	Accumulator 1 CVR Dependency Data	00	00	00									
DF 2A	(Contactless) [M/Chip Advance] Accumulator 2 CVR Dependency Data	00	00	00									
DF ZA	(Contact) [M/Chip Advance]	00	00	00									
DF 2B	Accumulator 2 CVR Dependency Data	00	00	00									
0, 20	(Contactless) [M/Chip Advance]												
DF 2C	Counter 1 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 2D	Counter 1 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												
DF 2E	Counter 2 CVR Dependency Data	00	00	00									
	(Contact) [M/Chip Advance]												
DF 2F	Counter 2 CVR Dependency Data	00	00	00									
	(Contactless) [M/Chip Advance]												
DF 30	Interface Enabling Switch [M/Chip	01											
DE OF	Advance]	00											
DF 35	Security Limits Status (Contactless)	00											
DF 37	[M/Chip Advance] Security Limits Status Common [M/Chip	00											
טר או	Advance												
DF 3C	CVR Issuer Discretionary Data	00											
51 55	(Contact) [M/Chip Advance]												
DF 3D	CVR Issuer Discretionary Data	00											
55	(Contactless) [M/Chip Advance]												
DF 3F	Read Record Filter (Contact) [M/Chip	00											
	Advance]												
DF 40	Read Record Filter (Contactless)												
	[M/Chip Advance]												
DF 41	DS Management Control [M/Chip	20											
	Advance]												

* Tag value changes with card usage

4.16.3 Contact: CVM List - Mastercard, AID A00000004101002

Cardho	Cardholder Verification Method List ('4201 1E03 4203 1F03')							
CVM	Verification Method	If unsuccessful						
1	Online PIN	Unattended Cash	Next CVM					
2	Signature (Paper)	Terminal supports CVM type	Fail					
3	Online PIN	Terminal supports CVM type	Next CVM					
4	No CVM required	Terminal supports CVM type	Fail					

4.16.4 Contact: Application Tag data, AID A000000004101002

Tag	Element name	Data Card v6
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	44 45 42 49 54 20 4D 41 53 54 45 52
		43 41 52 44 - 'DEBIT MASTERCARD'
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51 22 01
		14 83 59 49 00 0F
5A	Application Primary Account Number (PAN)	54 13 33 00 89 09 91 30
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 36 20 20
55.04	A sellentine Englishine Date	20 20 - 'USA DEBIT/Test Card 16'
5F 24	Application Expiration Date	
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 00
		BYTE 1:
		b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported
		b5 - Cardholder verification supported
		b4 - Terminal risk mgmt to be performed
		b3 - Issuer authentication NOT supported via
		EXTERNAL AUTH command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - EMV Contactless NOT supported
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10 02
87	Application Priority Indicator	02
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03 9F 7C 14
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 42 01 1E 03 42 03 1F 03
94	Application File Locator (AFL)	08 01 01 00 10 01 02 00 18 01 01 00
94	Application File Locator (AFL)	08 01 01 00 10 01 02 00 18 01 01 00
<u> </u>	/ ipplication / ilo Locator (/ il L)	

Tag	Element name	Data Card v6
9F 07	Application Usage Control	FF CO
		BYTE 1:
		b8 - Domestic cash trans. valid
		b7 - Int'l cash transactions valid
		b6 - Domestic goods valid b5 - International goods valid
		b4 - Domestic services valid
		b3 - International services valid
		b2 - ATMs valid
		b1 - non-ATM terminals valid
		BYTE 2: b8 - Domestic cashback allowed
		b7 - International cashback allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00
9F 10	Issuer Application Data [M/Chip	xx 10 xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	44 65 62 69 74 20 4D 61 73 74 65 72
		63 61 72 64 - 'Debit Mastercardt'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
05.00	Try Counter	00
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 27	Cryptogram Information Data (CID)	80 xx xx *
9F 36	Application Transaction Counter (ATC)	08 40 - USD
9F 42	Application Currency Code	08 40 - 05D 0B 0A
9F 4D 9F 4F	Transaction Log Entry	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
9F 4F	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 12 00 02 59
		A0 00 00 00 04 10 10 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	06 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	06 FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
0.4	[Mastercard]	00 00 00 00 00 00
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00 00
CB	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00
CD	Card Issuer Action Code (Contactless) - Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	00 00 00
OE .	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	00 00 00
	Decline [M/Chip Advance]	
L	[m, omp / www.loo]	<u>l</u>

Tag	Element name	Da	ta									Car	d v6
D1	Accumulator 1 Currency Conversion		40	00	01	01	08	40	00	01	01	08	40
-	Table [Mastercard]	00	01	01	80	40	00	01	01	80	40	00	01
	· acie [maciereara]	01											
D3	Additional Check Table [Mastercard]		00					FF	FF	FF	FF	FF	FF
			FF										
D5	Application Control [M/Chip Advance]		00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)												
DE	Log Data Table [M/Chip Advance]	00	00	00	00	00	00	00	00	00			
DF 02	Security Limits Status (Contact) [M/Chip Advance]	00											
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	00											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
51 17	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
51 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	08	40	- U	SD								
51 10	[Mastercard]			Ŭ	-								
DF 17	Accumulator 2 Currency Conversion	08	40	00	01	01	08	40	0.0	01	01	08	40
ו וט	Table [Mastercard]		01										
	Table [Mastercard]	01											
DF 18	Accumulator 2 Lower Limit [Mastercard]	00	00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]	00	00	00	00	00	00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advancel												
DF 1E	Counter 2 Control (Contactless) [M/Chip	00											
	Advance]												
DF 1F	Counter 2 Lower Limit [Mastercard]	00											
DF 21	Counter 2 Upper Limit [Mastercard]	00											
DF 22	MTA CVM (Contact) [M/Chip Advance]	00	00	00	00	00	00						
DF 23	MTA CVM (Contactless) [M/Chip		00										
D1 20	Advance]												
DF 24	MTA Currency Code [M/Chip Advance]	08	40										
DF 25	MTA NoCVM (Contact) [M/Chip		00	0.0	0.0	0.0	00						
01 23	Advance]			- 0			- -						
DF 26	MTA NoCVM (Contactless) [M/Chip	იი	00	ეი	00	00	00						
DI 20	Advance]	"	20	50	50		55						
DF 27	Number Of Days Offline Limit [M/Chip	99	99										
DF ZI	Advance]		,,										
DF 28	Accumulator 1 CVR Dependency Data	00	00	00									
DF 20		33	50	50									
DF 29	(Contact) [M/Chip Advance]	00	00	٥٥									
DF 29	Accumulator 1 CVR Dependency Data	"	50	50									
DECA	(Contactless) [M/Chip Advance]	00	00	00									
DF 2A	Accumulator 2 CVR Dependency Data	00	00	00									
DE OF	(Contact) [M/Chip Advance]	00	00	00									
DF 2B	Accumulator 2 CVR Dependency Data	"	00	00									
DE CC	(Contactless) [M/Chip Advance]	00	0.0	0.0									
DF 2C	Counter 1 CVR Dependency Data	00	00	UU									
	(Contact) [M/Chip Advance]												

Tag	Element name	Data Card v6
DF 2D	Counter 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2E	Counter 2 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 2F	Counter 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 30	Interface Enabling Switch [M/Chip Advance]	01
DF 35	Security Limits Status (Contactless) [M/Chip Advance]	00
DF 37	Security Limits Status Common [M/Chip Advance]	00
DF 3C	CVR Issuer Discretionary Data (Contact) [M/Chip Advance]	00
DF 3D	CVR Issuer Discretionary Data (Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip Advance]	00
DF 40	Read Record Filter (Contactless) [M/Chip Advance]	
DF 41	DS Management Control [M/Chip Advance]	20

^{*} Tag value changes with card usage

4.16.5 Contact: CVM List - Mastercard, AID A0000000042203

Cardholder Verification Method List ('0205 4203 1F03')								
CVM	Verification Method	Conditions	If unsuccessful					
1	Online PIN	Purchase with Cashback	Fail					
2	Online PIN	Terminal supports CVM type	Next CVM					
3	No CVM required	Terminal supports CVM type	Fail					

4.16.6 Contact: Application Tag data, AID A0000000042203

Tag	Element name	Data Card v6
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 4D 41 45 53 54 52 4F 20 20
		20 20 20 20 – 'US MAESTRO
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 51 22 01
	-	14 83 59 49 00 OF
5A	Application Primary Account Number	54 13 33 00 89 09 91 30
	(PAN)	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
		73 74 20 43 61 72 64 20 31 36 20 20
		20 20 - 'USA DEBIT/Test Card 16'
5F 24	Application Expiration Date	25 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	08 40 - USA
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 01
5F 34	Application PAN Sequence Number	01
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'

Tag	Element name	Data Card v6					
82	Application Interchange Profile	18 00					
02	7 Application interesting 1 Territor	BYTE 1:					
		b7 - Offline SDA NOT supported					
		b6 - Offline DDA NOT supported					
		b5 - Cardholder verification supported					
		b4 - Terminal risk mgmt to be performed					
		b3 - Issuer authentication NOT supported via EXTERNAL AUTH command					
		b1 - Combined DDA / GEN AC NOT supported					
		BYTE 2:					
		b8 - EMV Contactless NOT supported					
84	Dedicated File (DF) Name	A0 00 00 00 04 22 03					
87	Application Priority Indicator	03					
8C	Card Risk Management Data Object List	9F 02 06 9F 03 06 9F 1A 02 95 05 5F					
	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01					
	,	9F 45 02 9F 4C 08 9F 34 03 9F 21 03					
0.0	On I Dial Management Data Olivet List	9F 7C 14 91 0A 8A 02 95 05 9F 37 04 9F 4C 08					
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08					
OF.	2 (CDOL2)	00 00 00 00 00 00 00 00 02 05 42 03					
8E	Cardholder Verification Method (CVM)	1F 03					
0.4	List	08 01 01 00 10 01 02 00 20 01 01 00					
94	Application File Locator (AFL)	08 01 01 00 10 01 02 00 20 01 01 00					
94	Application File Locator (AFL)	FF C0					
9F 07	Application Usage Control	BYTE 1:					
		b8 - Domestic cash trans, valid					
		b7 - Int'l cash transactions valid					
		b6 - Domestic goods valid					
		b5 - International goods valid					
		b4 - Domestic services valid					
		b3 - International services valid b2 - ATMs valid					
		b2 - ATMs valid b1 - non-ATM terminals valid					
		BYTE 2:					
		b8 - Domestic cashback allowed					
		b7 - International cashback allowed					
9F 08	Application Version Number	00 02					
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00					
9F 0E	Issuer Action Code - Denial	00 00 00 00 00					
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00					
9F 10	Issuer Application Data [M/Chip	xx 10 xx					
	Advance]	xx xx xx xx xx xx *					
9F 11	Issuer Code Table Index	01					
9F 12	Application Preferred Name	55 53 20 4D 61 65 73 74 72 6F 20 20					
		20 20 20 - 'US Maestro'					
9F 14	Counter 1 Lower Limit [Mastercard]	00					
9F 17	Personal Identification Number (PIN)	09					
	Try Counter						
9F 23	Counter 1 Upper Limit [Mastercard]	00					
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *					
9F 27	Cryptogram Information Data (CID)	80					
9F 36	Application Transaction Counter (ATC)	00 04					
9F 42	Application Currency Code	08 40 - USD					
9F 4D	Transaction Log Entry	0B 0A					
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F					
		36 02 9F 52 06 DF 3E 01 9F 21 03 9F					
		7C 14					
9F 7E	Application Life Cycle Data [Mastercard]	04 10 0B 14 00 01 00 00 12 00 02 59					
		A0 00 00 00 04 10 10 00 00 00 00 00 00 00 00 00 00 00					
		00 00 00 00 00 00 00 00 00 00 00 00					
L		00 00 00 00 00 00 00 00 00 00					

Tag	Element name	Data Card v6
C3	Card Issuer Action Code (Contact) -	00 00 00
	Decline [M/Chip Advance]	
C4	Card Issuer Action Code (Contact) -	06 50 00
	Default [M/Chip Advance]	
C5	Card Issuer Action Code (Contact) -	06 FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
	[Mastercard]	
C8	CRM Country Code [Mastercard]	08 40 - USA
C9	Accumulator 1 Currency Code	08 40 - USD
	[Mastercard]	
CA	Accumulator 1 Lower Limit [Mastercard]	00 00 00 00 00
CB	Accumulator 1 Upper Limit [Mastercard]	00 00 00 00 00
CD	Card Issuer Action Code (Contactless) -	00 00 00
	Default [M/Chip Advance]	
CE	Card Issuer Action Code (Contactless) -	00 00 00
	Online [M/Chip Advance]	
CF	Card Issuer Action Code (Contactless) -	00 00 00
<u> </u>	Decline [M/Chip Advance]	
D1	Accumulator 1 Currency Conversion	08 40 00 01 01 08 40 00 01 01 08 40 00 01 01 08 40 00 01 01 08 40 00 01
	Table [Mastercard]	01
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF
	ridditional official rabio [Mactercara]	FF FF FF FF FF
D5	Application Control [M/Chip Advance]	00 00 00 00 00 00
D6	Default ARPC Response Code [M/Chip	00 10
	Advance]	
D7	Application Control [M/Chip Advance]	00 00 00 00 00 00
D9	Application File Locator (Contactless)	
DE	Log Data Table [M/Chip Advance]	00 00 00 00 00 00 00 00
DF 02	Security Limits Status (Contact) [M/Chip	00
	Advance]	
DF 11	Accumulator 1 Control (Contact)	C1
	[M/Chip Advance]	
DF 12	Accumulator 1 Control (Contactless)	00
DE 44	[M/Chip Advance]	00
DF 14	Accumulator 2 Control (Contact)	00
DE 45	[M/Chip Advance]	00
DF 15	Accumulator 2 Control (Contactless) [M/Chip Advance]	
DF 16	Accumulator 2 Currency Code	08 40 - USD
טר וט	[Mastercard]	00 40 000
DF 17	Accumulator 2 Currency Conversion	08 40 00 01 01 08 40 00 01 01 08 40
	Table [Mastercard]	00 01 01 08 40 00 01 01 08 40 00 01
	rabio [ividotorodia]	01
DF 18	Accumulator 2 Lower Limit [Mastercard]	00 00 00 00 00 00
DF 19	Accumulator 2 Upper Limit [Mastercard]	00 00 00 00 00
DF 1A	Counter 1 Control (Contact) [M/Chip	C1
	Advance]	
DF 1B	Counter 1 Control (Contactless) [M/Chip	00
	Advance]	
DF 1D	Counter 2 Control (Contact) [M/Chip	00
L	Advance]	
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
DE 15	Advance]	
DF 1F	Counter 2 Lower Limit [Mastercard]	00
DF 21	Counter 2 Upper Limit [Mastercard]	00

Tag	Element name	Data Card v6
DF 22	MTA CVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 23	MTA CVM (Contactless) [M/Chip	00 00 00 00 00 00
D. 20	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
J. 20	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
7. 20	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	99 99
	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2C	Counter 1 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2D	Counter 1 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 2E	Counter 2 CVR Dependency Data	00 00 00
	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
	Advance]	
DF 35	Security Limits Status (Contactless)	00
	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
DE 00	Advance]	00
DF 3C	CVR Issuer Discretionary Data	00
DE OD	(Contact) [M/Chip Advance]	00
DF 3D	CVR Issuer Discretionary Data	
DF 3F	(Contactless) [M/Chip Advance] Read Record Filter (Contact) [M/Chip	00
טר אר	Advance]	
DF 40	Read Record Filter (Contactless)	
DF 40	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20

^{*} Tag value changes with card usage

Chapter 5 - ASCII Character Conversion Chart

Dec	Bin	Hex	Char	Dec	Bin	Hex	Char	Dec	Bin	Hex	Char
00	00000000	00	NUL	44	00101100	2C		88	01011000	58	X
01	00000001	01	SOH	45	00101101	2D	,	89	01011001	59	Y
02	00000010	02	STX	46	00101110	2E		90	01011010	5A	Z
03	00000011	03	ETX	47	00101111	2F	1	91	01011011	5B	
04	00000100	04	EOT	48	00110000	30	0	92	01011100	5C	ì
05	00000101	05	ENQ	49	00110001	31	1	93	01011101	5D	1
06	00000110	06	ACK	50	00110010	32	2	94	01011110	5E	^
07	00000111	07	BEL	51	00110011	33	3	95	01011111	5F	_
08	00001000	08	BS	52	00110100	34	4	96	01100000	60	`
09	00001001	09	HT	53	00110101	35	5	97	01100001	61	а
10	00001010	0A	LF	54	00110110	36	6	98	01100010	62	b
11	00001011	0B	VT	55	00110111	37	7	99	01100011	63	С
12	00001100	0C	FF	56	00111000	38	8	100	01100100	64	d
13	00001101	0D	CR	57	00111001	39	9	101	01100101	65	е
14	00001110	0E	SO	58	00111010	3A	:	102	01100110	66	f
15	00001111	0F	SI	59	00111011	3B	;	103	01100111	67	g
16	00010000	10	DLE	60	00111100	3C	<	104	01101000	68	h
17	00010001	11	DC1	61	00111101	3D	=	105	01101001	69	i
18	00010010	12	DC2	62	00111110	3E	>	106	01101010	6A	j
19	00010011	13	DC3	63	00111111	3F	?	107	01101011	6B	k
20	00010100	14	DC4	64	01000000	40	@	108	01101100	6C	I
21	00010101	15	NAK	65	01000001	41	Α	109	01101101	6D	m
22	00010110	16	SYM	66	01000010	42	В	110	01101110	6E	n
23	00010111	17	ETB	67	01000011	43	С	111	01101111	6F	0
24	00011000	18	CAN	68	01000100	44	D	112	01110000	70	р
25	00011001	19	EM	69	01000101	45	E	113	01110001	71	q
26 27	00011010	1A	SUB	70 71	01000110	46 47	F G	114 115	01110010	72	r
28	00011011	1B 1C	FS	72	01000111 01001000	48	Н	116	01110011 01110100	73 74	s t
29	00011100	1D	GS	73	01001000	49	1	117	01110100	75	u
30	00011101	1E	RS	74	01001001	4A	J	118	01110101	76	V
31	00011111	1F	US	75	01001010	4B	K	119	01110111	77	w
32	00100000	20	SP	76	010011100	4C	L	120	01111000	78	x
33	00100001	21	!	77	01001101	4D	M	121	01111001	79	у
34	00100010	22	"	78	01001110	4E	N	122	01111010	7A	Z
35	00100011	23	#	79	01001111	4F	0	123	01111011	7B	{
36	00100100	24	\$	80	01010000	50	Р	124	01111100	7C	j
37	00100101	25	%	81	01010001	51	Q	125	01111101	7D	}
38	00100110	26	&	82	01010010	52	R	126	01111110	7E	~
39	00100111	27	•	83	01010011	53	S	127	01111111	7F	DEL
40	00101000	28	(84	01010100	54	Т				
41	00101001	29)	85	01010101	55	U				
42	00101010	2A	*	86	01010110	56	V				
43	00101011	2B	+	87	01010111	57	W				