

# USA Debit EMV™ Test Plan

Version 3.10

December 2018

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# **Revision History**

Version	Date	Revisions		
1.00	December 09, 2017	Initial document release		
1.10	December 14, 2017	<ul> <li>Recommended transaction \$value updated for cards 13, 15, 16</li> </ul>		
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		
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3.10	December 13, 2018	TC03 documentation updated to reflect Dual-Funding		



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# **Chapter 1 - Overview**

# 1.1 B2 USA Debit EMV Test Plan - Purpose

This test plan is designed for clients who wish to utilize the UL 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.



# 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	A0000000980840	

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:

- 1. 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



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. 0011111101	II Debit Scellarios				
Scenario One	AID Care		IIN Tag 42 Ile debit funding Test Cards 01, 0		
Global Debit AID	TC 01 - A000000031010 TC 05 - A0000000041010 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, Mastercard 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:  UL 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. Commoi	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 - A0000000042203	US	TC 03 - 476173 TC 09 - 679999		
Three	Card accesses two		accounts – Acco	ounts have different IINs: 1	
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 networks (any supported CVM may be used)	
U.S. Common Debit AID 2	TC 11 - A0000000004220302	US	679999		

# 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:

- 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 (UL 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 AlDs This is a U.S. Debit card (UL USA Debit Test Cards 01, 02, 03, 05, 08, 09, 10, 11, 12, 13 and 14).
- 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.
- 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 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 (UL 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 AlDs This is a U.S. Debit card (UL 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 "AII 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:

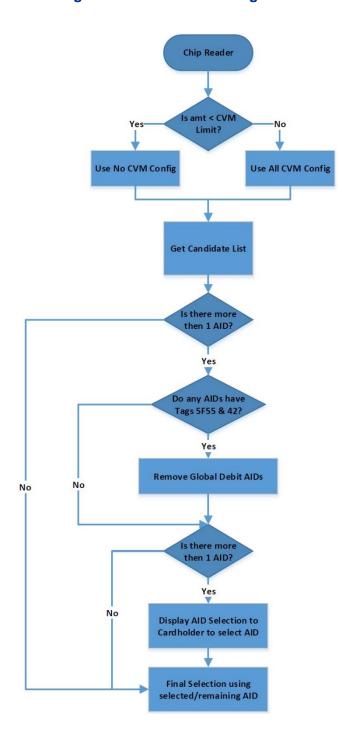
- International/Global AID selected a credit Processing Code should be used
- U.S. Common Debit AID, Interlink, Maestro or Interac selected a debit Processing Code should be used

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.

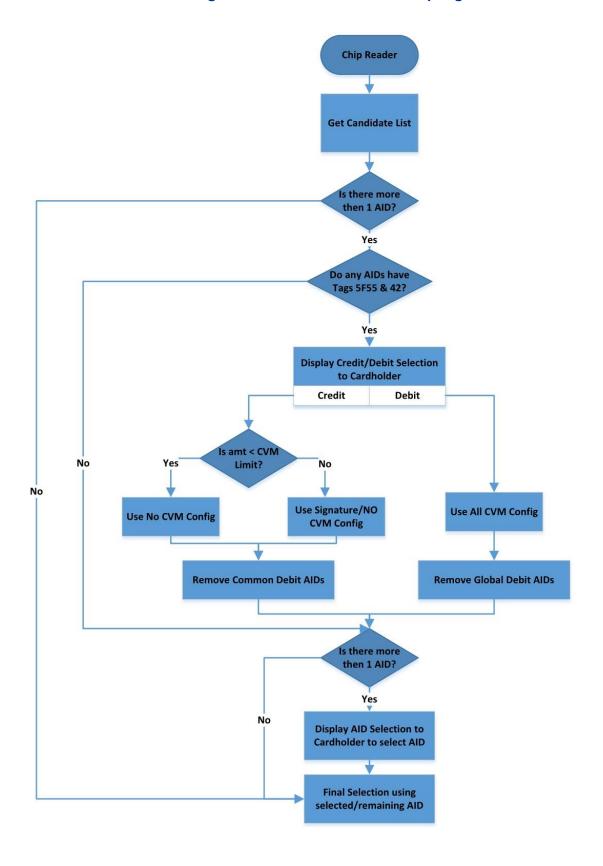


# 2.6 U.S. Debit Processing Flowchart PIN Preferring Merchants





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





# Chapter 3 - B2 USA Debit EMV Test Plan

#### 3.1 Test Case Outline

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

- 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.
- Interac Flash cards have a '1xxxxx' 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.

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

#### **DD**.**AAAA**.C**xx**-T**yy**, 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 UL 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 UL 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:

- 1. Does <u>not</u> prompt for Credit or Debit
- 2. Does <u>not</u> prompt for Application Selection
- 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:

- 1. 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:

- 1. 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.

#### 3.3.6 Pass Criteria

#### Pass Criteria:

- 1. "Chip" indicates the card was inserted
- 2. "A0000000980840" 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.



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

AIDs that should be loaded in the acceptance device when testing using the UL 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		
04	Debit	Debit		
01	Visa Debit	US Debit		
	4761739001010135	4761739001010135		
	A0000000980840			
00	Debit			
02	US Debit			
	4761739001010135			
	A00000003101001	A00000003101002	A000000980840	
00	Credit	Debit	Debit	
03	Visa Credit	Visa Debit	US Debit	
	4761739001010176	4761739001010135	4761739001010135	
	A000000033010			
	Debit			
04	Interlink			
	4761739001010671			
	A0000000041010	A0000000042203		
0.5	Debit	Debit		
05	Mastercard Debit	US Maestro		
	5413330089099130	5413330089099130		
	A0000000043060	A000000043060		
	D0561111	D0562222		
06	Debit	Debit		
	Maestro1	Maestro2		
	67999989000002010	67999989000002028		
	A0000000041010	A0000000043060		
	Credit	Debit		
07	Mastercard	Maestro		
	5413330089020060	6799998900000200051		
	A0000000042203	A000000042203		
	D0561111	D0562222		
08	Debit	Debit		
	US Checking	US Savings		
	5413330089099007	5413330089099015		
	A0000000041010	A000000043060	A0000000042203	
	Credit	Debit	Debit	
09	Mastercard	Maestro	US Maestro	
	5413330089020060	679998900000200051	6799998900000200051	
	A0000000042203			
	Debit			
10	US Maestro			
	5413330089099130			
	A0000000041010	A000000004220301	A000000043060	A000000004220302
	Debit	Debit	Debit	Debit
11	Mastercard Debit	US Checking	Maestro	US Savings
-	5413330089020060	5413330089020060	6799998900000200051	6799998900000200051



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

		-		
Card	Application 1	Application 2	Application 3	Application 4
	A0000001524010	A0000001523010		
12	Debit	Debit		
12	US Debit	Discover Debit		
	6011973700000005	6011973700000005		
	A0000001524010			
13	Debit			
13	US Debit			
	6011973700000005			
	A0000006200620			
14	Debit			
14	DNA			
	4000000000000028			
	A0000002771010			
15	Debit			
13	Interac			
	1967302839018644			
	A0000002771010			
16	Debit			
16	Interac			
	4506445006931933			



# 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 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 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 <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. "A000000980840" AID selected was 'US Debit'
  - c. "0135" last 4 digits of the PAN
  - d. "Verified by PIN" PIN CVM was used

# **Comments:**



3.3.9.2 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:**

- Application is configured as PIN Preferring
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AIDs: A000000031010, A000000980840
- 4. PIN Bypass is supported

## Steps:

- 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 <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. 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

#### Comments:



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:**

- 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 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. "A000000980840" AID selected was 'US Debit'
  - c. "0135" last 4 digits of the PAN
  - d. "Verified by PIN" PIN CVM was used

#### Comments:



3.3.9.4 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
- 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. 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. "A000000980840" AID selected was 'US Debit'
  - c. "0135" last 4 digits of the PAN
  - d. "No signature required" No CVM was used

#### Comments:



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 <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: 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 <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. "A0000000980840" AID selected was 'US Debit'
  - c. "0135" last 4 digits of the PAN
  - d. "Verified by PIN" PIN CVM was used

#### Comments:



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:**

- 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:

- 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 <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. 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

#### Comments:



#### 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 <u>not</u> 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

#### Comments:



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
- 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

#### Comments:



#### 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
- 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 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
- 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

#### **Comments:**



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: 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:

- 4. User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 5. User is <u>not</u> prompted to select an application
- 6. The Interlink application is automatically selected
- 7. 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:



3.3.9.11 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

#### Comments:



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
- 2. 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

#### Comments:



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

#### Comments:



#### 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 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
- 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

#### Comments:



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: 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:

- 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

#### Comments:



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: A000000043060

# 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'
- 3. 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

#### Comments:



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'
- 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:



3.3.9.18 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
- 2. 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:**

- 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
- 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

### **Comments:**



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, A0000000043060

# 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'
- 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

#### Comments:



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: A0000000042203

# 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

#### Comments:



#### 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
- 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
- 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

## Comments:



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
- 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

#### Comments:



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
- 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:**

- 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 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

## **Comments:**



#### 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: A0000000041010, A0000000043060 and A0000000042203

# Steps:

- 1. Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 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
- 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:**



#### 3.3.9.25 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: 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 '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'
- 2. User is prompted to select 'Mastercard' and 'US Maestro' only
- 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

## **Comments:**



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: A0000000041010, 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 <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. 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

#### **Comments:**



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: 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
- 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' and 'US Maestro' only
- 3. User is able to select 'US Maestro'
- 4. When PIN is not 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

## **Comments:**



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 <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

#### Comments:



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:**

- 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:

- 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'
- 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

# **Comments:**



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
- 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

#### **Comments:**



#### 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 A000000042203
- 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:

- 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
- 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

## **Comments:**



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
- 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

# **Comments:**



#### 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 A000000042203
- 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 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
- 3. 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

## **Comments:**



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:

- 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

#### Comments:



#### 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 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. 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

### **Comments:**



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:**

- 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 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. "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

#### Comments:



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
- 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 not prompted to select an application
- 3. User is not prompted to enter a PIN
- 4. The 'US Debit' application is automatically selected
- 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

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 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 <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

#### Comments:



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 <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: 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 <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
- 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

## **Comments:**



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
- 3. Automatically selects the 'DNA' application
- 4. Prompts the user to enter a PIN

# **Pre-Requisites:**

- 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 not prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- The DNA application is automatically selected
- 4. 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:**

- 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:

- 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.



3.3.9.42 PP.MCCL.C16-T01

**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:**

- 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 16
- 3. Enter PIN ("1234") when prompted

#### Pass Criteria:

- 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
- 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.



## 3.3.10 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
- Terminal supports the following AIDs: A000000031010, A0000000980840

#### Steps:

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

#### **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 '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

#### Comments:



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 <u>not</u> 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:**

- Application is configured as PIN Preferring
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A000000980840

# Steps:

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

#### Comments:



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:**

- 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:

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

#### Comments:



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:**

- 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. "Signature panel" Signature CVM was used

#### Comments:



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
- 4. 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

#### Comments:



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: 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 <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. "A0000000980840" AID selected was 'US Debit'
  - c. "0135" last 4 digits of the PAN
  - d. "Verified by PIN" PIN CVM was used

#### Comments:



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

# **Pre-Requisites:**

- 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:

- 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 <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. 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

#### Comments:



#### 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

### **Comments:**



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

### **Comments:**



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, A000000980840

### 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:**

- 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
- 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

#### **Comments:**



#### 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 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'
- 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

### **Comments:**



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 <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 Standard EMV Application Selection
- 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:

- 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 'Interlink' application is automatically selected
- 4. 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

#### Comments:



#### 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'
- 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. "9130" last 4 digits of the PAN
  - d. "Signature panel" or "No signature required" Signature or No CVM was used

#### **Comments:**



#### 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'
- 3. 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:



#### 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
- 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:

- 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'
- 3. 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

#### Comments:



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

#### Comments:



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

#### Comments:



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'
- 3. 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

#### Comments:



#### 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: A000000043060

# 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'
- 3. 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:



3.3.10.20 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, A000000043060

### 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

#### Comments:



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:

- 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
- 2. 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:**

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is prompted to select 'Mastercard' and 'Maestro'
- 3. User is able to select 'Mastercard'
- 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. "No signature required" or "Signature panel" No CVM or Signature CVM was used

### **Comments:**



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
- 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:



3.3.10.23 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: A0000000042203

# 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

#### Comments:



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
- 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:**

- 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
- 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

### **Comments:**



#### 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: 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:

- 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
- 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

#### Comments:



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: A000000042203
- 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
- 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

### **Comments:**



#### 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: A0000000041010, 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

### **Comments:**



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
- Terminal supports the following AIDs: A000000041010, A0000000043060 and A000000042203
- 4. PIN Bypass is supported

# Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 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 all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- 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

### **Comments:**



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: A0000000041010, A0000000043060 and A0000000042203

### Steps:

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

### **Comments:**



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: A0000000041010, 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

# **Comments:**



#### 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
- Terminal supports the following AIDs: A000000041010, A0000000043060 and A000000042203
- 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 '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 all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- User is able to select 'US Maestro'
- 4. When PIN is <u>not</u> entered the transaction continues with No CVM or Signature
- 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

### **Comments:**



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 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 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
- 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

#### Comments:



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:**

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

### Steps:

- 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'
- 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

#### Comments:



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 A000000042203

### 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 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 '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

# Comments:



#### 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'
- 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. 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

### **Comments:**



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 A000000042203

### 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'
- 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

# **Comments:**



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 A000000042203
- 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:**

- 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 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

### **Comments:**



#### 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 A000000042203

### 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 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'
- 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:**



3.3.10.39 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 A000000042203

### 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 <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 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

# **Comments:**



#### 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 A000000042203
- 4. PIN Bypass is supported

# Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 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 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

### **Comments:**



#### 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 <u>not</u> 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
- 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

#### Comments:



#### 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'
- 3. User is able to select 'US Debit'
- The transaction is approved
- 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

# **Comments:**



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'
- 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

#### Comments:



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'
- 3. User is able to select 'Discover Debit'
- The transaction is approved
- 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

# **Comments:**



#### 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 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. "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

#### Comments:



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

#### Comments:



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:

- 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

#### Comments:



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 <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: 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 <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
- 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

#### **Comments:**



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 <u>not</u> prompt for Credit or 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:**

- 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:**

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 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.



3.3.10.50 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:

- 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.



3.3.10.51 PP.SEAS.C16-T01

**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:

- Does <u>not</u> 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:**

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

## Steps:

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

#### **Pass Criteria:**

- User is <u>not</u> prompted to select 'Credit' or 'Debit'
- 2. User is <u>not</u> prompted to select an application
- 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.



#### 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 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 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
- 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

#### Comments:



#### 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 not 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:

- 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:

- 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'
- 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. "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
- 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. 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

#### Comments:



#### 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 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 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 'Debit'
- 4. Enter PIN ("1234") when prompted

#### Pass Criteria:

- User is prompted to select 'Credit' and 'Debit'
- 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. "A000000980840" AID selected was 'US Debit'
  - C.
  - d. "0135" last 4 digits of the PAN
  - e. "Verified by PIN" PIN CVM was used

#### **Comments:**



#### 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 not 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:**

- 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
- 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

#### Comments:



#### 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:

- 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
- 2. 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'
- 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:

- 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 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
- 2. When prompted for card entry, insert Test Card 03
- 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: 'Visa Credit' and 'Visa Debit'
- 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

#### **Comments:**



#### 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, A000000980840

## 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. Enter PIN ("1234") when prompted

#### **Pass Criteria:**

- 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

#### Comments:



#### 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:**

- 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: 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:

- User is prompted to select 'Credit' and 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Interlink' application is automatically selected
- 4. 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

#### 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:

- 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:**

- 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

#### Comments:



#### 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:

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

#### Comments:



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 <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
- 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

#### Comments:



#### 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:

- 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 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

#### Comments:



#### 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

#### **Comments:**



#### 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
- 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:

- 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 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. 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'
- User is able to select 'Mastercard'
- 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:**



#### 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, A000000043060

# 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'
- 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:**



3.3.11.19 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'
- 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

#### **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: A000000042203

# 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: 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 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'
- 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: 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'
- 2. User is prompted to select 'US Checking' and 'US Savings' only
- User is able to select 'US Savings'
- 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: A0000000041010, A0000000043060 and A0000000042203

# Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 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 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 Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- Terminal supports the following AIDs: A000000041010, A0000000043060 and A000000042203

## 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 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. "0051" last 4 digits of the PAN
  - d. "Verified by PIN" PIN CVM was used

#### Comments:



#### 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:**

- 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: A000000042203

# 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:

- User is prompted to select 'Credit' and 'Debit'
- 2. User is not 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

#### Comments:



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 not 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
- 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:**

- 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. "Signature panel" or "No signature required" Signature or No CVM was used

# Comments:



#### 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:

- 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

#### 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
- 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

#### **Comments:**



#### 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 A000000042203

# 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 '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'
- The transaction is approved
- 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

## **Comments:**



#### 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:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 11
- 3. 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'
- 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

# **Comments:**



#### 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:

- 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'
- 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

## **Comments:**



#### 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:

- 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

#### Comments:



#### 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 not 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:

- 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

# **Comments:**



#### 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 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 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:

- User is prompted to select 'Credit' and '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

## Comments:



#### 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:

- 1. Prompts for Credit and Debit (user selects 'Credit')
- 2. Does not 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:

- 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:**

- 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
- 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

## Comments:



#### 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 not prompt for Application Selection
- 3. Automatically selects the 'DNA' application
- 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: 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:**

- 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 \*
- 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 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 Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

# Steps:

- Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- 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 '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.



#### 3.3.11.37 CD.MCCL.C16-T01

**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 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 Credit/Debit Prompting
- 2. Application Selection is Merchant Controlled by filtering the Candidate List
- 3. Terminal supports the following AID: A0000002771010

# Steps:

- 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'
- User is not 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.



## 3.3.12 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:

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

## **Comments:**



#### 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:**

- Application is configured as Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AIDs: A000000031010, A000000980840

# Steps:

- 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 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

#### Comments:



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 <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:**

- 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 \$0

# Steps:

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

## **Pass Criteria:**

- 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
- 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

## **Comments:**



#### 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
- 4. 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

## Comments:



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 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 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 <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

## Comments:



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
- 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 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. When prompted, select 'Credit'

## **Pass Criteria:**

- 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
- 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

## Comments:



#### 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:

- 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 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
- 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'
- 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:**



#### 3.3.12.8 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
- 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'
- User is able to select 'Visa Debit'
- 4. The transaction is approved
- 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

## **Comments:**



#### 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
- 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
- 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'
- 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

# **Comments:**



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:**

- 1. 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:

- User is prompted to select 'Credit' and 'Debit'
- 2. User is not prompted to select an application
- 3. The 'Interlink' application is automatically selected
- 4. 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

## Comments:



#### 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
- 2. When prompted for card entry, insert Test Card 05
- When prompted, select 'Credit'
- 4. Select 'Mastercard' application when prompted

## **Pass Criteria:**

- User is prompted to select 'Credit' and 'Debit'
- 2. User is prompted to select 'Mastercard Debit' and 'US Maestro'
- 3. 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

## **Comments:**



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: 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. 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'
- 3. 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:



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 not 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

## Comments:



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
- 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. "No Signature Required" No CVM was used

## Comments:



#### 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'
- 3. 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

## **Comments:**



#### 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'
- 3. 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:



3.3.12.17 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, A000000043060

# 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'
- User is able to select 'Mastercard'
- 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:**



#### 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'
- 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:**



3.3.12.19 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, A000000043060

# 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'
- 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

## **Comments:**



#### 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: A000000042203

# Steps:

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

## **Pass Criteria:**

- 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'
- 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. "Signature panel" or "No signature required" Signature or No CVM was used

## **Comments:**



#### 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
- 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'
- User is able to select 'US Checking'
- 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:**



#### 3.3.12.22 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: A000000042203

# 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'
- 3. 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. "Signature panel" or "No signature required" Signature or No CVM was used

## **Comments:**



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: 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 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'
- User is able to select 'US Savings'
- 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:**



#### 3.3.12.24 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: A0000000041010, A0000000043060 and A0000000042203

# Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 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 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. "Signature panel" or "No signature required" Signature or No CVM was used

## **Comments:**



#### 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: A0000000041010, A0000000043060 and A0000000042203

# Steps:

- Start a Purchase transaction for \$20.00
- 2. When prompted for card entry, insert Test Card 09
- 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 all of the following applications: 'Mastercard', 'Maestro' and 'US Maestro'
- User is able to select 'Maestro'
- 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

## Comments:



#### 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
- 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 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 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

## Comments:



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 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 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:**

- 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

#### Comments:



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 not 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
- 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. When prompted, select 'Credit'

# **Pass Criteria:**

- 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
- 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

#### Comments:



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'
- 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'
- The transaction is approved
- 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

#### Comments:



#### 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 A000000042203
- 4. PIN Bypass is supported

#### Steps:

- 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:**

- User is prompted to select 'Credit' and '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. 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

#### **Comments:**



#### 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:

- 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 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 all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- 3. User is able to select 'US Checking'
- 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

#### Comments:



#### 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 A000000042203
- 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'
- 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. When a PIN is not entered, transaction continues with No CVM or Signature
- The transaction is approved
- 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

#### **Comments:**



#### 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:

- 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'
- 2. User is prompted to select all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'Maestro'
- 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

#### Comments:



#### 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:

- 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 all of the following applications: 'Mastercard Debit', 'US Checking', 'Maestro' and 'US Savings'
- User is able to select 'US Savings'
- 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

#### Comments:



#### 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 A000000042203
- 4. PIN Bypass is supported

# Steps:

- 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:**

- User is prompted to select 'Credit' and '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. When a PIN is not entered, transaction continues with No CVM or Signature
- The transaction is approved
- 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

#### **Comments:**



#### 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
- 2. 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'
- 3. User is able to select 'Discover Debit'
- The transaction is approved
- 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

#### **Comments:**



#### 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'
- 3. User is able to select 'US Debit'
- 4. The transaction is approved
- 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

#### **Comments:**



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'
- 3. User is able to select 'Discover Debit'
- 4. The transaction is approved
- 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

#### **Comments:**



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 <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 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 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. "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

#### Comments:



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
- 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:



#### 3.3.12.41 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 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 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:

- User is prompted to select 'Credit' and '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

#### Comments:



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 not 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 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:**

- 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. "Signature panel" or "No signature required" Signature or No CVM was used

#### Comments:



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 not 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 Standard EMV Application Selection
- 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'
- 2. User is <u>not</u> 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.



#### 3.3.12.44 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 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 Credit/Debit Prompting
- 2. Application Selection is Standard EMV Application Selection
- 3. Terminal supports the following AID: A0000002771010

# Steps:

- Start a Purchase transaction for \$30.00
- 2. When prompted for card entry, insert Test Card 15
- 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 '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. "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.



3.3.12.45 CD.SEAS.C16-T01

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 not 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
- 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.



# Chapter 4 - UL 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 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 cards have a '1xxxxx' 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. \*\*\*

This 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	A00000003101001 A00000003101002 A0000000980840
PAN list	4761 7390 0101 0135	4761 7390 0101 0135	4761 7390 0101 0176
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	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	v4.0	v4.0	v5.0



**Test Card 04 Test Card 05** Test Card 06 **Brand** Visa Mastercard Mastercard **Description (Card + types)** Interlink Global / Common Maestro Dual-Funding A000000043060 A0000000041010 D0561111 **AID list** A000000033010 A000000043060 A0000000042203 D05621222 **PAN** on plastic 4761 7390 0101 0671 5413 3300 8909 9130 5413 3300 0000 2010 12/2022 **Expiry Date** 12/2022 12/2022 **Service Code** 220 201 201 Contact, Contactless, Interface Contact, MSR Contact, MSR MSR **CVM** See card definition See card definition See card definition **Approval Amount** \$10.00 \$20.00 \$20.00 **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** v4.0 v4.0 v4.0

	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 A000000041010 A000000043060		A000000042203 D0561111 A000000042203 D0562222	A0000000041010 A0000000043060 A0000000042203
PAN on plastic	5413 3300 8902 0060	5413 3300 8909 9007	5413 3300 8902 0060
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	220	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	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	v4.0	v4.0	v4.0



	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	A0000000041010 A000000004220301 A0000000043060 A000000004220302	A0000001524010 A0000001523010	
PAN on plastic	5413 3300 8909 9130	5413 3300 8909 0060	6011 9737 0000 0005	
Expiry Date	12/2022	12/2022	12/2023	
Service Code	201	201	201	
Interface	Contact, MSR	Contact, MSR	Contactless, Contact, MSR	
CVM	See card definition	See card definition	See card definition	
Approval Amount	\$20.00	\$20.00	\$79.00	
Issuer 840 - USA 84		840 - USA	840 - USA	
Application Currency Code	840 - USD	840 - USD	840 - USD	
Language 'en' - Englis		'en' - English	'enesfr' (English, Spanish, French)	
Card Version	v4.0	v4.0	v5.0	

	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 0005	4000 0000 0000 0028	1967 3028 3901 8644
Expiry Date	12/2023	12/2025	12/2022
Service Code	201	201	220
Interface	Contact, MSR	Contact, MSR	Contactless, Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$79.00	\$10.00	\$30.00
Issuer Country Code	840 - USA	840 - USA	124 - CAN
<b>Application Currency Code</b>	840 - USD	840 - USD	124 -CAD
Language	'en' - English	'en' - English	'en' - English
Card Version	v5.0	v5.0	v4.0



	Test Card 16
Brand	Interac
Description	Canadian Debit
AID list	A0000002771010
PAN on plastic	4506 4450 0693 1933
Expiry Date	12/2022
Service Code	220
Interface	Contact, MSR
CVM	See card definition
Approval Amount	\$30.00
Issuer Country Code	124 - CAN
Application Currency Code	124 - CAD
Language	'en' - English
Card Version v4.0	



# 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

Cardhol	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	
8	Fail CVM Processing	Always	Fail	

# 4.1.2 Contact: Application Tag data, AID A000000031010

\* Tag value changes with card usage

		rag value changes with card usage
Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	56 49 53 41 20 44 45 42 49 54 - 'VISA DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 21 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 31 20 20 20 20 - 'USA DEBIT/Test Card 01'
5F 24	Application Expiration Date	22 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 [VSDC]	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 using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone
84	Dedicated File (DF) Name	A0 00 00 00 03 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



Tag	Element name	Data Card v4.0
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 1E 04 02 05 5E 00 42 00 1F 00
0.4	List	08 01 02 00
94	Application File Locator (AFL)	FF 80
9F 07	Application Usage 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
05.00	Application Varsian Number	b7 - International cashback NOT allowed 00 96
9F 08 9F 0D	Application Version Number Issuer Action Code - Default	FC 50 AC 88 00
9F 0E	Issuer Action Code - Derial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00
9F 10	Issuer Application Data [VSDC]	xx xx A0 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
• • • •	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	20 20 20 20 - 'Visa Debit'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	01
	Try Counter	
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)	
9F 42 9F 44	Application Currency Code	08 40 - USD 02
9F 4F	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
	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
	[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	



# 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 value changes with card usage

		* Tag value changes with card usage
Tag	Element name	Data Card v4.0
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 21 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 31 20 20
55.04	A 11 11 5 1 11 5 1	20 20 - 'USA DEBIT/Test Card 01'
5F 24	Application Expiration Date	22 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 [VSDC]	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 using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone
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 91 0A
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 02 05 42 00 1F 00 00 00 00 00
94	Application File Locator (AFL)	08 01 02 00



9F 07	Application Usage Control	AB 80
		BYTE 1:
		b8 - Domestic cash transactions 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- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number	00 96
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
		FC 70 BC 98 00
9F 0F	Issuer Action Code - Online	
9F 10	Issuer Application Data [VSDC]	xx xx A0 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)	01
	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 05
01 00	(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
	-	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]	80
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 5D	Available Offline Spending Amount	00 00 00 00 00 00
05.00	[VSDC]	10 00 80 00
9F 68	Card Additional Processes [qVSDC	10 00 00 00
DE	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
	1 1	1

# 4.1.5 Contactless: Application Tag data, AID A000000031010

\* Tag value changes with card usage

		rag raide changes with eard deage
Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	47 61 73
50	Application Label	56 49 53 41 20 44 45 42 49 54 -
		'VISA DEBIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 21 22 01
	•	19 55 94 58 00 00 1F



47 61 73 90 01 01 01 35 5A **Application Primary Account Number** (PAN) 22 12 31 5F 24 **Application Expiration Date** 5F 28 Issuer Country Code 08 40 - USA 5F 2D Language Preference 65 6E - 'en' (English) 5F 34 Application PAN Sequence Number 01 55 53 - 'US' 5F 55 Issuer Country Code (alpha2 format) 00 00 82 Application Interchange Profile [VCPS] 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 using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone AO 00 00 00 03 10 10 84 Dedicated File (DF) Name 87 **Application Priority Indicator** 01 08 03 03 00 94 Application File Locator (AFL) 9F 07 Application Usage Control [VCPS] C0 80 BYTE 1: b8 - Domestic cash transactions 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- Terminals other than ATMs NOT valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback NOT allowed xx xx xx xx xx xx \*\* 9F 10 Issuer Application Data [VSDC] 01 9F 11 Issuer Code Table Index 56 69 73 61 20 44 65 62 69 74 20 20 9F 12 **Application Preferred Name** 20 20 - 'Visa Debit' xx xx \* 9F 13 Last Online Application Transaction Counter (ATC) Register 01 9F 17 Personal Identification Number (PIN) Try Counter 9F 26 Application Cryptogram (AC) **xx xx xx xx xx xx xx x** 80 9F 27 Cryptogram Information Data (CID) xx xx \* Application Transaction Counter (ATC) 9F 36 9F 38 Processing Options Data Object List 9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 (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 00 00 00 00 9F 52 Application Default Action [VSDC VIS 9F 57 Issuer Country Code [VSDC] 08 40 - USA 11 08 40 08 40 9F 5A Application Program Identifier 00 00 00 00 00 00 9F 5D Available Offline Spending Amount 9F 68 Card Additional Processes [qVSDC 10 00 10 00 VCPS 2.1]



9F 69			
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 b2 - NOT valid at ATMs  9F 6C Card Transaction Qualifiers [qVSDC VCPS 2.1] 9F 6E Form Factor Indicator [qVSDC] 00 00  9F 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 50 AIP/AFL Entries Template	9F 69	Card Authentication Related Data	01 00 00 00 00 00 00
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 b2 - NOT valid at ATMs  9F 6C Card Transaction Qualifiers [qVSDC VCPS 2.1]  9F 6E Form Factor Indicator [qVSDC]  9F 6E Form Factor Indicator [qVSDC]  9F 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 50 AIP/AFL Entries Template		[qVSDC]	
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 b2 - NOT valid at ATMs  9F 6C		1	
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 b2 - NOT valid at ATMs  9F 6C			·
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C Card Transaction Qualifiers [qVSDC VCPS 2.1]  9F 6E Form Factor Indicator [qVSDC]  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 50 AIP/AFL Entries Template			
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C			
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 b2 - NOT valid at ATMs  9F 6C			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 b2 - NOT valid at ATMs  9F 6C			b2 - Do NOT switch interface for Cashback
BYTE 2: b8 - Consumer Device CVM NOT performed b7 - Card does NOT Support Issuer Update Processing at POS b2 - NOT valid at ATMs  9F 6C			110000000000000000000000000000000000000
b8 - Consumer Device CVM NOT performed b7 - Card does NOT Support Issuer Update Processing at POS b2 - NOT valid at ATMs  9F 6C			
b7 - Card does NOT Support Issuer Update Processing at POS b2 - NOT valid at ATMs  9F 6C			
Processing at POS b2 - NOT valid at ATMs  9F 6C			
9F 6C Card Transaction Qualifiers [qVSDC VCPS 2.1]  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			
9F 6C Card Transaction Qualifiers [qVSDC VCPS 2.1]  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			
VCPS 2.1]  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	05.00	0 17 " 0 "" 1 1 1000	
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	9F 6C	I - ·	00 00
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	9F 6E	Form Factor Indicator [qVSDC]	20 70 00 00
BF 57 International Counters Data Template BF 58 Amounts Data Template BF 59 Profile Controls Template BF 5A AIP/AFL Entries Template	BF 55	Contactless Counters Data Template	
BF 58 Amounts Data Template BF 59 Profile Controls Template BF 5A AIP/AFL Entries Template	BF 56	Counters Data Template	
BF 59 Profile Controls Template BF 5A AIP/AFL Entries Template	BF 57	International Counters Data Template	
BF 5A AIP/AFL Entries 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

# 4.1.6 Contactless: Application Tag data, AID A000000980840

\* Tag value changes with card usage

	rag value changes with card usage		
Tag	Element name	Data Card v4.0	
42	Issuer Identification Number (IIN)	47 61 73	
50	Application Label	55 53 20 44 45 42 49 54 - 'VISA DEBIT'	
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 21 22 01	
		19 55 94 58 00 00 1F	
5A	Application Primary Account Number	47 61 73 90 01 01 01 35	
	(PAN)		
5F 24	Application Expiration Date	22 12 31	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 34	Application PAN Sequence Number	01	
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'	
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 using	
		External Authenticate command	
		b1 - Combined DDA / GEN AC NOT supported BYTF 2:	
		b8 - Mag-stripe mode NOT supported	
		b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 00 98 08 40	
87	Application Priority Indicator	02	
<u>J,</u>	/ ipplication i nonty maloator		



Application File Locator (AFL) 08 03 03 00 94 C0 80 9F 07 Application Usage Control [VCPS] BYTE 1: b8 - Domestic cash transactions 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- Terminals other than ATMs NOT valid BYTE 2: b8 - Domestic cashback allowed b7 - International cashback NOT allowed xx xx A0 xx xx xx xx \* 9F 10 Issuer Application Data [VSDC] 01 9F 11 Issuer Code Table Index 55 53 20 44 65 62 69 74 20 20 20 20 9F 12 **Application Preferred Name** 20 20 20 - 'US Debit' 9F 13 Last Online Application Transaction xx xx \* Counter (ATC) Register 9F 17 Personal Identification Number (PIN) 01 Try Counter 9F 26 Application Cryptogram (AC) xx xx xx xx xx xx xx \*\* 80 9F 27 Cryptogram Information Data (CID) 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 (PDOL) 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 Application Currency Code [VSDC] 08 40 - USD 9F 51 00 00 00 00 9F 52 Application Default Action [VSDC VIS Issuer Country Code [VSDC] 08 40 - USA 9F 57 9F 5A Application Program Identifier 11 08 40 08 40 00 00 00 00 00 00 9F 5D Available Offline Spending Amount [VSDC] 10 00 80 00 9F 68 Card Additional Processes [qVSDC VCPS 2.1] 01 00 00 00 00 00 00 9F 69 Card Authentication Related Data LAST TWO BYTES [qVSDC] 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 b8 - Consumer Device CVM NOT performed b7 - Card does NOT Support Issuer Update Processing at POS b2 - NOT valid at ATMs 00 00 9F 6C Card Transaction Qualifiers [qVSDC **VCPS 2.1**]



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

# 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

Cardhol	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 value changes with card usage

Tag	Element name	Data Card v4.0
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 21 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	22 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 [VSDC]	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 using



_	l et	
Tag	Element name	Data Card v4.0
		External Authenticate command
		b1 - Combined DDA / GEN AC NOT supported BYTE 2:
		b8 - Mag-stripe mode NOT supported
		b7 - Is NOT Mobile phone
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
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 00 04
	List	02 05 42 00 1F 00
8F	Certification Authority Public Key Index	92
90	Issuer Public Key Certificate	3C 96 F7 65 8F BC 29 A2 02 F1 91 46
	-	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 DO 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
0.4	Application File Leaster (AFL)	B9 8F DF 01 49 A7 B7 8F DA 1C 49 67 10 01 01 00 10 02 04 01 B0 01 01 00
94	Application File Locator (AFL)	AB 80
9F 07	Application Usage Control	BYTE 1:
		b8 - Domestic cash transactions 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- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number	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 A0 xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 44 65 62 69 74 - 'US Debit'
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 2
05.00	Application Crimtogram (AC)	20 20 20 20 20 20 20 20 20 20 20 20 20 2
9F 26	Application Cryptogram (AC)	80
9F 27	Cryptogram Information Data (CID)	00



Tag	Element name	Data Card v4.0
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	21 F3 FF 81 73 C5 37 DA BD F2 DB C2
00	Too I done itoy commonto	EB 72 94 5A 6A C6 BB E3 80 62 08 44
		25 D7 67 37 BA 98 E5 A6 64 10 81 D7
		40 C0 7B 68 00 00 55 9E DF FF 5B CA
		FC F5 B8 35 A9 C4 98 48 75 B5 C7 8C 91 D0 A4 80 CC CF 0D 9A 2D 53 91 D2
		DC 56 53 96 08 B1 32 55 B9 56 D4 A4
		E5 D7 FB 85 EF 3C D0 9E 09 7A D2 14
		C6 0A 25 8E DF 15 B9 1C 32 9A D9 8E
		5B E9 44 7F A3 27 C6 0B 57 81 53 CF
		5A 6F 62 18 F9 44 D8 79 89 00 0E FE
		E3 B1 6D D7 8C FB CC EF 5C B5 EF C1 A6 D8 1C 53 8F 16 85 0E 91 64 6A 2D
		EO DA DC E4 17 1F 52 B1 54 F1 67 CD
		52 8A 88 E3 56 16 71 F4
9F 47	ICC Public Key Exponent	03
9F 49	Dynamic Data Authentication Data	9F 37 04
	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
	1.5]	
9F 53	Consecutive Transaction Limit	00
	(International) [VSDC]	
9F 54	Cumulative Total Transaction Amount	00 00 00 00 00
05.57	Limit [VSDC]	22.42.1104
9F 57	Issuer Country Code [VSDC]	08 40 - USA
9F 58	Consecutive Transaction Counter Limit	00
05.50	[VSDC]	00
9F 59	Consecutive Transaction Counter Upper	00
05.50	Limit [VSDC]	00 00 00 00 00 00
9F 5C	Cumulative Total Transaction Amount	00 00 00 00 00
9F 5E	Upper Limit [VSDC] Consecutive Transaction International	00
9F 3E	Upper Limit [VSDC]	
9F 68	Card Additional Processes [qVSDC	10 00 10 00
31 00	VCPS 2.1]	
9F 72	Consecutive Transaction Limit	00
0. , 2	(International-Country) [VSDC]	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 21 01 00 DF 31 01 00
BF 56	Counters Data Template	DF 11 01 02 DF 21 01 00 DF 31 01 00
BF 57	International Counters Data Template	DF 11 01 02 DF 21 01 00 DF 31 01 00
	,	DF 51 01 02 DF 61 01 00
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 DF 21 06
		00 00 00 00 00 00 DF 31 06 00 00 00
DE ED	Application Internal Data Targets	00 00 00 DF 01 02 00 00
BF 5B	Application Internal Data Template	DE 01 02 00 00



# 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 - A00000003101001

Cardho	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 value changes with card usage

Tag	Element name	Data Card v5.0
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 20
	11	20 20 20 20 - 'VISA CREDIT'
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 76 D2 21 22 01
	·	11 14 38 04 40 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 20 20 20 - 'USA DEBIT/Test Card 03'
FF 04	Application Expiration Data	20 20 - USA DEBIT/Test Cald US
5F 24	Application Expiration Date	08 40 - USA
5F 28	Issuer Country Code	
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	01
5F 34	Application PAN Sequence Number	
82	Application Interchange Profile [VSDC]	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 using
		External Authenticate command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Mag-stripe mode NOT supported
84	Dedicated File (DF) Name	b7 - Is NOT Mobile phone 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
30	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04
8D	` '	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
טט	Card Risk Management Data Object List	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
	2 (CDOL2)	OA
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
L	<del></del>	



Application File Locator (AFL)	Tag	Element name	Data Card v5.0
PF 07			
BYTE 1:   B8 - Domestic cash transactions valid   b7 - Int'l cash transactions valid   b7 - Int'l cash transactions valid   b6 - Domestic goods valid   b5 - International goods valid   b5 - International goods valid   b5 - International goods valid   b4 - Domestic services valid   b3 - International services valid   b2 - ATMs valid   B7TE 2:   b8 - Domestic cashback NOT allowed   b7 - International cash	-		FF 00
b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b5 - International goods valid b5 - International services valid b5 - International 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 b7	0. 0.	, ppilodien Codge Comion	BYTE 1:
b6 - Domestic goods valid   b5 - International goods valid   b4 - Domestic services valid   b3 - International goods valid   b4 - Domestic services valid   b3 - ATMs valid   b1 - Terminals other than ATMs valid   b2 - ATMs valid   b1 - Terminals other than ATMs valid   b1 - Terminals on D0   00 00 00 00 00 00 00 00 00 00 00 00			b8 - Domestic cash transactions valid
b5 - International goods valid b4 - Domestic services valid b3 - International services valid b1 - Terminals other than ATMs valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International Cashback NOT allowed b7 - Internati			
b4 - Domestic services valid   b3 - International services valid   b3 - International services valid   b2 - ATMs valid   b1 - Terminals other than ATMs valid   BYTE 2:   b8 - Domestic cashback NOT allowed   b7 - International Counters Data Template   B7 - International			
D3 - International services valid   D2 - ATMS valid   D4 - Terminals other than ATMS valid   D4 - Terminals of D4 - Te			
b2 - ATMS valid   b1- Terminals other than ATMS valid   b1- Terminals other than ATMS valid   b1- Terminals other than ATMS valid   BYTE 2:   b8 - Domestic cashback NOT allowed   b7 - International Counters Data Template   BF 58   Amounts Data			
b1- Terminals other than ATMs valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International Cashback NOT allowed NO			
BYTE 2: b8 - Domestic cashback NOT allowed b7 - International Cashback NOT allowed NO - International Cashback NOT allowed N			
B7 - International cashback NOT allowed			
9F 08         Application Version Number         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         x0         0A         xx         xx </td <td></td> <td></td> <td>b8 - Domestic cashback NOT allowed</td>			b8 - Domestic cashback NOT allowed
Section   Sect			
SF OE   Issuer Action Code - Denial   00 00 00 00 00   00	9F 08	Application Version Number	
9F 0F Issuer Action Code - Online	9F 0D	Issuer Action Code - Default	
9F 10	9F 0E	Issuer Action Code - Denial	
Section   International Processing   Section   Section	9F 0F	Issuer Action Code - Online	
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 Counter (ATC) Register         xx xx x *           9F 17         Personal Identification Number (PIN) Try Counter         00 xx x			xx xx 0A xx xx xx *
20	9F 11		
PF 13 Last Online Application Transaction Counter (ATC) Register  9F 17 Personal Identification Number (PIN) Try Counter  9F 26 Application Cryptogram (AC) 9F 27 Cryptogram Information Data (CID) 9F 36 Application Transaction Counter (ATC) 9F 38 Processing Options Data Object List (PDOL)  9F 44 Application Currency Exponent  9F 45 Transaction Log Format  9F 51 Application Currency Code [VSDC]  9F 52 Application Default Action [VSDC VIS 1.5]  9F 56 Issuer Authentication Indicator [VSDC]  9F 57 Issuer Country Code [VSDC]  9F 58 Contactless Counters Data Template  8F 56 International Counters Data Template  8F 57 International Counters Data Template  8F 58 Amounts Data Template	9F 12	Application Preferred Name	
Counter (ATC) Register  9F 17			
9F 17         Personal Identification Number (PIN) Try Counter         00           9F 26         Application Cryptogram (AC)         xx	9F 13	• •	xx xx *
Try Counter			
9F 26         Application Cryptogram (AC)         xx	9F 17		00
9F 27         Cryptogram Information Data (CID)         80           9F 36         Application Transaction Counter (ATC)         xx xx *           9F 38         Processing Options Data Object List (PDOL)         9F 06 07           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 1.5]         00 00 00 00 00 00 00 00 00 00 00 00 00	25.00		
9F 36 Application Transaction Counter (ATC) 9F 38 Processing Options Data Object List (PDOL) 9F 44 Application Currency Exponent 9F 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] 9F 52 Application Default Action [VSDC VIS 1.5] 9F 56 Issuer Authentication Indicator [VSDC] 9F 57 Issuer Country Code [VSDC] 9F 55 Contactless Counters Data Template BF 56 Counters Data Template BF 57 International Counters Data Template BF 58 Amounts Data Template			
9F 38         Processing Options Data Object List (PDOL)         9F 06 07           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 1.5]         00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 00 00 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 57 International Counters Data Template           BF 58         Amounts Data Template			
Processing Splits of Section (PDOL)   PDOL   PDOL			
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 1.5]         00 00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 00 00 00 00           9F 57         Issuer Country Code [VSDC]         08 40 - USA           BF 55         Contactless Counters Data Template         BF 56 International Counters Data Template           BF 57         International Counters Data Template         BF 58 Amounts Data Template	9F 38		9F 06 07
9F 4F         Transaction Log Format         9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 9F 05 05 9C 01 9F 27 01           9F 51         Application Currency Code [VSDC]         08 40 - USD           9F 52         Application Default Action [VSDC VIS 1.5]         00 00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 00 00 00           9F 57         Issuer Country Code [VSDC]         08 40 - USA           BF 55         Contactless Counters Data Template           BF 56         International Counters Data Template           BF 57         International Counters Data Template           BF 58         Amounts Data Template	9F 44	Application Currency Exponent	02
9F 51 Application Currency Code [VSDC] 08 40 - USD  9F 52 Application Default Action [VSDC VIS 1.5]  9F 56 Issuer Authentication Indicator [VSDC] 00 00 00 00 00 00 00 00 00 00 00 00 00			9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
9F 52 Application Default Action [VSDC VIS 1.5]  9F 56 Issuer Authentication Indicator [VSDC]  9F 57 Issuer Country Code [VSDC]  BF 55 Contactless Counters Data Template  BF 56 Counters Data Template  BF 57 International Counters Data Template  BF 58 Amounts Data Template		<u> </u>	
1.5]  9F 56 Issuer Authentication Indicator [VSDC]  9F 57 Issuer Country Code [VSDC]  BF 55 Contactless Counters Data Template  BF 56 Counters Data Template  BF 57 International Counters Data Template  BF 58 Amounts Data Template			
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	9F 52		00 00 00 00 00 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	9F 56		00
BF 55 Contactless Counters Data Template BF 56 Counters Data Template BF 57 International Counters Data Template BF 58 Amounts Data Template			08 40 - USA
BF 56 Counters Data Template BF 57 International Counters Data Template BF 58 Amounts Data Template			
BF 57 International Counters Data Template BF 58 Amounts 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			
BF 5A   AIP/AFL Entries Template   DF 11 0B 18 00 08 08 01 01 00 10 01 01 01 01	BF 5A	AIP/AFL Entries Template	
BF 5B Application Internal Data Template DF 01 02 C0 00 DF 02 01 F1	BF 5B	Application Internal Data Template	DF 01 02 C0 00 DF 02 01 F1



4.3.3 Contact: CVM List - Visa Debit, AID A00000003101002

Cardho	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 value changes with card usage

-	EL .	rag value changes with card usage
Tag	Element name	Data Card v5.0
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 21 22 01
	And the Control of Albertain	11 14 38 04 40 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 33 20 20
55.04	A 11 (1 E 1 (1 E 1	20 20 - 'USA DEBIT/Test Card 03'
5F 24	Application Expiration Date	
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 [VSDC]	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 using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone
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 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 91 0A
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 42 04 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 v5.0
9F 07	Application Usage Control	FF 80
		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 NOT allowed
9F 08	Application Version Number	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
·	, ippinounom rotoriou riamo	20 20 20 20 - 'Visa 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
01 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
JI <del>T</del> I	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		DF 11 0B 10 00 00 00 00 00 00 00 00
DF 39	Profile 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



#### 4.3.5 Contact: CVM List - U.S. Common Debit, AID A0000000980840

Cardho	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 value changes with card usage
Element name	Data Card v5.0
Issuer Identification Number (IIN)	47 61 73
Application Label	55 53 20 44 45 42 49 54 20 20 20 20
• •	20 20 20 20 - 'US DEBIT'
Track 2 Equivalent Data	47 61 73 90 01 01 01 35 D2 21 22 01
A 11 11 B 1	11 14 38 04 40 00 0F
Application Primary Account Number (PAN)	47 61 73 90 01 01 01 35
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 - 'USA DEBIT/Test Card 03'
<del>, , , , , , , , , , , , , , , , , , , </del>	22 12 31
•	08 40 - USA
	65 6E - 'en' (English)
	02 01
Application PAN Sequence Number	01
Issuer Country Code (alpha2 format)	55 53 - 'US'
Application Interchange Profile [VSDC]	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 using
	External Authenticate command
	b1 - Combined DDA / GEN AC NOT supported
	BYTE 2:
	b8 - Mag-stripe mode NOT supported
Dedicated File (DF) Name	b7 - Is NOT Mobile phone  A0 00 00 00 98 08 40
` '	03
i · ·	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
	2A 02 9A 03 9C 01 9F 37 04
	8A 02 9F 02 06 9F 03 06 9F 1A 02 95
	05 5F 2A 02 9A 03 9C 01 9F 37 04 91
2 (CDOL2)	0A
Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 01 00 04
1	02 05 42 00 1F 00 00 00
	08 01 01 00 10 02 02 00
	AB 80
	00 96
Issuer Action Code - Default	FC 50 AC 88 00
Issuer Action Code - Denial	00 00 00 00 00
Issuer Action Code - Denial	
Issuer Action Code - Denial Issuer Action Code - Online Issuer Application Data [VSDC]	00 00 00 00 00 FC 70 BC 98 00 xx xx 0A xx xx xx xx *
	Issuer Identification Number (IIN) Application Label  Track 2 Equivalent Data  Application Primary Account Number (PAN) Cardholder Name  Application Expiration Date Issuer Country Code Language Preference Service Code Application PAN Sequence Number Issuer Country Code (alpha2 format) Application Interchange Profile [VSDC]  Dedicated File (DF) Name 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 Usage Control Application Version Number



9F 12         Application Preferred Name         55 53 20 44 65 62 69 74 20 20 20 20 20 20 20 20 20 20 20 20 20	Tag	Element name	Da	ta								Ca	rd v	5.0
SF 13		Application Preferred Name						_			20			
Counter (ATC) Register   9F 17		• • • • • • • • • • • • • • • • • • • •	20	20	20	20	- 'U	JS D	ebit'					
9F 17         Personal Identification Number (PIN)	9F 13		хx	хx	*									
Try Counter  9F 26 Application Cryptogram (AC)  9F 27 Cryptogram Information Data (CID)  9F 36 Application Transaction Counter (ATC)  9F 38 Processing Options Data Object List (PDOL)  9F 44 Application Currency Exponent  9F 45 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]  9F 52 Application Default Action [VSDC VIS 1.5]  9F 56 Issuer Authentication Indicator [VSDC]  9F 57 Issuer Country Code [VSDC]  9F 58 Contactless Counters Data Template  BF 59 International Counters Data Template  BF 59 Profile Controls Template  DF 11 0B 10 00 00 00 00 00 00 00 00 00 00 00 00														
9F 26 Application Cryptogram (AC)	9F 17	` ,	00											
9F 27 Cryptogram Information Data (CID) 9F 36 Application Transaction Counter (ATC) 9F 38 Processing Options Data Object List (PDOL) 9F 44 Application Currency Exponent 9F 45 Transaction Log Format 9F 51 Application Currency Code [VSDC] 9F 52 Application Default Action [VSDC VIS 1.5] 9F 56 Issuer Authentication Indicator [VSDC] 9F 57 Issuer Country Code [VSDC] 9F 58 Contactless Counters Data Template BF 59 Profile Controls Template  BF 59 Profile Controls Template  DF 11 0B 10 00 00 00 00 00 00 00 00 00 00 00 00														
9F 36         Application Transaction Counter (ATC)         xx xx *           9F 38         Processing Options Data Object List (PDOL)         9F 06 07           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 1.5]         00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 00 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				ХX	ХX	ХX	ХX	ХX	хx	ХX	*			
9F 38         Processing Options Data Object List (PDOL)         9F 06 07           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 1.5]         00 00 00 00 00 00 00           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	9F 27													
Second Controls Data Colors   Colors	9F 36													
9F 44         Application Currency Exponent         92           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 1.5]         00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 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	9F 38		9F	06	07									
9F 4F         Transaction Log Format         9F 02 06 5F 2A 02 9A 03 9F 36 02 9F           9F 51         Application Currency Code [VSDC]         08 40 - USD           9F 52         Application Default Action [VSDC VIS 1.5]         00 00 00 00 00 00 00           9F 56         Issuer Authentication Indicator [VSDC]         00 00 00 00 00 00           9F 57         Issuer Country Code [VSDC]         08 40 - USA           BF 55         Contactless Counters Data Template           BF 57         International Counters Data Template           BF 58         Amounts Data Template           BF 59         Profile Controls Template														
1A 02 95 05 9C 01 9F 27 01		Application Currency Exponent												
9F 51 Application Currency Code [VSDC] 08 40 - USD 9F 52 Application Default Action [VSDC VIS 00 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	9F 4F	Transaction Log Format	_			_			-		-	36	02	9F
9F 52 Application Default Action [VSDC VIS 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	05.54	A II (I O O I D)(000)					9C	01	9F	27	01			
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						_								
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	9F 52	• •	00	00	00	00	00	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		•												
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														
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		,	08	40	- U	SA								
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		•												
BF 58         Amounts Data Template           BF 59         Profile Controls Template           DF 11         0B 10         00		•												
BF 59   Profile Controls Template   DF 11 0B 10 00 00 00 00 00 00 00		•												
Di 33   Fronic Controls Template	BF 58	Amounts Data Template												
	BF 59	Profile Controls Template												
00 00 DF 12 0B 20 00 00 00 00 00							0В	20	00	00	00	00	00	00
00 00 00 00	DE EA	AID/ACI Entrice Templete					00	00	00	01	01	00	10	01
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	BF 5A	AIP/AFL Entries Template												
10 02 02 00							00		00	00	00	0.1	<b>7</b> -	30
BF 5B Application Internal Data Template DF 01 02 C0 00 DF 02 01 F1	BF 5B	Application Internal Data Template	DF	01	02	C0	00	DF	02	01	F1			



## 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	Verification Method	Conditions	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 value changes with card usage

Tag	Element name	Data Card v4.0
50	Application Label	49 4E 54 45 52 4C 49 4E 4B -
30	Application Label	'INTERLINK'
57	Track 2 Equivalent Data	47 61 73 90 01 01 06 71 D2 21 22 21
01	Track 2 Equivalent Bata	13 50 61 46 89 00 0F
5A	Application Primary Account Number	47 61 73 90 01 01 06 71
	(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 34 20 20
		20 20 - 'USA DEBIT/Test Card 04'
5F 24	Application Expiration Date	22 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 21
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile [VSDC]	1C 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 supported using
		External Authenticate command
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - Mag-stripe mode NOT supported
		b7 - Is NOT Mobile phone
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



Tog	Floment name	Data Card v4.0
Tag 90	Element name Issuer Public Key Certificate	Data Card v4.0  3C 96 F7 65 8F BC 29 A2 02 F1 91 46
30	Issuel Fublic Key Certificate	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
		B9 8F DF 01 49 A7 B7 8F DA 1C 49 67
93	Signed Static Application Data	3C 0C 66 F5 58 76 E7 3F 44 94 4B 52
		35 BA 27 35 7E E8 4F 93 8B 34 FA 2F 06 BE C8 49 01 1B AE 57 8C F9 5E 92
		8E 6E CC 62 72 7C C7 FD B3 0B 8C 88
		31 DE AB 60 2C E1 25 D1 43 90 02 C0
		C3 D8 C7 78 92 C9 7C 5A 57 73 1C 36
		D6 8E 5A 0F A5 1A DC 94 09 4F A9 AB
		02 DE DF 23 B4 60 F0 E1 9E 69 65 87 38 E7 4E 36 B4 08 81 44 7A 2A E0 11
		EE DE OC 61 4B 41 B1 56 98 D1 55 63
		05 95 A5 75 0D B7 C5 B9 22 84 0B DA
		84 8B 61 D9 14 2A F8 35 7E 27 D4 92
		B7 03 F1 C6 E3 D2 3C AC DC 60 E3 C7
		8F 00 36 E1 0C A4 1B B7 53 6D 0F 4F
0.4	Application File Legator (AFL)	C4 18 6D 5B 3D A0 44 12 10 01 01 00 10 02 04 01 10 06 06 00
94	Application File Locator (AFL)	B0 01 01 00 00 10 02 04 01 10 00 00 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 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 A0 xx 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	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	09
	Try Counter	
9F 1F	Track 1 Discretionary Data	31 33 35 30 36 30 30 31 34 36 30 30
05.00		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 v4.0
	Issuer Public Key Exponent	03
9F 36	Application Transaction Counter (ATC)	xx xx *
	Application Currency Exponent	02
9F 46	ICC Public Key Certificate	2F CB B2 98 34 1B A8 B3 EB 7E D3 23
		63 AE 2A 27 D2 FF 39 79 D1 44 8A 87
		5B D6 C1 22 8C 00 6D 3B 77 BC 8E E1 5F 53 4D 54 3D F8 D8 52 60 DA FF E1
		0A 40 21 F2 55 5D 84 BA 17 48 3C 25
		28 09 A6 D3 8B 1E D3 4F 03 CD 85 60
		0D EA 4F 04 BF 7A 17 0C D3 61 1A 3A
		ED A8 AC FE E5 46 1E 70 9E 5C 82 3E
		6D B4 D7 17 26 C3 78 88 93 19 61 ED 6E DD 3F 97 4F 3E D2 92 8B 16 26 20
		5B EF 07 23 80 EF 6F 9E 0C 55 36 CF
		63 46 EE A2 4E FB 62 81 0F 9D 61 1F
		51 4F C1 A3 87 A4 1E 8D 51 72 95 CF
		19 1E FA D6 A4 ED 7E 16 00 9D D2 F9
OF 47	ICC Dublic Kon Torranget	4C A4 A9 0E A7 C1 DA CF
	ICC Public Key Exponent	9F 37 04
	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04
	Static Data Authentication Tag List	82
	Application Currency Code [VSDC]	08 40 - USD
	Application Default Action [VSDC VIS	CO 00 00 00 00 00
	1.5]	
9F 53	Consecutive Transaction Limit	00
	(International) [VSDC]	
	Cumulative Total Transaction Amount	00 00 00 00 00
	Limit [VSDC]	80
	Issuer Authentication Indicator [VSDC]	
	Issuer Country Code [VSDC] Consecutive Transaction Counter Limit	08 40 - USA 00
	[VSDC]	
	Consecutive Transaction Counter Upper Limit [VSDC]	00
	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00
9F 5E	Consecutive Transaction International	00
	Upper Limit [VSDC]	
	Card Additional Processes [qVSDC	10 00 D0 00
	VCPS 2.1]	
	VLP Reset Threshold [VSDC]	00 00 00 00 00
	VLP Funds Limit [VSDC]	00 00 00 00 00
	VLP Single Transaction Limit [VSDC]	00 00 00 00 00
	VLP Available Funds [VSDC]	00 00 00 00 00 00 00 00 00 DE 71 06
BF 55	Contactless Counters Data Template	DF 61 06 00 00 00 00 00 00 DF 71 06 00 00 00 00 00 00 DF 41 06 00 00 00
		00 00 00 DF 51 06 00 00 00 00 00 00
		DF 11 01 00 DF 21 01 00 DF 31 01 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 01 DF 21 01 00 DF 31 01 00
DE 50	Amounts Data Tomplets	DF 51 01 01 DF 11 06 00 00 00 00 00 00 DF 21 06
BF 58	Amounts Data Template	00 00 00 00 00 00 00 00 00 0F 21 06
		00 00 00
BF 5B	Application Internal Data Template	DF 01 02 00 00



# 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 A000000041010

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

\* Tag value changes with card usage

Tag	Element name	Data Card v4.0						
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 09 91 30 D2 21 22 01						
	·	14 83 59 49 00 OF						
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 30 35 20 20						
55.04	Assiltantian Essimilar Data	20 20 - 'USA DEBIT/Test Card 05' 22 12 31						
5F 24	Application Expiration Date	xx xx xx *						
5F 25	Application Effective Date							
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 using						
		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						
30	1 (CDOL1)	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 v4.0
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 01 02 05
	List	5E 03 42 03 1F 00
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
	11	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
05.00	Application Varsian Number	b7 - International cashback allowed
9F 08 9F 0D	Application Version Number	B0 50 9C 88 00
9F 0E	Issuer Action Code - Default	00 00 00 00 00
	Issuer Action Code - Denial	B0 70 9C 98 00
9F 0F	Issuer Action Code - Online	xx xx A0 xx xx xx xx xx xx xx xx xx
9F 10	Issuer Application Data [M/Chip Advance]	** ** ** ** ** ** *
9F 11	Issuer Code Table Index	01
9F 11		4D 61 73 74 65 72 63 61 72 64 20 44
95 12	Application Preferred Name	65 62 69 74 - 'Mastercard Debit'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
01 17	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	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 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]	
00	CRM Country Code [Mastercard]	08 40 - USA
C8		00.40 UCD
C8	Accumulator 1 Currency Code	08 40 - USD
C9	Accumulator 1 Currency Code [Mastercard]	
	· · · · · · · · · · · · · · · · · · ·	00 00 00 00 00 00 00 00 00 00 00 00



Tag	Element name	Da	ta								Са	rd v	4.0
CD	Card Issuer Action Code (Contactless) -		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								00				
	Table [Mastercard]	00	00	00	08	40	00	00	00	08	40	00	00
D3	Additional Check Table [Mastercard]		00	00	FF	FF							
		FF	FF	FF	FF	FF	FF						
D5	Application Control [M/Chip Advance]	80		80	00	C6	02						
D6	Default ARPC Response Code [M/Chip	00	10										
	Advance]												
D7	Application Control [M/Chip Advance]					E6	02						
D9	Application File Locator (Contactless)			03		00	00	00	00	00			
DE DF 02	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)	C1											
	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
DE 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	08	40	- U	SD								
DF 17	[Mastercard]	08	40	00	00	00	ΛQ	40	00	00	00	ΛQ	40
ו דו	Accumulator 2 Currency Conversion Table [Mastercard]								00				
	rable [Mastercard]	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											
DE 40	Advance]	C1											
DF 1B	Counter 1 Control (Contactless) [M/Chip	CI											
DF 1D	Advance] 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 6 :	Advance]		4.0										
DF 24	MTA Currency Code [M/Chip Advance]		40	00	00	00	00						
DF 25	MTA NoCVM (Contact) [M/Chip	00	UU	UU	UU	UU	UU						
DF 26	Advance] MTA NoCVM (Contactless) [M/Chip	nη	nn	00	00	00	nn						
DF 20	Advance]	"	00	00	00	-	00						
DF 27	Number Of Days Offline Limit [M/Chip	00	00										
5. 2.	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 v4.0
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
DE OB	(Contact) [M/Chip Advance]	00
DF 3D	CVR Issuer Discretionary Data	00
DE OF	(Contactless) [M/Chip Advance]	00
DF 3F	Read Record Filter (Contact) [M/Chip	00
DE 40	Advance]	10 01 01 00
DF 40	Read Record Filter (Contactless)	10 01 01 00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip	20
	Advance]	

## 4.5.3 Contact: CVM List - U.S. Maestro, AID A0000000042203

Cardho	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

		rag value changes with card usage
Tag	Element name	Data Card v4.0
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 21 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	22 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)



Tag	Element name	Data Card v4.0
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 using
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4	Dadicated File (DF) Name	b8 - EMV mode NOT supported  A0 00 00 00 04 22 03
84	Dedicated File (DF) Name	02
87 8C	Application Priority Indicator	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
00	Card Risk Management Data Object List 1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	(CDOLI)	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 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 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 xx A0 xx xx xx xx xx xx xx xx xx
	Advance]	xx xx xx xx xx x *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 4D 61 65 63 74 72 6F 20 20
05 4 4	Countar 1 Lower Limit [Mastersard]	20 20 20 20 - 'US 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 23	Application Cryptogram (AC)	xx xx xx xx xx xx xx *
9F 26	Cryptogram Information Data (CID)	80
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 36	Application Currency Code	08 40 - USD
9F 4Z 9F 4D	Transaction Log Entry	08 0A
31 4D	Transaction Log Littly	



Ton	Flow out nome	Do	40								00	بامسا	.1.0
Tag	Element name	Da		01	9F	00	0.6	E E	2.7	00		rd v	
9F 4F	Transaction Log Format				52								
			14	96	52	00	DE	36	01	ЭĒ	21	03	ЭĒ
9F 6E	Third Darty Data [Mastaroard]			00	00	30	30	00					
	Third Party Data [Mastercard]				14				00	EΛ	17	79	00
9F 7E	Application Life Cycle Data [Mastercard]				00								
					00								
					00								
C3	Card Issuer Action Code (Contact) -		00										
00	Decline [M/Chip Advance]												
C4	Card Issuer Action Code (Contact) -	06	50	00									
C4			50	00									
05	Default [M/Chip Advance]	0.6	FB	00									
C5	Card Issuer Action Code (Contact) -	06	гD	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	08	40	- U	SD								
	[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									
OD	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	06	F8	00									
CL			-0	00									
OF.	Online [M/Chip Advance]	00	00	00									
CF	Card Issuer Action Code (Contactless) -	08	00	00									
- ·	Decline [M/Chip Advance]		40					40					40
D1	Accumulator 1 Currency Conversion				00 08								
	Table [Mastercard]	00	00	00	08	40	00	00	00	08	40	00	00
D3	Additional Check Table [Mastercard]		0.0	0.0	FF	नन	नन	नन	पप	पप	पप	पप	पप
DS	Additional Offeck Table [Mastercard]				FF								
D5	Application Control [M/Chip Advance]				00								
D6	Default ARPC Response Code [M/Chip	00	10										
D0	Advance]												
D7	Application Control [M/Chip Advance]	00	00	80	00	E6	02						
					00			0.4	۸۸				
D9	Application File Locator (Contactless)				00					00			
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)	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	08	40	- U	SD								
2. 10	[Mastercard]		- •	J									
DF 17	Accumulator 2 Currency Conversion	0.8	40	0.0	00	00	08	40	0.0	00	00	08	40
וויטן ו	Table [Mastercard]				08								
	Table [เพลงเยเบลเน]	00				-					-		
DF 18	Accumulator 2 Lower Limit [Mastercard]		00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]				00								
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
5, 17	Advance]	-											
L	Maranooj	<u> </u>											



Tog	Floment name	Data Cord v4.0
Tag	Element name	Data Card v4.0
DF 1B	Counter 1 Control (Contactless) [M/Chip	
DF 1D	Advance]	00
טר זט	Counter 2 Control (Contact) [M/Chip	
DE 4E	Advance]	00
DF 1E	Counter 2 Control (Contactless) [M/Chip	
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]	00.10.1100
DF 24	MTA Currency Code [M/Chip Advance]	08 40 - USD 00 00 00 00 00 00
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
DE 00	Advance]	00 00 00 00 00 00
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
DE 07	Advance]	00 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	00 00 00
DE 00	(Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
DE OA	(Contactless) [M/Chip Advance]	00 00 00
DF 2A	Accumulator 2 CVR Dependency Data	
DE OD	(Contact) [M/Chip Advance]	00 00 00
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00
DE 00	(Contactless) [M/Chip Advance]	00 00 00
DF 2C	Counter 1 CVR Dependency Data	
DF 2D	(Contact) [M/Chip Advance]  Counter 1 CVR Dependency Data	00 00 00
DF ZD	(Contactless) [M/Chip Advance]	00 00 00
DF 2E	Counter 2 CVR Dependency Data	00 00 00
DF ZE	(Contact) [M/Chip Advance]	00 00 00
DF 2F	Counter 2 CVR Dependency Data	00 00 00
DF ZF	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	03
₽F 30	Interface Enabling Switch [M/Chip   Advance]	
DF 35	Security Limits Status (Contactless)	00
01 33	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
וט וט	Advance	
DF 3C	CVR Issuer Discretionary Data	00
Di 30	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
5. 05	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
5. 0.	Advance]	
DF 40	Read Record Filter (Contactless)	10 01 01 00
2. 10	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	

## 4.5.5 Contactless: CVM List - Mastercard debit, AID A0000000041010

Cardholder Verification Method List ('0205 5E03 0203 1F03 0000')					
CVM Verification Method Conditions If unsuccess			If unsuccessful		
1	Online PIN	Unattended Cash	Next CVM		



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 Contactless: Application Tag data, AID A000000041010

		* Tag value changes with card usage
Tag	Element name	Data Card v4.0
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 09 91 30 D2 21 22 01
- A	And Profess District Association	14 83 59 49 00 0F 54 13 33 00 89 09 91 30
5A	Application Primary Account Number	54 13 33 00 89 09 91 30
5F 24	(PAN) Application Expiration Date	22 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 34	Application PAN Sequence Number	11
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'
82	Application Interchange Profile	18 80
02	Application interchange Frome	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 using
		External Auth command
		b2 - On device Cardholder verification NOT
		supported b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - M/Chip 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
	. (0 = 0 = 1)	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)	20 20 20 20 20 20 20 20 20 20 25 55 22
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 5E 03 02 03 1F 03 00 00
0.4	List	
94	Application File Locator (AFL)	08 02 03 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 02
9F 0D	Issuer Action Code - Default	B4 50 84 00 00
ם יכ	100001 ACTION COUC - DETAUL	



Fag	Tag	Element name	Da	ta								Ca	rd v	<b>4</b> 0
Sequence   Sequence					00	00	00					00	i u v	7.0
Sequence   Sequence														
Advance								xx	xx	xx	xx	xx	xx	xx
Security   Security	51 10													
9F 12	9F 11	4	01											
65			4D	61	73	74	65	72	63	61	72	64	20	44
9F 17	01 12	7 Application 1 Tolonou Hamo	65	62	69	74	- 'N	1aste	erca	rd D	EBI	Γ'		
Personal Identification Number (PIN)   Try Counter   Try Counter   Ocupation   Ocupation	9F 14	Counter 1 Lower Limit [Mastercard]	00											
Try Counter   Security   Counter   Security   Counter   Counter	9F 17		03											
SP 26   Application Cryptogram (AC)		Try Counter												
SF 27   Cryptogram Information Data (CID)   SF 36   Application Transaction Counter (ATC)   SX	9F 23	Counter 1 Upper Limit [Mastercard]	00											
9F 36	9F 26	Application Cryptogram (AC)	хx	хx	хx	хx	хx	хx	хх	хx	*			
9F 42   Application Currency Code   08	9F 27	Cryptogram Information Data (CID)	80											
9F 4A   Static Data Authentication Tag List   9F 4D   Transaction Log Entry   0B 0A   0A   0A   0A   0A   0A   0A	9F 36	Application Transaction Counter (ATC)	хx	хx	*									
9F 4D   Transaction Log Entry   9F 4F   Transaction Log Format   9F 27 01 9F 02 06 5F 2A 02 9A 03 9F	9F 42	Application Currency Code	08	40	- U	SD								
9F 4F	9F 4A	Static Data Authentication Tag List	82											
36	9F 4D	Transaction Log Entry	_											
Second   S	9F 4F	Transaction Log Format												
9F 6E					9F	52	06	DF	3E	01	9F	21	03	9F
Application Life Cycle Data [Mastercard]	OF CF	Third Porty Data [Mastersand]			00	00	30	30	Ω٥					
A0 00 00 00 04 10 10 00 00 00 00 00 00 00 00 00 00 00										00	50	17	79	00
C3	9 7 7	Application Life Cycle Data [Mastercard]											_	
C3														
Decline [M/Chip Advance]			00	00	00	00	00	00	00	00	00	00	00	00
C4         Card Issuer Action Code (Contact) - Default [M/Chip Advance]         06 50 00           C5         Card Issuer Action Code (Contact) - Online [M/Chip Advance]         06 FB 00           C6         PIN Try Limit [M/Chip Advance]         03           C7         CDOL1 Related Data Length [Mastercard]         42           C8         CRM Country Code [Mastercard]         08 40 - USA           C9         Accumulator 1 Currency Code [Mastercard]         08 40 - USD           [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 00           CB         Accumulator 1 Upper Limit [Mastercard]         00 00 00 00 00 00 00 00 00 00 00           CD         Card Issuer Action Code (Contactless) - Default [M/Chip Advance]         00 58 00 00 00 00 00 00 00 00 00 00 00 00 00	C3	Card Issuer Action Code (Contact) -	00	00	00									
Default [M/Chip Advance]														
C5	C4	` '	06	50	00									
C6														
C6         PIN Try Limit [M/Chip Advance]         03           C7         CDOL1 Related Data Length [Mastercard]         42           C8         CRM Country Code [Mastercard]         08 40 - USA           C9         Accumulator 1 Currency Code [Mastercard]         08 40 - USD           [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 00 00           CD         Card Issuer Action Code (Contactless) - Default [M/Chip Advance]         06 F8 00           CE         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 00 00           D1         Accumulator 1 Currency Conversion Table [Mastercard]         08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 00 08 40 00 00 00 00 00 00 00 00 00 00 00 00	C5		06	FB	00									
C7	_													
[Mastercard]														
C8         CRM Country Code [Mastercard]         08 40 - USA           C9         Accumulator 1 Currency Code [Mastercard]         08 40 - USD           [Mastercard]         00 00 00 00 00 00 00           CA         Accumulator 1 Lower Limit [Mastercard]         00 00 00 00 00 00 00           CB         Accumulator 1 Upper Limit [Mastercard]         00 00 00 00 00 00 00           CD         Card Issuer Action Code (Contactless) - Default [M/Chip Advance]         00 58 00           CE         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 00 00           D1         Accumulator 1 Currency Conversion Table [Mastercard]         08 40 00 00 00 08 40 00 00 08 40 00 00           D3         Additional Check Table [Mastercard]         00 00 00 FF F	C7		42											
C9         Accumulator 1 Currency Code [Mastercard]         08 40 - USD           CA         Accumulator 1 Lower Limit [Mastercard]         00 00 00 00 00 00 00           CB         Accumulator 1 Upper Limit [Mastercard]         00 00 00 00 00 00 00           CD         Card Issuer Action Code (Contactless) - Default [M/Chip Advance]         00 58 00           CE         Card Issuer Action Code (Contactless) - Online [M/Chip Advance]         06 F8 00           CF         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 00 00           D1         Accumulator 1 Currency Conversion Table [Mastercard]         00 00 00 00 00 00 00 00 00 00 00 00 00						<u> </u>								
[Mastercard]  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] 00 58 00  CE Card Issuer Action Code (Contactless) - Online [M/Chip Advance] 06 F8 00  CF Card Issuer Action Code (Contactless) - Decline [M/Chip Advance] 08 00 00  D1 Accumulator 1 Currency Conversion Table [Mastercard] 00 00 00 00 00 00 00 00 00 00 00 00 00														
CA         Accumulator 1 Lower Limit [Mastercard]         00 00 00 00 00 00 00         00	C9		08	40	- U	5D								
CB         Accumulator 1 Upper Limit [Mastercard]         00 00 00 00 00 00 00           CD         Card Issuer Action Code (Contactless) - Default [M/Chip Advance]         00 58 00           CE         Card Issuer Action Code (Contactless) - Online [M/Chip Advance]         06 F8 00           CF         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 00 00           D1         Accumulator 1 Currency Conversion Table [Mastercard]         08 40 00 00 00 840 00 00 00 840 00 00 00           D3         Additional Check Table [Mastercard]         00 00 00 FF F	C A	1 2	00	00	00	00	00	00						
CD														
Default [M/Chip Advance]						00	00	00						
CE         Card Issuer Action Code (Contactless) - Online [M/Chip Advance]         06 F8 00           CF         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 00 00           D1         Accumulator 1 Currency Conversion Table [Mastercard]         08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 00 08 40 00 00 00 00 00 00 00 00 00 00 00 00	CD		00	50	00									
Online [M/Chip Advance]	CE		06	F8	0.0									
CF         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         08 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	CE	,		- 0	00									
Decline [M/Chip Advance]	CF		08	00	0.0									
D1		,		- 0	. •									
D3	D1		08	40	00	00	00	08	40	00	00	00	08	40
D3 Additional Check Table [Mastercard]  D5 Application Control [M/Chip Advance]  D6 Default ARPC Response Code [M/Chip Advance]  D7 Application Control [M/Chip Advance]  D8 O0 00 80 00 C6 02  D9 O0 10  Advance]  D7 Application Control [M/Chip Advance]  D8 O0 00 80 00 E6 02  D8 O0 00 80 00 E6 02														
FF		-												
D5 Application Control [M/Chip Advance] 80 00 80 00 C6 02  D6 Default ARPC Response Code [M/Chip Advance] 00 10  Advance]  D7 Application Control [M/Chip Advance] 00 00 80 00 E6 02  DF 02 Security Limits Status (Contact) [M/Chip 00	D3	Additional Check Table [Mastercard]							FF	FF	FF	FF	FF	FF
D6 Default ARPC Response Code [M/Chip Advance] D7 Application Control [M/Chip Advance] DF 02 Security Limits Status (Contact) [M/Chip 00	DE	Application Control IM/Ohim Advance 1												
Advance]  D7 Application Control [M/Chip Advance]  DF 02 Security Limits Status (Contact) [M/Chip  00 00 80 00 E6 02					30	50	C 6	υZ						
D7 Application Control [M/Chip Advance] 00 00 80 00 E6 02 DF 02 Security Limits Status (Contact) [M/Chip 00	סט	· · · · · · · · · · · · · · · · · · ·	"	Τ0										
DF 02 Security Limits Status (Contact) [M/Chip 00	D7		00	00	80	00	E6	02						
				50	50	50	0	J2						
	DI 02													



**4.5.7** Contactless: CVM List - U.S. Maestro, AID A0000000042203

Cardho	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 Contactless: Application Tag data, AID A0000000042203

\* Tag value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 4D 41 45 53 54 52 4F - US
	, tephodulon Eddon	MAESTRO'
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 21 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	22 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 using
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
		b8 - M/Chip NOT supported
84	Dedicated File (DF) Name	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 9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 45 02 9F 4C 08 9F 34 03 9F 21 03
8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
35	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 05 42 03
02	List	1F 03 00 00 00 00
94	Application File Locator (AFL)	08 02 02 00 08 04 04 00
J-T	Application in Locator (ALL)	



Tag	Element name	Data Card v4.0
9F 07	Application Usage Control	FF CO
0. 0.	pp	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 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 xx A0 xx
05.44	Advance]	
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 20 - 'US Maestro'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
91 17	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 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		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
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]	



Tag	Element name	Da	ta								Ca	rd v	4.0
CF	Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]	08	00	00									
D1	Accumulator 1 Currency Conversion Table [Mastercard]	08 00 00	40 00	00	00				00		00 40	08 00	40 00
D3	Additional Check Table [Mastercard]	00 FF	00 FF	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						
D6	Default ARPC Response Code [M/Chip Advance]	00	10										
D7	Application Control [M/Chip Advance]	00	00	80	00	E6	02						
DF 02	Security Limits Status (Contact) [M/Chip Advance]	00											

## 4.6 Test Card 06 - Mastercard, CO, 1-AID (Maestro 2-Funding), English, NLD, EUR

A contact-only, single-AID 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.

#### 4.6.1 Contact: CVM List - Maestro Debit, AID A000000043060D0561111

Cardho	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						

## 4.6.2 Contact: Application Tag data, AID A0000000043060D0561111

\* Tag value changes with card usage

Tag	Element name	Data							Ca	rd v	4.0
50	Application Label	4D 41 45	53	54	52	4F	31	- 'N	1AES	STR	01'
57	Track 2 Equivalent Data	67 99 99 01 48 35				02	01	0D	22	12	22
5A	Application Primary Account Number (PAN)	67 99 99	89	00	00	02	01	0F			
5F 20	Cardholder Name	55 53 41 73 74 20 20 20 - 'l	43	61	72	64	20	30	36		
5F 24	Application Expiration Date	22 12 31									
5F 25	Application Effective Date	хх хх хх	*								
5F 28	Issuer Country Code	05 28 - N	ILD								
5F 2D	Language Preference	65 6E - '6	en' (E	ngli	sh)						
5F 30	Service Code	02 20									
5F 34	Application PAN Sequence Number	31									



Tag	Element name	Data Card v4.0				
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 using				
		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 30 60 D0 56 11 11				
84	Dedicated File (DF) Name	01				
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 41 03 02 03				
	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				
		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				
05.00	A seller Con Marshar NI and an	b7 - International cashback allowed				
9F 08	Application Version Number					
9F 0A	Application Selection Registered	00 01 01 01				
05.00	Proprietary Data	DO 50 DO 00 00				
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 xx A0 xx xx xx xx xx xx xx xx 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 31 20 20 20 20				
OF 4.4	Country 1 Louis Limit IMt	20 20 20 - 'Maestro1'				
9F 14	Counter 1 Lower Limit [Mastercard]					
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				
9F 36	Application Transaction Counter (ATC)	xx xx *				
9F 42	Application Currency Code	09 78 - EUR				
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				
		/0 17				



Tag	Element name	Da	ta								Ca	rd v	4 0
9F 7E	Application Life Cycle Data [Mastercard]			0в	14	00	01	00	00	50	17	79	
01 72	Application Life Cycle Data [Mastercara]					04				10	13	00	00
		00	00	00	00	00	80	00	88	01	06	Α5	5 <b>A</b>
		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) -	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	- N	LD								
C9	Accumulator 1 Currency Code	09	78	- E	UR								
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]		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]	L											
CE	Card Issuer Action Code (Contactless) -	00	00	00									
<u></u>	Online [M/Chip Advance]	L											
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	00	09	78	00	00	00	09	78	00	00
		00											
D3	Additional Check Table [Mastercard]	00	00	00		FF		FF	FF	FF	FF	FF	FF
DE	Application Control [M/Chin Advance]					FF C6							
D5	Application Control [M/Chip Advance]		10	00	00		02						
D6	Default ARPC Response Code [M/Chip	00	10										
DZ	Application Control (M/Chip Advance)	00	00	00	00	00	00						
D7	Application Control [M/Chip Advance]	00	00	00	00	00	00						
D9	Application File Locator (Contactless)	00	00	00	00	00	00	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											
DE 44	Advance]	C1											
DF 11	Accumulator 1 Control (Contact)	C1											
DE 40	[M/Chip Advance]	00											
DF 12	Accumulator 1 Control (Contactless)	00											
DE 4.4	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact)	00											
DE 45	[M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
DE 40	[M/Chip Advance]	0.0	99										
DF 16	Accumulator 2 Currency Code	09	99										
DE 47	[Mastercard]	09	90	00	00	00	09	90	00	00	00	00	90
DF 17	Accumulator 2 Currency Conversion						00						
	Table [Mastercard]	00	-	-			-	-				-	55
DF 18	Accumulator 2 Lower Limit [Mastercard]	00	00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]	00		00			00						
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	00											
5, 10	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
5, 10	Advance]												
L		<u> </u>											



T	Florestance	Data Candud O
Tag	Element name	Data Card v4.0
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]	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
	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
5	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
J	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
D. 00	Advance]	
DF 35	Security Limits Status (Contactless)	00
D. 00	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
5, 5,	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
5, 50	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
0, 30	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
וט וט	Advance]	
DF 40	Read Record Filter (Contactless)	00
51 40	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
0, 4,	Advance]	
<u> </u>	Auvail0 <del>0</del> ]	

## 4.6.3 Contact: CVM List - Maestro Debit, AID A000000043060D0562222

Cardho	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						



4.6.4 Contact: Application Tag data, AID A0000000043060D0562222

		* Tag value changes with card usage
Tag	Element name	Data Card v4.0
50	Application Label	4D 41 45 53 54 52 4F 32 - 'MAESTRO2'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 02 8D 22 12 22
01	Track 2 Equivalent Data	01 48 35 94 90 OF
5A	Application Primary Account Number	67 99 99 89 00 00 02 02 8F
	(PAN)	55 50 41 00 44 65 60 60 54 05 54 65
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 20 - 'USA DEBIT/Test Card 06'
55.04	A - Profes Estate Data	20 20 - USA DEBIT/Test Card 06
5F 24	Application Expiration Date	_
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
82	Application Interchange Profile	18 00
02	Application interestange i 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 using
		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
	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 02 03
	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
	The second of th	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
00.00	Application Varsian Number	b7 - International cashback allowed
9F 08	Application Version Number	
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



Tag	Element name	Da	ta								Ca	rd v	4.0
9F 10	Issuer Application Data [M/Chip			A0	хx	хх	хx	хх	хх	хх			
	Advance]	хx	хx	хx	хx	хx	хx	*					
9F 11	Issuer Code Table Index	01											
9F 12	Application Preferred Name	4D	61	65	73	74	72	6 <b>F</b>	32	20	20	20	20
	•	20	20	20	- 'N	/laes	tro2	,					
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)		ХX	ХX	ХX	ХX	ХX	ХX	ХX	*			
9F 27	Cryptogram Information Data (CID)	80											
9F 36	Application Transaction Counter (ATC)		xx										
9F 42	Application Currency Code		78	- E	UK								
9F 4D	Transaction Log Entry		0A	01	^=	^^	0.0		0.7	^^	0.7	^^	^=
9F 4F	Transaction Log Format					02 06							
			14	<b>J</b> -	32	00		J <u>_</u>	0_	<b>J</b> -		03	<b>J</b> -
9F 7E	Application Life Cycle Data [Mastercard]	04	10	0в	14	00	01	00	00	50	17	79	00
	, pp. 100 mar. 2 mar. 2 mar. [110 mar. 2 mar. 2]					04							
						00							
C2	Cord loguer Action Code (Contact)		00		00	00	υ0	00	00	00	00	00	υÜ
C3	Card Issuer Action Code (Contact) -	00	00	00									
C4	Decline [M/Chip Advance] Card Issuer Action Code (Contact) -	7 F	50	00									
C4	Default [M/Chip Advance]	,,	50	00									
C5	Card Issuer Action Code (Contact) -	3F	FB	00									
03	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]	05	28	- N	LD								
C9	Accumulator 1 Currency Code	09	78	- E	UR								
	[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									
D.(	Decline [M/Chip Advance]	00	70	00	00	00	00	70	00	00	00	00	70
D1	Accumulator 1 Currency Conversion					00 78							
	Table [Mastercard]	00	50	50	09	, 0	50	55	55	09	, 3	55	55
D3	Additional Check Table [Mastercard]		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]	00	υ0	00	00	00	υ0						
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											
DE 44	Advance]	C1											
DF 11	Accumulator 1 Control (Contact)	C1											
DF 12	[M/Chip Advance] Accumulator 1 Control (Contactless)	00											
DF 12	[M/Chip Advance]												
<u> </u>	[INITOTIIP AUVATIOE]												



Tag	Element name	Data	Card v4.0
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	
	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	
DF 1A	Counter 1 Control (Contact) [M/Chip	C1	
J. 171	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	
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	
DE 04	Advance]	09 78 - EUR	
DF 24 DF 25	MTA Currency Code [M/Chip Advance] MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00	
DF 23	Advance]		
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00	
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	
DE OD	(Contact) [M/Chip Advance]	00.00.00	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00	
DE 2C	(Contactless) [M/Chip Advance] Counter 1 CVR Dependency Data	00 00 00	
DF 2C	(Contact) [M/Chip Advance]		
DF 2D	Counter 1 CVR Dependency Data	00 00 00	
D1 2D	(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	
DE CE	[M/Chip Advance]	00	
DF 37	Security Limits Status Common [M/Chip	00	
DE 2C	Advance]	00	
DF 3C	CVR Issuer Discretionary Data (Contact) [M/Chip Advance]		
DF 3D	CVR Issuer Discretionary Data	00	
5, 55	(Contactless) [M/Chip Advance]		
	(	II.	



Tag	Element name	Data	Card v4.0
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	

# 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

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 A0000000041010

\* Tag value changes with card usage

Tag	Element name	Data Card v4.0
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 21 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 30 37 20 20 20 - 'USA DEBIT/Test Card 07'
5F 24	Application Expiration Date	22 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 01
5F 34	Application PAN Sequence Number	11



Tag	Element name	Data Card v4.0
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 using
		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 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
שט	2 (CDOL2)	
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 41 03 42 03
OL	List	5E 03 5F 03 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 00
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 NOT allowed
		b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02
9F 0A	Application Selection Registered	00 01 01 02
	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 xx A0 xx xx xx xx xx xx xx xx
	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 20
· · ·		20 20 20 - 'Mastercard'
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	OB OA
9F 4F	Transaction Log Entry  Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F
J1 +1	Transaction Log Format	36 02 9F 52 06 DF 3E 01 9F 21 03 9F
		7C 14



Tag	Element name	Da	ta								Ca	rd v	4 0
9F 7E	Application Life Cycle Data [Mastercard]			0в	14	00	01	00	00	50	17	79	
01 7 2	Application Life Cycle Data [Mastercara]						10		00		00	00	00
		00	00	00	00	00	80	00	88	01	06	Α5	5 <b>A</b>
		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									
	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	26	- G	BR								
C9	Accumulator 1 Currency Code		26										
	[Mastercard]												
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										
OD	Default [M/Chip Advance]												
CE	Card Issuer Action Code (Contactless) -	00	00	0.0									
CL	Online [M/Chip Advance]		•	•									
CF	Card Issuer Action Code (Contactless) -	00	00	0.0									
CF	Decline [M/Chip Advance]	"	00	00									
D1	Accumulator 1 Currency Conversion	08	26	00	00	00	08	26	00	00	00	ΛQ	26
וט	·						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	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]	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											
2. 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
וט וט	[Mastercard]	-	-										
DF 17	Accumulator 2 Currency Conversion	09	99	00	00	00	09	99	00	00	00	09	99
	Table [Mastercard]						00						
	Table [Masterearu]	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	00											
5	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												



T	Florestance	Data Candud O
Tag	Element name	Data Card v4.0
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 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
	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
5	(Contact) [M/Chip Advance]	
DF 2F	Counter 2 CVR Dependency Data	00 00 00
J	(Contactless) [M/Chip Advance]	
DF 30	Interface Enabling Switch [M/Chip	01
D. 00	Advance]	
DF 35	Security Limits Status (Contactless)	00
D. 00	[M/Chip Advance]	
DF 37	Security Limits Status Common [M/Chip	00
Di 37	Advance]	
DF 3C	CVR Issuer Discretionary Data	00
5, 50	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
0, 30	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
51 31	Advance]	
DF 40	Read Record Filter (Contactless)	00
51 40	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
0, 4,	Advance]	
<u> </u>	Auvail0 <del>0</del> ]	

## 4.7.3 Contact: CVM List - Maestro debit, AID A000000043060

Cardholder Verification Method List ('4103 4203 0000')					
CVM	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 value changes with card usage
Tag	Element name	Data Card v4.0
50	Application Label	4D 41 45 53 54 52 4F - 'MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 22 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 30 37 20 20 20 20 - 'USA DEBIT/Test Card 07'
FF 04	Application Expiration Data	20 20 - USA DEBIT/Test Cald 07
5F 24	Application Expiration Date	xx xx xx *
5F 25	Application Effective Date	08 26 - GBR
5F 28	Issuer Country Code	** =* *=**
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	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 using External Auth command b2 - On device Cardholder verification NOT supported b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV mode NOT supported
0.4	Dadicated File (DE) Name	A0 00 00 00 04 30 60
84	Dedicated File (DF) Name	02
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)	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 41 03 42 03 00 00 00 00
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 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 02
9F 0A	Application Version Number  Application Selection Registered  Proprietary Data	00 01 01 01
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



Seuer Application Data [M/Chip   Xx	Tag	Element name	Da	ta								Ca	rd v	4.0
9F 11   Issuer Code Table Index   9F 12   Application Preferred Name   40   61   65   73   74   72   6F 20   20   20   20   20   20   20   20		Issuer Application Data [M/Chip	хx	хx	A0	хx	хx	хx	хx	хx	хx	хх	хx	хх
9F 12		Advance]	хx	хx	ХX	ХX	хx	хx	*					
PF 14	9F 11	Issuer Code Table Index	01											
First   Counter 1 Lower Limit [Mastercard]	9F 12	Application Preferred Name		_					6F	20	20	20	20	20
Personal Identification Number (PIN)   Try Counter   Try Counter   Try Counter   Try Counter   Pix Counter   Tupper Limit [Mastercard]   Pix Counter   Pix Counter   Tupper Limit [Mastercard]   Pix Counter   Tupper Limit [Mastercard]   Pix Counter   Pix				20	20	- 'N	/laes	tro'						
Try Counter   Section   Counter														
9F 28	9F 17		09											
SF 26														
9F 27   Cryptogram Information Data (CID)   80		•												
9F 36   Application Transaction Counter (ATC)				ХX	ХX	ХX	ХX	ХX	ХX	ХX	*			
Section   Sect														
9F 4D														
9F 4F		•			- G	BP								
9F 7E			_	-										
9F 7E	9F 4F	Transaction Log Format												
PF 7E					9F	52	06	DF	ЗE	01	9F	21	03	9F
A0	0E 7E	Application Life Cycle Data [Mastercard]			ΛB	14	00	01	00	00	50	17	79	00
C3	9 7 1	Application Life Cycle Data [Mastercard]	_										-	
Card Issuer Action Code (Contact) - Decline [M/Chip Advance]														
Decline [M/Chip Advance]						00	00	00	00	00	00	00	00	00
Card Issuer Action Code (Contact) - Default (M/Chip Advance)	C3		00	00	00									
Default [M/Chip Advance]														
C3	C4	,	7F	50	00									
Online [M/Chip Advance]														
C6	C5		3F	FB	00									
C7														
[Mastercard]														
C8         CRM Country Code [Mastercard]         08         26         -GBR           C9         Accumulator 1 Currency Code [Mastercard]         08         26         -GBP           CA         Accumulator 1 Lower Limit [Mastercard]         00         00         00         00         00           CB         Accumulator 1 Upper Limit [Mastercard]         00         00         00         00         00         00           CB         Accumulator 1 Upper Limit [Mastercard]         00	C7		42											
C9	00		00	0.0		DD								
Mastercard   CA														
CA         Accumulator 1 Lower Limit [Mastercard]         00         00         00         00         00         00           CB         Accumulator 1 Upper Limit [Mastercard]         00	C9		08	26	- G	יסר								
CB	CA		00	٥٥	00	٥٥	٥٥	٥٥						
CD														
Default [M/Chip Advance]														
CE	CD			00	00									
Online [M/Chip Advance]	CE	• • •	00	0.0	0.0									
CF         Card Issuer Action Code (Contactless) - Decline [M/Chip Advance]         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	OL													
Decline [M/Chip Advance]	CF		00	00	00									
D1	01	,												
Table [Mastercard]	D1		08	26	00	00	00	08	26	00	00	00	08	26
D3														
FF		-												
D5	D3	Additional Check Table [Mastercard]							FF	FF	FF	FF	FF	FF
D6	DE	Application Control IM/Chin Advance1												
Advance					80	00		υZ						
D7         Application Control [M/Chip Advance]         00 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 00           DF 02         Security Limits Status (Contact) [M/Chip Advance]         00 00 00 00 00 00 00 00 00 00 00 00           DF 11         Accumulator 1 Control (Contact) [M/Chip Advance]         C1 00 00 00 00 00 00 00 00 00 00 00 00 00	סט		33	-0										
D9	D7		00	იი	იი	იი	იი	იი						
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 00 00 00 00 00 00 00 00 00 00 00 00			- 00		50									
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	იი	იი	იი	იი	იი	იი	იი	იი			
Advance]  DF 11					50									
DF 11 Accumulator 1 Control (Contact)  [M/Chip Advance]  DF 12 Accumulator 1 Control (Contactless)  00	DF 02													
[M/Chip Advance]  DF 12 Accumulator 1 Control (Contactless)  00	DF 11		C1											
DF 12 Accumulator 1 Control (Contactless) 00	וויטן													
Di 12 / todamalator i Contacticco)	DF 12		00											
	J. 12	[M/Chip Advance]												



Tag	Element name	Data	Card v4.0
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	
	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	
	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	
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	
DE 24	Advance]	08 26 - GBP	
DF 24 DF 25	MTA Currency Code [M/Chip Advance] MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00	
DF 23	Advance]		
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00	
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	
DE OD	(Contact) [M/Chip Advance]	00.00.00	
DF 2B	Accumulator 2 CVR Dependency Data	00 00 00	
DE ac	(Contactless) [M/Chip Advance]	00 00 00	
DF 2C	Counter 1 CVR Dependency Data (Contact) [M/Chip Advance]		
DF 2D	Counter 1 CVR Dependency Data	00 00 00	
D1 2D	(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	
<u> </u>	[M/Chip Advance]		
DF 37	Security Limits Status Common [M/Chip	00	
DE 00	Advance]	00	
DF 3C	CVR Issuer Discretionary Data		
DF 3D	(Contact) [M/Chip Advance]  CVR Issuer Discretionary Data	00	
טני וט	(Contactless) [M/Chip Advance]	<del></del>	
	(	<u>l</u>	



Tag	Element name	Data	Card v4.0
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	

## 4.8 Test Card 08 - U.S. Maestro, CO, 1-AID (2-Funding), English, USA, USD

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 A0000000042203D0561111

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 A0000000042203D0561111

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 43 48 45 43 4B 49 4E 47 -
		'US CHECKING'
57	Track 2 Equivalent Data	54 13 33 00 89 09 90 07 D2 21 22 20
		14 83 59 49 00 OF
5A	Application Primary Account Number	54 13 33 00 89 09 90 07
	(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 38 20 20
		20 20 - 'USA DEBIT/Test Card 08'
5F 24	Application Expiration Date	22 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	31
5F 55	Issuer Country Code (alpha2 format)	55 53 - 'US'



Tag	Element name	Data Card v4.0
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 using 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 22 03 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
0D	Cord Dick 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	JI OR OR OZ JJ OJ JE J/ 04 JE 40 00
0.	2 (CDOL2)	00 00 00 00 00 00 00 00 02 05 42 03
8E	Cardholder Verification Method (CVM) List	1F 03 00 00
0.4		08 01 01 00
94	Application File Locator (AFL)	08 01 01 00
94	Application File Locator (AFL)	FF C0
9F 07	Application Usage 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 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 xx A0 xx xx xx xx xx xx xx xx
01 10	Advance]	xx xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 43 68 65 63 6B 69 6E 67 -
91 12	Application i referred Name	'US Checking'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	03
0. 17	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00
9F 26	Application Cryptogram (AC)	xx 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 Transaction Counter (ATC)  Application Currency Code	08 40 - USD
		08 40 - 03D 0B 0A
9F 4D	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
		1



Tag	Element name	Da	ta								Ca	rd v	4.0
9F 7E	Application Life Cycle Data [Mastercard]		10	0в	14	00	01	00	00	50	17	79	
31 7	Application Life Cycle Data [Mastercard]		00									-	
		00	00	00	00	00	80	00	88	01	06	Α5	5 <b>A</b>
		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									
	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		40										
	[Mastercard]												
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									
	Default [M/Chip Advance]			-									
CE	Card Issuer Action Code (Contactless) -	00	00	00									
OL	Online [M/Chip Advance]												
CF	Card Issuer Action Code (Contactless) -	00	00	00									
Oi	Decline [M/Chip Advance]												
D1	Accumulator 1 Currency Conversion	08	40	00	0.0	00	0.8	40	0.0	0.0	00	08	40
וטו	Table [Mastercard]		00										
	Table [Mastercard]	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	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	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	09					09						
	Table [Mastercard]		00	00	09	99	00	00	00	09	99	00	00
DE 15	-	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	00											
	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												



Tag	Element name	Data Card v4.0
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 - USD
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
DE 07	Advance]	00 00
DF 27	Number Of Days Offline Limit [M/Chip	00 00
DF 28	Advance] Accumulator 1 CVR Dependency Data	00 00 00
DF 20	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
J. 20	(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
DF 2F	(Contact) [M/Chip Advance]	00 00 00
DF ZF	Counter 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 30	Interface Enabling Switch [M/Chip	01
Di 30	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
DE 10	Advance]	
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip Advance]	
	Auvancej	



## 4.8.3 Contact: CVM List - Mastercard U.S. Savings, AID A0000000042203D0562222

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 value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 53 41 56 49 4E 47 53 - 'US
30	Application Label	SAVINGS'
57	Track 2 Equivalent Data	54 13 33 00 89 09 90 15 D2 21 22 20
01	Track 2 Equivalent Bata	14 83 59 49 00 OF
5A	Application Primary Account Number	54 13 33 00 89 09 90 15
	(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 38 20 20
		20 20 - 'USA DEBIT/Test Card 08'
5F 24	Application Expiration Date	22 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	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 using
		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 22 03 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
	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
94	Application File Locator (AFL)	08 01 01 00
		<u>l</u>



Tag	Element name	Data Card v4.0
9F 07	Application Usage Control	FF CO
		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
0E 00	Application Varsian Number	b7 - International cashback allowed
9F 08 9F 0D	Application Version Number	B0 50 9C 88 00
	Issuer Action Code - Default	00 00 00 00 00
9F 0E 9F 0F	Issuer Action Code - Denial	B0 70 9C 98 00
	Issuer Action Code - Online	xx xx A0 xx xx xx xx xx xx xx xx xx
9F 10	Issuer Application Data [M/Chip Advance]	** ** ** ** ** ** *
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	55 53 20 53 61 76 69 6E 67 73 - 'US
31 12	Application i referred Name	Savings'
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	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
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]	A0 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
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	03
C7	CDOL1 Related Data Length	42
<u>C0</u>	[Mastercard]	00.40. 1104
C8	CRM Country Code [Mastercard]	08 40 - USA 08 40 - USD
C9	Accumulator 1 Currency Code	00 40 - 000
CA	[Mastercard]	00 00 00 00 00 00
CA CB	Accumulator 1 Lower Limit [Mastercard] 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]	
	in fire a tile i terrania.	I.



Tag	Element name	Data Card v4.0
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
D3	Additional Check Table [Mastercard]	00 00 00 FF F
D5	Application Control [M/Chip Advance]	80 00 80 00 C6 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)	
DE	Log Data Table [M/Chip Advance]	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) [M/Chip Advance]	00
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00
DF 15	Accumulator 2 Control (Contactless) [M/Chip Advance]	00
DF 16	Accumulator 2 Currency Code [Mastercard]	09 99
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
DE 10		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
DF 1A	Counter 1 Control (Contact) [M/Chip Advance]	C1
DF 1B	Counter 1 Control (Contactless) [M/Chip Advance]	00
DF 1D	Counter 2 Control (Contact) [M/Chip Advance]	00
DF 1E	Counter 2 Control (Contactless) [M/Chip Advance]	00
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 Advance]	00 00 00 00 00 00
DF 24	MTA Currency Code [M/Chip Advance]	08 40 - USA
DF 25	MTA NoCVM (Contact) [M/Chip Advance]	00 00 00 00 00 00
DF 26	MTA NoCVM (Contactless) [M/Chip Advance]	00 00 00 00 00 00
DF 27	Number Of Days Offline Limit [M/Chip Advance]	00 00
DF 28	Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2A	Accumulator 2 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 2B	Accumulator 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2C	Counter 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00



Tag	Element name	Data	Card v4.0
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]		

# 4.9 Test Card 09 - Mastercard, CO, 3-AID (Credit+Maestrox2), 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

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 value changes with card usage

		rag value changes with cara acage	
Tag	Element name	Data	Card v4.0
50	Application Label	4D 41 53 54 45 52 43 41 52	44 -
		'MASTERCARD'	
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2	21 22 01
		14 83 59 49 00 OF	
5A	Application Primary Account Number	54 13 33 00 89 02 00 60	
	(PAN)		



Tag	Element name	Data Card v4.0
5F 20	Cardholder Name	55 41 54 20 44 65 62 69 74 2F 54 65
		73 74 20 43 61 72 64 20 30 39 20 20
FF 04	Application Expiration Data	20 20 - 'USA DEBIT/Test Card 09'
5F 24	Application Expiration Date	xx xx xx *
5F 25	Application Effective Date	
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 using
		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
0D	0 15:11	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
8E	2 (CDOL2)	00 00 00 00 00 00 00 00 41 03 42 03
OΕ	Cardholder Verification Method (CVM) List	5E 03 1F 00 00 00
94	Application File Locator (AFL)	08 01 01 00
94		08 01 01 00
9 <del>4</del> 9F 07	Application File Locator (AFL)	FF 00
95 07	Application Usage 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 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 - 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 xx A0 xx xx xx xx xx xx xx xx xx
	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 20
05.1.		20 20 20 20 - 'Mastercard'
9F 14	Counter 1 Lower Limit [Mastercard]	00
9F 17	Personal Identification Number (PIN)	09
<b></b>	Try Counter	
9F 23	Counter 1 Upper Limit [Mastercard]	00



-													4.0
Tag	Element name	Da									Ca	rd v	4.0
9F 26	Application Cryptogram (AC)		ХX	ХX	ХX	ХX	XX	ХX	ХX	*			
9F 27	Cryptogram Information Data (CID)	80											
9F 36	Application Transaction Counter (ATC)		ХX										
9F 42	Application Currency Code		40	- U	SA								
9F 4D	Transaction Log Entry		0A										
9F 4F	Transaction Log Format								2A				
				9F	52	06	DF	3E	01	9F	21	03	9F
<u> </u>			14	-	1 4		01				17	70	00
9F 7E	Application Life Cycle Data [Mastercard]								00		17	79	
									88				
									00				
C3	Card Issuer Action Code (Contact) -	00		00									
00	Decline [M/Chip Advance]												
C4	Card Issuer Action Code (Contact) -	1F	50	00									
04	Default [M/Chip Advance]												
C5	Card Issuer Action Code (Contact) -	3F	FB	0.0									
03	Online [M/Chip Advance]			• •									
C6		09											
C6 C7	PIN Try Limit [M/Chip Advance] CDOL1 Related Data Length	42											
C/		72											
<u>C0</u>	[Mastercard]	00	40	- 11	C 1								
C8	CRM Country Code [Mastercard]		40										
C9	Accumulator 1 Currency Code	08	40	- U	5D								
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]					00							
СВ	Accumulator 1 Upper Limit [Mastercard]				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	08	40	00	00	00	08	40	00	00
D2	Additional Chack Table [Mastercard]	00	00	٥٥	ਸਾਸ	ਸ਼ਸ਼	FF	FF	FF	ਸਾਸ	FF	FF	FF
D3	Additional Check Table [Mastercard]					FF		FF	EE	FF	E E	FF	FF
D5	Application Control [M/Chip Advance]		00			C6							
D6	Default ARPC Response Code [M/Chip		10										
D0	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	ეე	იი	ეი	იი	ეე	ეე	00	00			
DF 02	Security Limits Status (Contact) [M/Chip	00				-			-	-			
DF 02	Advance]												
DF 11	Accumulator 1 Control (Contact)	C1											
וו אט		01											
DF 12	[M/Chip Advance]	00											
DF 12	Accumulator 1 Control (Contactless)												
DF 14	[M/Chip Advance]	00											
DF 14	Accumulator 2 Control (Contact)	30											
DE 4 <i>E</i>	[M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	50											
DE 40	[M/Chip Advance]	0.0	99										
DF 16	Accumulator 2 Currency Code	09	99										
DE 47	[Mastercard]	0.0	0.0	0.0	0.0	00	00	0.0	00	00	00	00	0.0
DF 17	Accumulator 2 Currency Conversion								00				
	Table [Mastercard]	00	50	55	55	,,	-	50	00		,,	-	00
	I .												



Tag	Element name	Data Card v4.0
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
ו וא	Advance]	
DF 1B	Counter 1 Control (Contactless) [M/Chip	00
55	Advance]	
DF 1D	Counter 2 Control (Contact) [M/Chip	00
55	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 00 00 00 00
	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40 - USD
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
DE 00	(Contactless) [M/Chip Advance]	01
DF 30	Interface Enabling Switch [M/Chip	01
DE 05	Advance]	00
DF 35	Security Limits Status (Contactless)	00
DE 27	[M/Chip Advance]	00
DF 37	Security Limits Status Common [M/Chip Advance]	
DF 3C	CVR Issuer Discretionary Data	00
ا ٥٠ ام	(Contact) [M/Chip Advance]	
DF 3D	CVR Issuer Discretionary Data	00
ן טט וט	(Contactless) [M/Chip Advance]	
DF 3F	Read Record Filter (Contact) [M/Chip	00
0, 0,	Advance]	
DF 40	Read Record Filter (Contactless)	00
2. 10	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	



4.9.3 Contact: CVM List - Maestro debit, AID A000000043060

Cardho	Cardholder Verification Method List ('4103 0203 0000')					
CVM Verification Method Conditions If unsucces						
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 value changes with card usage

Second Registration	2 12 4 65
Application Label   4D 41 45 53 54 52 4F - 'MAESTRO'	2 12 4 65
57         Track 2 Equivalent Data         67 99 99 89 00 00 02 00 05 1D 2 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 41 54 20 44 65 62 69 74 2F 5 73 74 20 43 61 72 64 20 30 39 2 20 20 - 'USA DEBIT/Test Card 09'           5F 24         Application Expiration Date         22 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	2 12 4 65
22 01 48 35 94 90 0F	4 65
(PAN)       55 41 54 20 44 65 62 69 74 2F 5         5F 20       Cardholder Name       55 41 54 20 44 65 62 69 74 2F 5         73 74 20 43 61 72 64 20 30 39 2       20 20 - 'USA DEBIT/Test Card 09'         5F 24       Application Expiration Date       22 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	
73 74 20 43 61 72 64 20 30 39 2 20 20 - 'USA DEBIT/Test Card 09'	
5F 25 Application Effective Date  5F 28 Issuer Country Code  5F 2D Language Preference  5F 30 Service Code  5F 34 Application PAN Sequence Number  5F 55 Issuer Country Code (alpha2 format)  82 Application Interchange Profile  18 00  BYTE 1:  b7 - Offline SDA NOT supported  b6 - Offline DDA NOT supported	
5F 28 Issuer Country Code 5F 2D Language Preference 65 6E - 'en' (English) 5F 30 Service Code 65 6E - 'en' (English) 65 6F 34 Application PAN Sequence Number 65 5S 3 - 'US' 82 Application Interchange Profile 82 Application Interchange Profile 83 Application Interchange Profile 84 ON BYTE 1: 65 6F - 'en' (English) 67 - US' 68 6F - 'en' (English) 69 6F - 'en' (Englis	
5F 2D Language Preference  5F 30 Service Code  5F 34 Application PAN Sequence Number  5F 55 Issuer Country Code (alpha2 format)  82 Application Interchange Profile  18 00  BYTE 1:  b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported	
5F 30 Service Code  5F 34 Application PAN Sequence Number  5F 55 Issuer Country Code (alpha2 format)  82 Application Interchange Profile  BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported	
5F 34 Application PAN Sequence Number  5F 55 Issuer Country Code (alpha2 format)  82 Application Interchange Profile  18 00  BYTE 1:  b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported	
SF 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	
SF 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	
82 Application Interchange Profile  BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported	
b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported External Auth command b2 - On device Cardholder verification NO supported b1 - Combined DDA / GEN AC NOT supp BYTE 2: b8 - EMV mode NOT supported	Т
84 Dedicated File (DF) Name A0 00 00 00 04 30 60	
87 Application Priority Indicator 02	
8C	5 01 1 03
8D Card Risk Management Data Object List 91 0A 8A 02 95 05 9F 37 04 9F 4	C 08
2 (CDOL2)	
8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 41 03 0 00 00 00 00 00 00 00 00 00	2 03
8E Cardholder Verification Method (CVM) 00 00 00 00 00 00 00 00 41 03 0	2 03



Tag	Element name	Data Card v4.0
9F 07	Application Usage Control	FF CO
0. 0.	rippinganen Goage Germe.	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 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 xx A0 xx xx xx xx xx xx xx 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 20 20 20 20 20
	• •	20 20 20 - '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 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
		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 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) -	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]	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
CB	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]	
	20010 [147 OTHP / GVGHOO]	



Tag	Element name	Data Card v4.0
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
D3	Additional Check Table [Mastercard]	00 00 00 FF F
D5	Application Control [M/Chip Advance]	84 00 80 00 C6 02
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
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) [M/Chip Advance]	C1
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00
DF 15	Accumulator 2 Control (Contactless) [M/Chip Advance]	00
DF 16	Accumulator 2 Currency Code [Mastercard]	09 99
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
DE 10		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 Advance]	C1
DF 1B	Counter 1 Control (Contactless) [M/Chip Advance]	C1
DF 1D	Counter 2 Control (Contact) [M/Chip Advance]	00
DF 1E	Counter 2 Control (Contactless) [M/Chip Advance]	00
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 Advance]	00 00 00 00 00
DF 24	MTA Currency Code [M/Chip Advance]	08 40 - USD
DF 25	MTA NoCVM (Contact) [M/Chip Advance]	00 00 00 00 00
DF 26	MTA NoCVM (Contactless) [M/Chip Advance]	00 00 00 00 00
DF 27	Number Of Days Offline Limit [M/Chip Advance]	00 00
DF 28	Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 29	Accumulator 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2A	Accumulator 2 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00
DF 2B	Accumulator 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2C	Counter 1 CVR Dependency Data (Contact) [M/Chip Advance]	00 00 00



Tag	Element name	Data	Card v4.0
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]		

#### 4.9.5 Contact: CVM List - U.S. Maestro, AID A0000000042203

Cardhol	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			

## 4.9.6 Contact: Application Tag data, AID A0000000042203

\* Tag value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	67 99 99
50	Application Label	55 53 20 4D 41 45 53 54 52 4F - US
		MAESTRO'
57	Track 2 Equivalent Data	67 99 99 89 00 00 02 00 05 1D 22 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 41 54 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	22 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 v4.0
82	Application Interchange Profile	18 00
	3	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 using
		External Auth command
		b2 - On device Cardholder verification NOT
		supported
		b1 - Combined DDA / GEN AC NOT supported
		BYTE 2:
0.4	De l'este LE'Is (DE) Nove	b8 - EMV mode NOT supported  A0 00 00 00 04 22 03
84	Dedicated File (DF) Name	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 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 00 00
94	Application File Locator (AFL)	08 01 01 00 08 03 03 00
94	Application File Locator (AFL)	08 01 01 00 08 03 03 00
9F 07	Application Usage Control	FF CO
		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 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 xx A0 xx xx xx xx xx xx xx 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 - 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 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
		l ·



Tag	Element name	Da	ta								Ca	rd v	4 0
9F 7E	Application Life Cycle Data [Mastercard]			0B	14	00	01	00	00	50	17	79	
31 7	Application Life Cycle Data [Mastercard]		00						00			_	
		00	00	00	00	00	80	00	88	01	06	<b>A</b> 5	5 <b>A</b>
		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	- U	SA								
C9	Accumulator 1 Currency Code		40										
	[Mastercard]												
CA	Accumulator 1 Lower Limit [Mastercard]	00	00	00	00	00	00						
CB	Accumulator 1 Upper Limit [Mastercard]		00			00							
CD	Card Issuer Action Code (Contactless) -		50										
	Default [M/Chip Advance]			- 0									
CE	Card Issuer Action Code (Contactless) -	06	FB	00									
CE	Online [M/Chip Advance]	"		00									
CF	Card Issuer Action Code (Contactless) -	00	00	00									
CF	Decline [M/Chip Advance]	"	00	00									
D4		00	40	00	00	00	08	40	00	00	00	00	40
D1	Accumulator 1 Currency Conversion						00						
	Table [Mastercard]	00	•	•	•		•	•	•	•		•	•
D3	Additional Check Table [Mastercard]	00	00	00	FF	FF	FF	FF	FF	FF	FF	FF	FF
	radiconal enesit radio [mastereara]	FF	FF	FF	FF	FF	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	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											
	Advancel												
DF 11	Accumulator 1 Control (Contact)	C1											
	[M/Chip Advance]												
DF 12	Accumulator 1 Control (Contactless)	C1											
2. 12	[M/Chip Advance]												
DF 14	Accumulator 2 Control (Contact)	00											
J. 17	[M/Chip Advance]												
DF 15	Accumulator 2 Control (Contactless)	00											
D. 10	[M/Chip Advance]												
DF 16	Accumulator 2 Currency Code	09	99										
וטו וט	[Mastercard]												
DF 17	Accumulator 2 Currency Conversion	09	99	0.0	00	00	09	99	0.0	00	00	09	99
ווט וט	Table [Mastercard]						00						
	i abie [iviastercatu]	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											
5, 10	Advance]												
	,												



Tag	Element name	Data Card v4.0
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
D1 23	Advance]	
DF 24	MTA Currency Code [M/Chip Advance]	08 40 - USD
DF 25	MTA NoCVM (Contact) [M/Chip	00 00 00 00 00 00
D1 23	Advance]	
DF 26	MTA NoCVM (Contactless) [M/Chip	00 00 00 00 00 00
D1 20	Advance]	
DF 27	Number Of Days Offline Limit [M/Chip	00 00
D. 27	Advance]	
DF 28	Accumulator 1 CVR Dependency Data	00 00 00
J. 20	(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
	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]	



## 4.10 Test Card 10 - Mastercard CO, Contact, 1-AID(US Maestro), English, USA, USD

A contact-only, 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 A000000043060

Cardhol	Cardholder Verification Method List ('0205 4203 1F03')						
CVM	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				

#### 4.10.2 Contact: Application Tag data, AID A0000000043060

\* Tag value changes with card usage

42   Issuer Identification Number (IIIN)   54   13   33     50			* Tag value changes with card usage
Application Label	Tag	Element name	2 11 1
MAESTRO    State   S	42	Issuer Identification Number (IIN)	54 13 33
Track 2 Equivalent Data	50	Application Label	
Second Primary Account Number (PAN)			
SA	57	Track 2 Equivalent Data	
SF 20		Analization Drive and Assessed Novelean	
T3 74 20 43 61 72 64 20 31 30 20 20 20 20 20 20 20 20 - 'USA DEBIT/Test Card 10'		(PAN)	
SF 24   Application Expiration Date   22   12   31	5F 20	Cardholder Name	
SF 24			
SF 25	FF 04	Application Expiration Data	
SF 28			
SF 2D			
Service Code			
SF 34			
SF 55   Issuer Country Code (alpha2 format)   55   53   - 'US'			
Application Interchange Profile [M/Chip, PayPass]   18 00   BYTE 1:			
PayPass   PayP			
b7 - Offline SDA NOT supported	82		
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   using   External Authenticate command   b1 - Combined DDA / GEN AC NOT supported   BYTE 2:   b8 - Mag-stripe mode NOT supported   b7 - Is NOT Mobile phone   B4   Dedicated File (DF) Name   A0   00   00   04   22   03		PayPass	
b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone   NOT Supported			
b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone			
b3 - Issuer authentication NOT supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone   NOT Support			
b1 - Combined DDA / GEN AC NOT supported BYTE 2:   b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone   B4   Dedicated File (DF) Name   A0   00   00   04   22   03			b3 - Issuer authentication NOT supported using
BYTE 2:			
B8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone   B4   Dedicated File (DF) Name   A0 00 00 00 00 04 22 03   B7   Application Priority Indicator   O1   SC   Card Risk Management Data Object List 1 (CDOL1)   PF 02 06 9F 03 06 9F 1A 02 95 05 5F 1 (CDOL1)   PF 45 02 9F 4C 08 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 37 04 9F 4C 08 2 (CDOL2)   SE   Cardholder Verification Method (CVM)   List   Cardholder Verification Method (CVM)   O0 00 00 00 00 00 00 00 02 05 42 03   Data Not be a considered with the consideration of the considered with the consideration of the			
84   Dedicated File (DF) Name   A0   00   00   04   22   03			= : := =:
84       Dedicated File (DF) Name       A0       00       00       00       04       22       03         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         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			
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         8D       Card Risk Management Data Object List 2 (CDOL2)       91 0A 8A 02 95 05 9F 37 04 9F 4C 08 2G 0A	8/1	Dedicated File (DF) Name	
8C			
1 (CDOL1)  2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 45 02 9F 4C 08 9F 34 03  8D Card Risk Management Data Object List 2 (CDOL2)  8E Cardholder Verification Method (CVM) List  2A 02 9A 03 9C 01 9F 37 04 9F 35 01 9F 37 04 9F 36 01 08 00 00 00 00 00 00 00 00 00 00 00 00			·-
8D Card Risk Management Data Object List 2 (CDOL2)  8E Cardholder Verification Method (CVM) List  9F 45 02 9F 4C 08 9F 34 03  8A 02 95 05 9F 37 04 9F 4C 08  00 00 00 00 00 00 00 00 00 00 00 00 00	00		
2 (CDOL2)  8E Cardholder Verification Method (CVM) List 00 00 00 00 00 00 00 00 02 05 42 03		(ODOLI)	
2 (CDOL2)  8E Cardholder Verification Method (CVM) List  00 00 00 00 00 00 00 00 02 05 42 03 LF 03	8D	Card Risk Management Data Object List	91 0A 8A 02 95 05 9F 37 04 9F 4C 08
8E		,	
List 1F 03	8E		00 00 00 00 00 00 00 00 02 05 42 03
8F Certification Authority Public Key Index FA			1F 03
and the state of t	8F	Certification Authority Public Key Index	FA



Tag	Element name	Data Card v4.0
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
51 07	Application esage 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
0E 00	Application Varsian Number	b7 - International cashback allowed
9F 08	Application Version Number Issuer Action Code - Default	B0 50 9C 88 00
9F 0D 9F 0E	Issuer Action Code - Denail	00 00 00 00 00
9F 0F	Issuer Action Code - Definal	B0 70 9C 98 00
9F 10	Issuer Application Data [M/Chip 4]	xx xx A0 xx xx xx xx xx xx xx xx
31 10	133del Application Data [M/Onip 4]	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
		Maestro'
9F 14	Lower Consecutive Offline Limit	00
9F 17	Personal Identification Number (PIN)	01
05.45	Try Counter	20 26 22 20 22 20 24 20 22 20 20
9F 1F	Track 1 Discretionary Data	30 36 32 39 33 30 34 32 33 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	30 74 E6 E9 E9 3E DF BD CE 0D 80 6A
	<b>,</b>	6B B6 A2 82 0C 30 1B ED 84 E9 3D 58
		E9 EB 72 4A 54 D8 52 B4 4B A3 DC 14
		1D 30 28 0B 77 D7 E6 11 F7 B2 1A C6 62 FE CD FE F1 C3 BD EF 60 0F 1E DD
		68 8D 6A 83 A5 29 90 0D 51 94 3A 47
		EB EF DC 97 28 EB B1 D5 35 D0 2E 49
		B2 07 FC E6 A3 B2 4B B6 67 CD 45 B9
		60 4E 99 9C 20 5F 3B 67 19 6B E1 48
05.15	100 B 111 17 E	D5 7A 50 06
9F 47	ICC Public Key Exponent	03



Tag	Element name	Data	a a								Са	rd v	4.0
9F 48	ICC Public Key Remainder	58 E		79	E5	33	12	54	E2	90			
0. 10	Too r done recy remainder	64 8	32	20	8A	49	D5	34	33	D3	CD	ВF	04
		B8 C						F6	C9	72	9A	0E	21
		4F 6			11	F8	3 <b>F</b>						
9F 49	Dynamic Data Authentication Data	9F 3	37	04									
	Object List (DDOL)												
9F 4A	Static Data Authentication Tag List	82											
9F 4D	Transaction Log Entry	0B 0											
9F 4F	Transaction Log Format	9F 2					06	5F	2A	02	9A	03	9F
05.75	Application Life Couls Date (Masters and	36 0 03 1					00	00	00	चन	777	चन	कर
9F 7E	Application Life Cycle Data [Mastercard]	FF F											
		FF F											00
		38 4	1A	02	11	50	35	43	44	30	37	32	20
C3	Card Issuer Action Code - Decline	00 0	00	00									
	[Mastercard]												
C4	Card Issuer Action Code - Default	06 5	50	00									
	[Mastercard]												
C5	Card Issuer Action Code - Online	06 F	·В	00									
	[Mastercard]												
C6	Counters [Mastercard]	00 0	)2	00	00	00	00	00	00	00	00		
C7	CDOL1 Related Data Length	2B											
	[Mastercard]												
C8	CRM Country Code [Mastercard]	08 4	10	- U	SA								
C9	CRM Currency Code [M/Chip4]	08 4	10	- U	SD								
CA	Lower Cumulative Offline Transaction	00 0	00	00	00	00	00						
	Amount [M/Chip]												
СВ	Upper Cumulative Offline Transaction	00 0	00	00	00	00	00						
	Amount [M/Chip]												
CD	Card Issuer Action Code - Default	00 5	58	00									
	[PayPass M/Chip]												
CE	Card Issuer Action Code - Online	00 F	·8	00									
	[PayPass M/Chip]												
CF	Card Issuer Action Code - Denial	08 0	00	00									
	[PayPass M/Chip]												
D1	Currency Conversion Table [M/Chip]	08 4											
		00 0	00	00	80	40	00	00	00	80	40	00	00
Da	Additional Chapte Table 1845-4-11-11	00	10	00	च्य	च्च	च्य	च्च	चन	क्रक	च्य	च्य	ਰਾਜ਼
D3	Additional Check Table [Mastercard]	00 0 FF F						r r	r r	r r	r r	r r	ГĽ
D5	Application Control [M/Chip]	82 0											
D6	Default ARPC Response Code	00 1											
	[M/Chip4]		-										
D7	Application Control [PayPass M/Chip]	40 0	00	40									
DF 02	Security Limits Status [Mastercard]	00											
טו טב	Occurry Limits Status [Mastercard]												



## 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

Cardholder Verification Method List ('0205 4103 4203 5E03 1F00')						
CVM	Verification Method	ion Method Conditions If unsuccess				
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 value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	4D 41 53 54 45 52 43 41 52 44 20 44
	7 199 1100 110 11 2000 1	45 42 49 54 - 'MASTERCARD DEBIT'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 21 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 (1 E 1 (1 E 1	20 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	xx xx xx *
5F 25	Application Effective Date	
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 using
		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
	1 (02021)	9F 45 02 9F 4C 08 9F 34 03 9F 21 03
		9F 7C 14



Tag	Element name	Data Card v4.0
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 02 05 41 03 42 03 5E 03 1F 00 00 00
94	Application File Locator (AFL)	08 01 02 00
94	Application File Locator (AFL)	08 01 02 00
9F 07	Application Usage Control	FF CO
	The state of the s	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 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 xx A0 xx xx xx xx xx xx xx 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
		65 62 69 74 - 'Mastercard Debit'
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
9F 7E	Application Life Cycle Data [Mastercard]	7C 14 04 10 0B 14 00 01 00 00 50 17 79 00
9F / E	Application Life Cycle Data [Mastercard]	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) -	06 00 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 00
<u> </u>	, localitator i oppor Elitit [Masterdard]	



Color	Tog	Floment name	Data Card v4.0
Default [M/Chip Advance]   CE	Tag	Cord leaver Action Code (Contactless)	2 2 2 2
Online   M/Chip Advance    Card Issuer Action Code (Contactless) - Decline   M/Chip Advance      D1		Default [M/Chip Advance]	
CF	CE	·	06 FB 00
D1	CF	Card Issuer Action Code (Contactless) -	00 00 00
Table [Mastercard]	D1		08 40 00 00 00 08 40 00 00 00 08 40
PFF FFF FFF FFFFFFFFFFFFFFFFFFFFFFFFF			00 00 00 08 40 00 00 00 08 40 00 00
Default ARPC Response Code [M/Chip Advance]	D3	Additional Check Table [Mastercard]	
Advance	D5	Application Control [M/Chip Advance]	84 00 80 00 C6 02
D7	D6	· · · · · · · · · · · · · · · · · · ·	00 10
DB	D7		80 00 80 00 C6 02
DE			08 01 01 00 08 03 03 00
DF 02		, , ,	00 00 00 00 00 00 00 00
DF 11   Accumulator 1 Control (Contact)   [M/Chip Advance]   DF 12   Accumulator 2 Control (Contactless)   [M/Chip Advance]   DF 14   Accumulator 2 Control (Contact)   M/Chip Advance]   DF 15   Accumulator 2 Control (Contactless)   [M/Chip Advance]   DF 16   Accumulator 2 Currency Code   Mastercard]   DF 17   Accumulator 2 Currency Code   Mastercard]   DF 18   Accumulator 2 Currency Conversion   DF 19   Accumulator 2 Currency Conversion   DF 19   Accumulator 2 Currency Conversion   DF 19   Accumulator 2 Lower Limit [Mastercard]   O0   O0   O0   O0   O0   O0   O0   O			
DF 12		Advance]	C1
M/Chip Advance  DF 14   Accumulator 2 Control (Contact)   M/Chip Advance  DF 15   Accumulator 2 Control (Contactless)   M/Chip Advance  DF 16   Accumulator 2 Currency Code   Mastercard  DF 17   Accumulator 2 Currency Code   Mastercard  DF 18   Accumulator 2 Currency Conversion   DF 19   Accumulator 2 Currency Conversion   DF 19   Accumulator 2 Lower Limit [Mastercard]   DF 19   Accumulator 2 Upper Limit [Mastercard]   DF 19   Accumulator 2 Upper Limit [Mastercard]   DF 19   Accumulator 2 Upper Limit [Mastercard]   DF 10   Counter 1 Control (Contact) [M/Chip Advance]   DF 10   Counter 2 Control (Contact) [M/Chip Advance]   DF 10   Counter 2 Control (Contact) [M/Chip Advance]   DF 17   Counter 2 Control (Contactless) [M/Chip Advance]   DF 18   Counter 2 Upper Limit [Mastercard]   DF 19   Counter 2 Upper Limit [Mastercard]   DF 20   MTA CVM (Contact) [M/Chip Advance]   DF 21   Counter 2 Upper Limit [Mastercard]   DF 22   MTA CVM (Contact) [M/Chip Advance]   DF 23   MTA CVM (Contactless) [M/Chip Advance]   DF 24   MTA CVM (Contactless) [M/Chip Advance]   DF 25   MTA NoCVM (Contact) [M/Chip Advance]   DF 26   MTA NoCVM (Contactless) [M/Chip Advance]   DF 27   Number Of Days Offline Limit [M/Chip Advance]   DF 28   Accumulator 1 CVR Dependency Data   Contact) [M/Chip Advance]   DF 29   Accumulator 1 CVR Dependency Data   Contact) [M/Chip Advance]   DF 29   Accumulator 1 CVR Dependency Data   Contact) CVM Countactor CVM Contactor CVM COntactor CVM Dependency Data   Contactor CVM		[M/Chip Advance]	
[M/Chip Advance]	DF 12	[M/Chip Advance]	
M/Chip Advance   DF 16   Accumulator 2 Currency Code   [Mastercard]   DF 17   Accumulator 2 Currency Conversion   Table [Mastercard]   DF 17   Accumulator 2 Currency Conversion   Table [Mastercard]   DF 18   Accumulator 2 Lower Limit [Mastercard]   DF 19   Accumulator 2 Upper Limit [Mastercard]   DF 19   Accumulator 2 Upper Limit [Mastercard]   DF 10   Counter 1 Control (Contact) [M/Chip Advance]   DF 10   Counter 2 Control (Contact) [M/Chip Advance]   DF 10   Counter 2 Control (Contact) [M/Chip Advance]   DF 16   Counter 2 Control (Contactless) [M/Chip Advance]   DF 17   Counter 2 Lower Limit [Mastercard]   DF 18   Counter 2 Lower Limit [Mastercard]   DF 19   Counter 2 Control (Contactless) [M/Chip Advance]   DF 20   MTA CVM (Contact) [M/Chip Advance]   DF 21   Counter 2 Lower Limit [Mastercard]   DF 22   MTA CVM (Contactless) [M/Chip Advance]   DF 24   MTA CVM (Contactless) [M/Chip Advance]   DF 25   MTA NoCVM (Contact) [M/Chip Advance]   DF 26   MTA NoCVM (Contact) [M/Chip Advance]   DF 27   Number Of Days Offline Limit [M/Chip Advance]   DF 28   Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]   DF 29   Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]   DF 29   Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]   DF 29   Accumulator 1 CVR Dependency Data (Department)   DF 29   Accumulator 1 CVR Depart	DF 14		00
DF 16	DF 15		00
DF 17	DF 16	Accumulator 2 Currency Code	09 99
DF 18	DF 17	Accumulator 2 Currency Conversion	00 00 00 09 99 00 00 00 09 99 00 00
DF 19	DF 18	Accumulator 2 Lower Limit [Mastercard]	
DF 1A			
DF 1B         Counter 1 Control (Contactless) [M/Chip Advance]         C1           DF 1D         Counter 2 Control (Contact) [M/Chip Advance]         00           DF 1E         Counter 2 Control (Contactless) [M/Chip Advance]         00           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 Advance]         00 00 00 00 00 00 00           DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00 00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00 00 00 00 00 00 00 00 00 00		Counter 1 Control (Contact) [M/Chip	
DF 1D         Counter 2 Control (Contact) [M/Chip Advance]         00           DF 1E         Counter 2 Control (Contactless) [M/Chip Advance]         00           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 00           DF 23         MTA CVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00 00           DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00 00 00 00 00 00 00	DF 1B	Counter 1 Control (Contactless) [M/Chip	C1
DF 1E         Counter 2 Control (Contactless) [M/Chip Advance]         00           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 Advance]         00 00 00 00 00 00 00           DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00 00	DF 1D	Counter 2 Control (Contact) [M/Chip	00
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 Advance]         08 40 - USD           DF 24         MTA Currency Code [M/Chip Advance]         00 00 00 00 00 00 00           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00 00	DF 1E	Counter 2 Control (Contactless) [M/Chip	00
DF 21         Counter 2 Upper Limit [Mastercard]         00           DF 22         MTA CVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 23         MTA CVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00	DE 1E		00
DF 22         MTA CVM (Contact) [M/Chip Advance]         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 0			
DF 23         MTA CVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00			
DF 24         MTA Currency Code [M/Chip Advance]         08 40 - USD           DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00		MTA CVM (Contactless) [M/Chip	
DF 25         MTA NoCVM (Contact) [M/Chip Advance]         00 00 00 00 00 00 00 00           DF 26         MTA NoCVM (Contactless) [M/Chip Advance]         00 00 00 00 00 00 00           DF 27         Number Of Days Offline Limit [M/Chip Advance]         00 00 00 00 00 00           DF 28         Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]         00 00 00 00 00           DF 29         Accumulator 1 CVR Dependency Data         00 00 00	DE 24	2	08 40 - USD
Advance]  DF 26 MTA NoCVM (Contactless) [M/Chip 00 00 00 00 00 00 00 00 00 00 00 00 00			
Advance]  DF 27 Number Of Days Offline Limit [M/Chip Advance]  DF 28 Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]  DF 29 Accumulator 1 CVR Dependency Data 00 00 00		Advance]	
DF 27 Number Of Days Offline Limit [M/Chip Advance]  DF 28 Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]  DF 29 Accumulator 1 CVR Dependency Data 00 00 00	DF 26	, , , , , , , , , , , , , , , , , , , ,	00 00 00 00 00
DF 28 Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]  DF 29 Accumulator 1 CVR Dependency Data 00 00 00	DF 27	Number Of Days Offline Limit [M/Chip	00 00
DF 29   Accumulator 1 CVR Dependency Data   00 00 00	DF 28	Accumulator 1 CVR Dependency Data	00 00 00
(CONTACTIESS)   IVI/CHIP AUVANCE	DF 29		00 00 00



Tag	Element name	Data Card v4.0
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
DE 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]	
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip	20
	Advance]	

## 4.11.3 Contact: CVM List - U.S. checking, AID A000000004220301

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				

## 4.11.4 Contact: Application Tag data, AID A000000004220301

\* Tag value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	54 13 33
50	Application Label	55 53 20 43 48 45 43 4B 49 4E 47 - 'US CHECKING'
57	Track 2 Equivalent Data	54 13 33 00 89 02 00 60 D2 21 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 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	22 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



Tag	Element name	Data Card v4.0					
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 using 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 22 03 01					
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 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) List	00 00 00 00 00 00 00 00 02 05 42 03 1F 03 00 00 00 00					
94	Application File Locator (AFL)	08 01 01 00 08 03 03 00					
94 9F 07	Application File Locator (AFL) Application Usage Control	08 01 01 00 08 03 03 00 FF C0					
		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 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 xx A0 xx					
9F 11	Issuer Code Table Index	01					
9F 12	Application Preferred Name	55 53 20 43 68 65 63 6B 69 6E 67 20 20 20 20 - 'US Checking'					
9F 14 9F 17	Counter 1 Lower Limit [Mastercard] Personal Identification Number (PIN) 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					
9F 36	Application Transaction Counter (ATC)	xx xx *					
9F 42	Application Currency Code	08 40 - USD					
9F 4D 9F 4F	Transaction Log Entry Transaction Log Format	0B 0A 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										rd v	
9F 7E	Application Life Cycle Data [Mastercard]		10				01		00	50	17	79	00
							10 80						
							00						
C3	Card Issuer Action Code (Contact) -		00		00	00	00	00	00	00	00	00	00
CS	Decline [M/Chip Advance]		00	00									
C4		06	50	٥٥									
C4	Card Issuer Action Code (Contact) - Default [M/Chip Advance]	00	50	00									
OF.		06	FB	00									
C5	Card Issuer Action Code (Contact) -	00	гD	00									
-00	Online [M/Chip Advance]	09											
C6	PIN Try Limit [M/Chip Advance]	42											
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						
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						08						
	Table [Mastercard]		00	00	80	40	00	00	00	80	40	00	00
D0	A LEGIS AND TALLS TAKEN AND THE	00	00	00									
D3	Additional Check Table [Mastercard]					FF	FF	r.r.	P.P.	r r	r.r.	r.r.	PP
D5	Application Control [M/Chip Advance]					C6							
D6	Default ARPC Response Code [M/Chip		10										
D0	Advance]												
D7	Application Control [M/Chip Advance]	80	00	80	0.0	C6	02						
D9	Application File Locator (Contactless)				00		03	03	00				
DE	Log Data Table [M/Chip Advance]	00					00			0.0			
DF 02	Security Limits Status (Contact) [M/Chip	00	-					-	-				
DF 02	Advance	00											
DF 11	Accumulator 1 Control (Contact)	C1											
DETT	· , ,	-											
DF 12	[M/Chip Advance] Accumulator 1 Control (Contactless)	C1											
DF 12	[M/Chip Advance]	01											
DF 14		00											
DF 14	Accumulator 2 Control (Contact)												
DE 15	[M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless)	00											
DE 40	[M/Chip Advance]	00	99										
DF 16	Accumulator 2 Currency Code	09	23										
DE 47	[Mastercard]	00	0.0	00	00	00	09	0.0	00	00	00	0.0	0.0
DF 17	Accumulator 2 Currency Conversion						00						
	Table [Mastercard]	00	50	50	55	,,	50	50	50	55	,,	55	
DF 18	Accumulator 2 Lower Limit [Mastercard]		00	00	00	00	00						
DF 19	Accumulator 2 Upper Limit [Mastercard]					00							
DF 1A	Counter 1 Control (Contact) [M/Chip	C1											
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
55	Advance]												
DF 1D	Counter 2 Control (Contact) [M/Chip	00											
	Advance]												
L	· · · · · · · · · · · ·	1											



Tag	Element name	Data Card v4.0
DF 1E	Counter 2 Control (Contactless) [M/Chip	00
J	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]	08 40 - USD
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
DECA	(Contactless) [M/Chip Advance]	00.00.00
DF 2A	Accumulator 2 CVR Dependency Data	00 00 00
DE OD	(Contact) [M/Chip Advance]	00 00 00
DF 2B	Accumulator 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 2C	Counter 1 CVR Dependency Data	00 00 00
DI 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
DE 00	Advance]	00
DF 3C	CVR Issuer Discretionary Data	00
DF 3D	(Contact) [M/Chip Advance]  CVR Issuer Discretionary Data	00
טר אט	(Contactless) [M/Chip Advance]	"
DF 3F	Read Record Filter (Contact) [M/Chip	00
D: 01	Advance]	
DF 40	Read Record Filter (Contactless)	00
	[M/Chip Advance]	
DF 41	DS Management Control [M/Chip	20
	Advance]	
	· · · · ·	1



4.11.5 Contact: CVM List - Maestro debit, AID A000000043060

Cardho	Cardholder Verification Method List ('0205 4103 0203 0000')							
CVM	Verification Method	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	Fail					
4	No CVM required	Always	Fail					

## 4.11.6 Contact: Application Tag data, AID A0000000043060

\* Tag value changes with card usage

	* Tag value changes with card usage							
Tag	Element name	Data Card v4.0						
42	Issuer Identification Number (IIN)	67 99 99						
50	Application Label	4D 41 45 53 54 52 4F - 'MAESTRO'						
57	Track 2 Equivalent Data	67 99 99 89 00 00 00 02 01 0D 22 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 20 20 - 'USA DEBIT/Test Card 11'						
5F 24	Application Expiration Date	22 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	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 using 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	03						
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						
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 05 <b>41</b> 03 02 03 00 00 00 00						
94	Application File Locator (AFL)	08 01 02 00						
94	Application File Locator (AFL)	08 01 02 00						



Tag	Element name	Data Card v4.0
9F 07	Application Usage Control	FF CO
		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
0E 00	Application Varsian Number	b7 - International cashback allowed
9F 08	Application Version Number	B0 50 BC 88 00
9F 0D	Issuer Action Code - Default	00 00 00 00 00
9F 0E	Issuer Action Code - Denial	B0 70 BC 98 00
9F 0F	Issuer Action Code - Online	xx xx A0 xx xx xx xx xx xx xx xx xx
9F 10	Issuer Application Data [M/Chip 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
31 12	Application i referred Name	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	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]	A0 00 00 00 04 30 60 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) -	3F FB 00
	Online [M/Chip Advance]	
C6	PIN Try Limit [M/Chip Advance]	09
C7	CDOL1 Related Data Length	42
<u>C0</u>	[Mastercard]	00.40. USA
C8	CRM Country Code [Mastercard]	08 40 - USA 08 40 - USD
C9	Accumulator 1 Currency Code	00 40 - 000
CA	[Mastercard] 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) -	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]	
	Decline [M/Chip Advance]	



Tag	Element name	Da	ta								Ca	rd v	4.0
D1	Accumulator 1 Currency Conversion	08	40	00	00	00	08	40	00	00	00	08	40
	Table [Mastercard]	00 00	00	00	80	40	00	00	00	80	40	00	00
D3	Additional Check Table [Mastercard]					FF FF		FF	FF	FF	FF	FF	FF
D5	Application Control [M/Chip Advance]	84	00	80	00	С6	02						
D6	Default ARPC Response Code [M/Chip Advance]	00	10										
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 Advance]	00											
DF 11	Accumulator 1 Control (Contact) [M/Chip Advance]	C1											
DF 12	Accumulator 1 Control (Contactless) [M/Chip Advance]	C1											
DF 14	Accumulator 2 Control (Contact) [M/Chip Advance]	00											
DF 15	Accumulator 2 Control (Contactless) [M/Chip Advance]	00											
DF 16	Accumulator 2 Currency Code [Mastercard]	09	99										
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
	-	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 Advance]	C1											
DF 1B	Counter 1 Control (Contactless) [M/Chip Advance]	C1											
DF 1D	Counter 2 Control (Contact) [M/Chip Advance]	00											
DF 1E	Counter 2 Control (Contactless) [M/Chip Advance]	00											
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 Advance]	00	00	00	00	00	00						
DF 24	MTA Currency Code [M/Chip Advance]	08	40	- U	SD								
DF 25	MTA NoCVM (Contact) [M/Chip Advance]					00	00						
DF 26	MTA NoCVM (Contactless) [M/Chip Advance]	00	00	00	00	00	00						
DF 27	Number Of Days Offline Limit [M/Chip Advance]	00	00										
DF 28	Accumulator 1 CVR Dependency Data (Contact) [M/Chip Advance]	00	00	00									
DF 29	Accumulator 1 CVR Dependency Data (Contactless) [M/Chip Advance]	00	00	00									
DF 2A	Accumulator 2 CVR Dependency Data (Contact) [M/Chip Advance]	00	00	00									
DF 2B	Accumulator 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00	00	00									
DF 2C	Counter 1 CVR Dependency Data (Contact) [M/Chip Advance]	00	00	00									



Tag	Element name	Data	Card v4.0
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	

## 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 value changes with card usage

Tag	Element name	Data Card v4.0
42	Issuer Identification Number (IIN)	67 99 99
50	Application Label	55 53 20 53 41 56 49 4E 47 53 - 'US
		SAVINGS'
57	Track 2 Equivalent Data	67 99 99 89 00 00 00 02 01 0D 22 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
3F 2U	Cardilolder Name	73 74 20 43 61 72 64 20 31 31 20 20
		20 20 - 'USA DEBIT/Test Card 11'
5F 24	Application Expiration Date	22 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 v4.0
82	Application Interchange Profile	18 00
-	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 using
		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  A0 00 00 00 04 22 03 02
87	, ,	04
8C	Application Priority Indicator	9F 02 06 9F 03 06 9F 1A 02 95 05 5F
0C	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 00 00
94	Application File Locator (AFL)	08 01 01 00 08 03 03 00
94	Application File Locator (AFL)	08 01 01 00 08 03 03 00
9F 07	Application Usage Control	FF CO
		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 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 xx A0 xx xx xx xx xx xx xx xx
	Advance]	xx xx xx xx xx *
9F 11	Issuer Code Table Index	01
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)	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
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
		· <del>-</del>



Tag	Element name	Da	ta								Ca	rd v	4.0
9F 7E	Application Life Cycle Data [Mastercard]	04		0в	14	00	01	00	00	50	17	79	00
				00							00	00	00
				00		00			88			A5	
				00	00	00	00	00	00	00	00	00	00
C3	Card Issuer Action Code (Contact) -	00	00	00									
0.4	Decline [M/Chip Advance]	0.6	50	00									
C4	Card Issuer Action Code (Contact) -	06	50	00									
05	Default [M/Chip Advance]	0.6	FB	00									
C5	Card Issuer Action Code (Contact) -	06	гD	00									
	Online [M/Chip Advance]	09											
C6	PIN Try Limit [M/Chip Advance]	42											
C7	CDOL1 Related Data Length	42											
C8	[Mastercard]	00	40	- U:	ς Λ								
C9	CRM Country Code [Mastercard]			- U:									
C9	Accumulator 1 Currency Code [Mastercard]	08	40	- 0.	9D								
C A		00	00	00	٥٥	00	00						
CA CB	Accumulator 1 Lippor Limit [Mastercard]	00			00		00						
	Accumulator 1 Upper Limit [Mastercard]		50		00	00	00						
CD	Card Issuer Action Code (Contactless) -	00	50	00									
CE	Default [M/Chip Advance] Card Issuer Action Code (Contactless) -	06	FB	00									
0=	Online [M/Chip Advance]	00	гD	00									
CF	Card Issuer Action Code (Contactless) -	00	00	00									
CF	Decline [M/Chip Advance]	00	00	00									
D1	Accumulator 1 Currency Conversion	ΛR	40	00	٥٥	00	ΛR	40	00	٥٥	00	ΛR	40
וטו	Table [Mastercard]			00									
	Table [Mastercard]	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	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 / =	[M/Chip Advance]	~-											
DF 12	Accumulator 1 Control (Contactless)	C1											
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)	00											
DE 40	[M/Chip Advance]	00	99										
DF 16	Accumulator 2 Currency Code	09	23										
DF 17	[Mastercard]	09	00	00	٥٥	00	00	90	00	Ω٥	٥٥	nα	90
טר וו	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											
<b> </b>	\												
	Advance]												
DF 1B	Counter 1 Control (Contactless) [M/Chip	C1											
		C1											
	Counter 1 Control (Contactless) [M/Chip	C1 00											



Tag	Element name	Data Card v4.0
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 - USD
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
DE 07	Advance]	00 00
DF 27	Number Of Days Offline Limit [M/Chip	00 00
DF 28	Advance] Accumulator 1 CVR Dependency Data	00 00 00
DF 20	(Contact) [M/Chip Advance]	
DF 29	Accumulator 1 CVR Dependency Data	00 00 00
J. 20	(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
DF 2F	(Contact) [M/Chip Advance]	00 00 00
DF ZF	Counter 2 CVR Dependency Data (Contactless) [M/Chip Advance]	00 00 00
DF 30	Interface Enabling Switch [M/Chip	01
DI 30	Advance]	
DF 35	Security Limits Status (Contactless)	00
D. 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
DE 12	Advance]	
DF 40	Read Record Filter (Contactless)	00
DE 44	[M/Chip Advance]	20
DF 41	DS Management Control [M/Chip Advance]	
	Auvancej	



## 4.12 Test Card 12 - Discover, DI, 2-AID (U.S. Debit, Discover), English/Spanish/French, 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	Conditions	If unsuccessful			
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 value changes with card usage

	rag value changes with card usage		
Tag	Element name	Data Card v5.0	
42	Issuer Identification Number (IIN)	60 11 97	
50	Application Label	55 53 20 44 45 42 49 54 - 'US DEBIT'	
57	Track 2 Data [Discover]	60 11 97 37 00 00 00 05 D2 31 22 01	
		10 00 07 49 00 00 0F	
5A	Application Primary Account Number (PAN)	60 11 97 37 00 00 00 05	
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 32 20 20	
O 4	A 11 41 E 1 41 B 4	20 20 - 'USA DEBIT/Test Card 12'	
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,	
		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	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 01 52 40 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 34 03	
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04	
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	Data Card v5.0
9F 07	Application Usage Control	FF 00
01 01	7 Application Coago 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 NOT allowed
		b7 - International cashback NOT 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
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 02 06 9F 1A 02 5F 2A 02 9A 03 9F
0. 00	(PDOL)	35 01
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
01 41	Transaction Log Format	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]	01
C1	Application Configuration Options [DPAS]	15 48
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
	0 0 1 4 [554.0]	00 00 00 00 00 00 00 00 00 00 00 00 00
C3	Currency Conversion Codes 1 [DPAS]	
C4	Currency Conversion Codes 2 [DPAS]	** ** ** **
C5	Card Action Code - Denial [DPAS]	01 00
C6	Card Action Code - Default [DPAS]	2E 1F
C7	Card Action Code - Online [DPAS]	FE 1F
D0	Issuer Application Data ObjectList (IADOL) [DPAS]	
D2	CRM Country Code [DPAS]	08 40 - USA
D3	CRM Currency Code [DPAS]	08 40 - USD
DF 11	PDOL Check Table - Profile (PDOLP) [DPAS]	01 09 41 00 00 41 A0 11 FF 01 01
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 10 01 01 00 18
	[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
DF 21	Transaction Profile Objects(TPO1)	E0 10 00 08 01 01 00 10 01 01 00 18
	[DPAS]	02 02 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
		00 00



## 4.12.3 Contact: CVM List - Discover Debit, AID A0000001523010

Cardho	Cardholder Verification Method List ('0201 0203 1E03 1F03')					
CVM	Verification Method Conditions If		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 value changes with card usage

		1 ag value changes with card usage
Tag	Element name	Data Card v5.0
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 - 'DISCOVER DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 00 05 D2 31 22 01
		10 00 07 49 00 00 0F
5A	Application Primary Account Number (PAN)	60 11 97 37 00 00 00 05
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 2F 54 65
SF 20	Cardnoider Name	73 74 20 43 61 72 64 20 31 32 20 20
		20 20 - 'USA DEBIT/Test Card 12'
5F 24	Application Expiration Date	23 12 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,
		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	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
50	1 (CDOL1)	2A 02 9A 03 9C 01 9F 37 04 9F 35 01
	(ODOLI)	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
	` ,	40 00 15 00 15 00
	List	42 03 1E 03 1F 03



Tag	Element name	Data Card v5.0
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
25.00		b7 - International cashback NOT 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
0=	Try Counter (1.0)	
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 35 01
	(PDOL)	
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]	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 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
D0	Issuer Application Data ObjectList	
Do	(IADOL) [DPAS]	00.40.1104
D2	CRM Country Code [DPAS]	08 40 - USA
D3	CRM Currency Code [DPAS]	08 40 - USD
DF 11	PDOL Check Table - Profile (PDOLP) [DPAS]	01 09 41 00 00 41 A0 11 FF 01 01
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 10 01 01 00 18
	[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
DF 21	Transaction Profile Objects(TPO1)	E0 10 00 08 01 01 00 10 01 01 00 18
	[DPAS]	02 02 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
1		00 00



4.12.5 Contactless: CVM List - Discover U.S. Debit, AID A0000001524010

Cardholder Verification Method List ('0203 1F03')							
CVM	Verification Method	Conditions	If unsuccessful				
1	Online PIN	Terminal supports CVM type	Fail				
2	No CVM required	Terminal supports CVM type	Fail				

## 4.12.6 Contactless: Application Tag data, AID A0000001524010

\* Tag value changes with card usage

		* Tag value changes with card usage					
Tag	Element name	Data Card v5.0					
42	Issuer Identification Number (IIN)	60 11 97					
50	Application Label	55 53 20 44 45 42 49 54 20 20 - 'US DEBIT'					
57	Track 2 Data [Discover]	60 11 97 37 00 00 00 05 D2 31 22 01 10 00 07 49 00 00 0F					
5A	Application Primary Account Number (PAN)	60 11 97 37 00 00 00 05					
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	23 12 31					
5F 25	Application Effective Date	xx xx xx *					
5F 28	Issuer Country Code	08 40 - USA					
5F 2D	Language Préference	65 6E 65 73 66 72 - 'enesfr' (English, 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 CL]	10 00 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 using 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) List	00 00 00 00 00 00 00 00 02 03 1F 03					
94	Application File Locator (AFL)	08 01 02 00 18 01 01 00					
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					
1							
9F 08	Application Version Number	00 01					
9F 08 9F 10		00 01 xx 15 xx xx xx xx xx xx xx xx *					
	Application Version Number Issuer Application Data [DPAS CL] Application Cryptogram (AC)						
9F 10	Issuer Application Data [DPAS CL]	xx 15 xx xx xx xx xx xx xx xx *					



Tag	Element name	Da	ta								Са	rd v	5.0
9F 38	Processing Options Data Object List		66	04	9F	02	06	9F	03	06			
	(PDOL)	5F	2A	02	9A	03	9C	01	9F	37	04		
9F 4D	Transaction Log Entry	0в	0 <b>A</b>										
9F 4F	Transaction Log Format	9F	02	06	5F	2A	02	9A	03	9F	36	02	9F
			03										
			02							9F	53	80	9F
05.00	Cond Transaction Conditions (DDAC)		04	9 F	71	02	9F.	6C	02				
9F 6C	Card Transaction Qualifiers [DPAS]		89										
9F 71	Card Processing Requirements [DPAS]		89										
9F 71	Card Processing Requirements [DPAS]	01	09										
9F 78	Application State [D-PAS]		02	00	00	0.4	0.4	00	Λ1	Λ1	00		
BF 51	Contactless D-PAS MS and ZIP Default Profile	02	02	00	00	94	04	06	ΟI	01	00		
C0		0.3	88										
CO	Contactless Application Configuration	03	00										
C2	Options (CL-ACO) Issuer Life Cycle Data (ILCD) [DPAS]	00	00	00	00	00	00	00	00	00	00	00	00
02	issuer Life Cycle Data (ILCD) [DPAS]		00										
			00										
			00				00	00	00	00	00	00	00
C3	Currency Conversion Codes 1 [DPAS]		40										
C4	Currency Conversion Codes 2 [DPAS]		40										
C8	Lower Consecutive Offline Amount	00	00	00	00	00	00						ļ
	(LCOA) Limit [DPAS]												
C9	Upper Consecutive Offline Amount Limit	00	00	00	00	00	00						ļ
	(UCOA) [DPAS]												
CA	Single Transaction Amount (STA) Limit	00	00	00	00	00	00						ļ
OD	[DPAS]	00											
СВ	Lower Consecutive Offline Limit (LCOL)	00											
CC	[DPAS] Upper Consecutive Offline Transaction	00											
	Limit (UCOL) [DPAS]												
CD	Number of Consecutive Offline	00											
	Transactions (NCOT) [DPAS]												
CE	Cumulative Offline Amount [DPAS]	00	00	00	00	00	00						
D0	Issuer Application Data ObjectList												
	(IADOL) [DPAS]												
D1	Offline Balance [DPAS]	00	00	00	00	00	00						
D2	CRM Country Code [DPAS]	08	40	- U	SA								
D3	CRM Currency Code [DPAS]	08	40	- U	SD								
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										
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	ļ
	[DPAS]												



Tag	Element name	Da	ta								Ca	rd v	5.0
DF 21	Transaction Profile Objects(TPO1)	40	40	00	10	00	80	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	FF OO	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	00	00	00	00					
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											

### 4.12.7 Contactless: Application Tag data, AID A0000001523010

\* Tag value changes with card usage

Tag	Element name	Data Card v5.0
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 - 'DISCOVER DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 00 05 D2 31 22 01
<i>-</i> ^	Application Drive on Account Number	10 00 07 49 00 00 0F 60 11 97 37 00 00 00 05
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 (1 E 1 (1 E 1	CARDMEMBER'
5F 24	Application Expiration Date	23 12 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, 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
	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 using
		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 v5.0
9F 07	Application Usage Control	FF 00
0. 0,	FFsaus Soago Soniaoi	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 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
		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 (PDOL)	5F 2A 02 9A 03 9C 01 9F 37 04
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Entry  Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F
∂l⁻ 4Γ	Transaction Log Fulliat	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 6C	Card Transaction Qualifiers [DPAS]	00 00
9F 71	Card Processing Requirements [DPAS]	00 8B
9F 71	Card Processing Requirements [DPAS]	00 8B
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
DI 31	Profile	02 02 00 00 31 01 00 01 01
C0	Contactless Application Configuration	03 88
	Options (CL-ACO)	
C2	Issuer Life Cycle Data (ILCD) [DPAS]	00 00 00 00 00 00 00 00 00 00 00 00
02	locaci Elio Oyolo Bata (1208) [51 710]	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
	(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 00
0,1	[DPAS]	
СВ	Lower Consecutive Offline Limit (LCOL)	00
	[DPAS]	
СС	Upper Consecutive Offline Transaction	00
	Limit (UCOL) [DPAS]	
CD		00
CD	Number of Consecutive Offline	
OF.	Transactions (NCOT) [DPAS]	00 00 00 00 00 00
CE	Cumulative Offline Amount [DPAS]	00 00 00 00 00 00
D0	Issuer Application Data ObjectList	
D:	(IADOL) [DPAS]	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
D4	CVM-Accumulator [DPAS]	00 00 00 00 00 00
D5	CVM-Cum limit 1	00 00 00 00 00 00



Tag	Element name	Da	ta								Ca	ırd v	5.0
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 Options (CACO) [D-PAS]	C1	01	09	01	01	00						
DF 11	PDOL Check Table - Profile (PDOLP) [DPAS]	01	09	41	00	00	41	A0	11	FF	01	01	
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				00
							00		00	00	00	00	00
DF 30	CRM-CAC Switch Interface [D-PAS]		00		00	00	00	00					
DF 31	CRM-CAC Denial [D-PAS]	00	00										
DF 32	CRM-CAC Online [D-PAS]		7E										
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											



# 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

Cardho	Cardholder Verification Method List ('4203 1F03 0000')					
CVM	CVM Verification Method Conditions If uns		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 value changes with card usage

Tag	Element name	Data Card v5.0
42	Issuer Identification Number (IIN)	60 11 97
50	Application Label	55 53 20 44 45 42 49 54 - 'US DEBIT'
57	Track 2 Data [Discover]	60 11 97 37 00 00 00 05 D2 31 22 01
		10 00 07 49 00 00 OF
5A	Application Primary Account Number	60 11 97 37 00 00 00 05
	(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
55.04	A - Partie - Faring Date	20 20 - 'USA DEBIT/Test Card 13'
5F 24	Application Expiration Date	23 12 31 xx xx xx *
5F 25	Application Effective Date	
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
		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 Data Chiest List	9F 34 03 91 0A 8A 02 95 05 9F 37 04
טט	Card Risk Management Data Object List	JI OR OR OZ 93 03 9E 37 04
ог	2 (CDOL2)	00 00 00 00 00 00 00 00 02 03 1F 03
8E	Cardholder Verification Method (CVM)	00 00 00 00 00 00 00 00 02 03 12 03
0.4	List	08 01 01 00 10 01 02 00 18 01 01 00
94	Application File Locator (AFL)	00 01 01 00 10 01 02 00 10 01 01 00



Tag	Element name	Data Card v5.0
9F 07	Application Usage Control	AB 00
	3	BYTE 1:
		b8 - Domestic cash transactions 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- Terminals other than ATMs valid
		BYTE 2:
		b8 - Domestic cashback NOT allowed
		b7 - International cashback NOT 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 - '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	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 78	Application State [D-PAS]	66 04 9F 71 02 9F 6C 02
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
02	losder Elie Gyole Bata (IEGB) [Bi 710]	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
D0	Issuer Application Data ObjectList	
	(IADOL) [DPAS]	
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 01
	[DPAS]	
DF 20	Transaction Profile Objects(TPO0)	00 18 00 08 01 01 00 10 01 02 00 18
	[DPAS]	01 01 00 00 00 00 00 00 00 00 00 00 00 0
		00 FE 1F 2E 1F 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00 00
		00 00



#### 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 value changes with card usage

Tag	Element name	Data Card v5.0
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 - Partie - Faring Date	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
0D	Cord Diek Management Date Chiest 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)	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 v5.0
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 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 xx *
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	
D0	(IADOL) [DPAS]	00.40. UCA
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 00 00 00 00 00 00 00 00 00 00 00
	[DPAS]	00 00 00 00 00 00 00 00 00 00 00 00
		00 F6 1F 22 0B 00 00 00 00 00 00 00
		00 00 00 00 00 00 00 00 00 00 00
		00 00



# 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'.

The recommended transaction amount to generate a host approval is \$30.00.

#### 4.15.1 Contact: CVM List - Interac, AID A0000002771010

Cardholder Verification Method List ('0103 0203')				
CVM	Verification Method	Conditions	If unsuccessful	
1	Offline Plaintext PIN	Terminal supports CVM type	Fail	
2	Online PIN	Terminal supports CVM type	Fail	

#### 4.15.2 Contact: Application Tag data, AID A0000002771010

\* Tag value changes with card usage

		rag value changes with card usage
Tag	Element name	Data Card v4.0
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'
57	Track 2 Equivalent Data	19 67 30 28 39 01 86 44 D2 21 22 20
	·	08 97 74 00 00 00 1F
5A	Application Primary Account Number (PAN)	19 67 30 28 39 01 86 44
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
		20 20 - 'USA DEBIT/Test Card 15'
5F 24	Application Expiration Date	22 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	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 02 77 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 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) List	00 00 00 00 00 00 00 00 01 03 02 03
94	Application File Locator (AFL)	08 01 02 00 10 01 01 00
<u> </u>	/ ipplication in Locator (/ ii L)	



Tag	Element name	Data Card v4.0
9F 07	Application Usage 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 NOT allowed b7 - International cashback NOT allowed
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	FC E8 FC 98 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	FC E8 FC 98 00
9F 10	Issuer Application Data [InteracFlash]	xx xx 85 xx
9F 13	Last Online Application Transaction Counter (ATC) Register	00 00
9F 17	Personal Identification Number (PIN) Try Counter	09
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 02 06 9F 1A 02 5F 2A 02 9F 37 04
9F 42	Application Currency Code	01 24 - CAD
9F 44	Application Currency Exponent	02
9F 4D	Transaction Log Entry	OB OA
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 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

### 4.15.3 Contactless: CVM List - Interac Flash, AID A0000002771010

Cardholder Verification Method List ('0203 0103')									
CVM	Verification Method Conditions If unsuccessful								
1	Online PIN	Terminal supports CVM type	Fail						
2	Offline Plaintext PIN	Terminal supports CVM type	Fail						

#### 4.15.4 Contactless: Application Tag data, AID A0000002771010

\* Tag value changes with card usage

Tag	Element name	Data	Card v4.0
50	Application Label	49 6E 74 65 72 61 63 - Intera	ac'
57	Track 2 Equivalent Data	19 67 30 28 39 01 86 44 D2 08 97 74 00 00 00 1F	21 22 20
5A	Application Primary Account Number (PAN)	19 67 30 28 39 01 86 44	
5F 20	Cardholder Name	55 53 41 20 44 45 42 49 54 73 74 20 43 61 72 64 20 31 20 20 - 'USA DEBIT/Test Card 15	35 20 20
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	01 24 - CAN	



Data Tag Element name Card v4.0 65 6E 66 72 - 'enfr' (English, French) 5F 2D Language Preference 5F 30 02 20 Service Code 5F 34 01 Application PAN Sequence Number 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 A0 00 00 02 77 10 10 84 Dedicated File (DF) Name 01 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 45 02 1 (CDOL1) 9F 4C 08 9F 34 03 91 0A 8A 02 95 05 9F 37 04 9F 4C 08 8D Card Risk Management Data Object List 8E 00 00 00 00 00 00 00 00 02 03 1F 03 Cardholder Verification Method (CVM) 94 Application File Locator (AFL) 08 01 03 00 FF 00 9F 07 **Application Usage 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 BYTF 2. b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed 00 02 9F 08 **Application Version Number** FC E8 FC 98 00 9F 0D Issuer Action Code - Default 9F 0E Issuer Action Code - Denial 00 00 00 00 00 9F 0F FC E8 FC 98 00 Issuer Action Code - Online 9F 10 Issuer Application Data [InteracFlash] **xx xx xx xx xx xx xx xx xx \*** 9F 13 Last Online Application Transaction xx xx \* Counter (ATC) Register 09 9F 17 Personal Identification Number (PIN) Try Counter 9F 26 Application Cryptogram (AC) xx xx xx xx xx xx xx \*\* 80 9F 27 Cryptogram Information Data (CID) 9F 36 Application Transaction Counter (ATC) xx xx \* 9F 59 03 9F 5A 01 9F 02 06 9F 1A 02 9F 38 **Processing Options Data Object List** 5F 2A 02 9F 37 04 9F 58 01 (PDOL) 9F 42 **Application Currency Code** 01 24 - CAD 02 9F 44 **Application Currency Exponent** 0B 0A 9F 4D Transaction Log Entry 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 9F 4F **Transaction Log Format** 1A 02 95 05 9C 01 8A 02 00 01 Card Product Code [InteracFlash] 9F 62 Card Transaction Information xx xx xx \* 9F 63 [InteracFlash] 00 9F 70 Form Factor Indicator [InteracFlash]



# 4.16 Test Card 16 - Interac, CO, 1-AID (Interac), English, CAN, CAD

A contact-only, 1-AID(Interac) Interac (Canadian) debit card with an Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

The recommended transaction amount to generate a host approval is \$30.00.

#### 4.16.1 Contact: CVM List - Interac, AID A0000002771010

Cardholder Verification Method List ('4103 0203')									
CVM	Verification Method Conditions If unsuccessful								
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM						
2	Online PIN	Terminal supports CVM type	Fail						

#### 4.16.2 Contact: Application Tag data, AID A0000002771010

\* Tag value changes with card usage

		rag value changes with card usage
Tag	Element name	Data Card v4.0
50	Application Label	49 4E 54 45 52 41 43 - 'INTERAC'
57	Track 2 Equivalent Data	45 06 44 50 06 93 19 33 D2 21 22 20
		01 62 90 74 00 00 0F
5A	Application Primary Account Number	45 06 44 50 06 93 19 33
	(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 36 20 20
		20 20 - 'USA DEBIT/Test Card 16'
5F 24	Application Expiration Date	22 12 31
5F 25	Application Effective Date	xx xx xx *
5F 28	Issuer Country Code	01 24 - CAN
5F 2D	Language Preference	65 6E - 'en' (English)
5F 30	Service Code	02 20
5F 34	Application PAN Sequence Number	01
82	Application Interchange Profile	1C 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 02 77 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
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 41 03 02 03
	List	
8F	Certification Authority Public Key Index	55



Tag	Element name	Data Card v4.0
90	Issuer Public Key Certificate	6C 16 73 99 B8 BE 0C CA 2A A9 EF 30
	, and a second	EC F5 14 C4 F4 F1 F0 89 85 8A 46 08
		6F 12 F2 80 B6 81 FD CA 40 8C 09 51
		CO D6 BA 64 FD 05 C7 2C 5A 23 B2 66
		DA 11 D6 75 BA B2 AC 74 C5 AF E0 41 A6 94 2D 84 FC 19 0D C0 6D 83 CF 17
		71 F2 F9 74 B8 31 73 5A A1 30 39 4D
		12 DC CF D5 74 61 D1 20 E5 58 F6 35
		12 F6 DB 82 46 DD 41 00 9F A1 D9 73
		1B 27 42 F9 7E FD 2B C1 16 DF B9 AF
		7A 96 6A CF 12 83 A8 49 A7 A9 73 6A
		OD 8A E2 63 98 36 BC A6 9B D9 EE 78
92	Issuer Public Key Remainder	EC A4 19 2A 02 CA AC 0B 75 22 44 EC AE 9F 1A BA 46 15 E7 05 27 AD D0 D8
		03 67 54 CA 9F A5 2E 7D 42 16 22 0F
93	Signed Static Application Data	8E 85 10 B3 4A D5 75 23 55 88 FA 87
33	oigned otatic Application Data	FA 27 F7 47 AC 0C F3 0E 61 71 55 83
		E6 DD D8 53 13 A1 99 C7 A6 77 7A 02
		BE CF 20 18 14 99 AB 7A 9A 2E A3 09
		F0 B0 94 0C 03 34 0B AB 91 CC 6E 46
		52 44 93 D4 CD 22 0B 62 36 27 64 7D 23 03 B0 03 8A C5 E5 5B 80 D1 B4 EC
		01 68 4F 43 AB EC A9 03 77 48 6C 26
		CE 1D 5E 83 73 90 1C E1 6C 5F 9C 70
		C5 44 53 67 94 3F 8F 03 91 0E 67 C9
		D4 3E F7 92 D8 35 D2 D2 42 D4 DA 6F
		C7 6B E1 71 52 05 75 1B 79 F4 51 33
94	Application File Locator (AFL)	10 01 01 00 10 02 04 01 10 06 06 00
0= 0=		B0 01 01 00
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 01
9F 0D	Issuer Action Code - Default	B0 70 BC 80 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 70 BC 98 00
9F 11	Issuer Code Table Index	01
9F 12	Application Preferred Name	49 6E 74 65 72 61 63 - 'Interac'
9F 13	Last Online Application Transaction	xx xx *
	Counter (ATC) Register	
9F 17	Personal Identification Number (PIN)	09
	Try Counter	
9F 1F	Track 1 Discretionary Data	31 36 32 39 30 37 34 30 30 30 30 31
	The state of the s	30 30 30 30 30 30 30 30 30 30 30 30
9F 32	Issuer Public Key Exponent	03
9F 36	Application Transaction Counter (ATC)	xx xx *
9F 38	Processing Options Data Object List	9F 02 06 9F 1A 02
	(PDOL)	
9F 44	Application Currency Exponent	02
-	· · · · · · · · · · · · · · · · · · ·	



Tag	Element name	Da	ta								Са	rd v	4.0
9F 46	ICC Public Key Certificate	31	ΑE	EC	E5	72	75	2D	6E	E7	D7	BA	E1
	, , , , , , , , , , , , , , , , , , , ,	5A	в0	59	7D	71	EE	6D	C0	EB	1A	F2	54
			_			_			_	1C			
		_			-			-		9A		-	-
			_	_		_			_	5D	_	_	
				_	_			_		07	-	-	
			_			_				83 52			-
				_						A9		_	_
		_	_		_	_	_	-		FC	_	_	-
					_	_	_		_	F0		_	
										11			
9F 47	ICC Public Key Exponent	03											
9F 48	ICC Public Key Remainder	C7	FC	17	8E	7 <b>A</b>	76	F6	F4	17	вс	8F	E6
	,		-	89	15	DE	93	В5	E5	ED	38	EF	EC
		_	69										
9F 49	Dynamic Data Authentication Data	9F	37	04									
	Object List (DDOL)												
9F 4A	Static Data Authentication Tag List	82											
9F 51	Lower Cumulative Offline Limit	01	24										
	[InteracFlash]												
9F 52	Merchant Type Indicator Limits 01	C0	38	00	00	00	00						
	[InteracFlash]												
9F 54	Merchant Type Indicator Limits 02	00	00	00	00	00	00						
	[InteracFlash]												
9F 56	Merchant Type Indicator Limits 04	80											
	[InteracFlash]												
9F 57	Merchant Type Indicator Limits 05	01	24										
	[InteracFlash]												
9F 5C	Upper Cumulative Offline Limit	00	00	00	00	00	00						
	[InteracFlash]												
9F 68	Contact CIAC Default [InteracFlash]	10	00	10	00								
9F 6D	Contactless CIAC Online [InteracFlash]	00	00	00	00	00	00						



### **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	01011000	59	Y
02	0000001	02	STX	46	00101110	2E		90	01011010	5A	Z
03	00000011	03	ETX	47	00101111	2F	1	91	01011011	5B	<u> </u>
04	00000100	04	EOT	48	00110000	30	0	92	01011100	5C	i
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	00011010	1A	SUB	70	01000110	46	F	114	01110010	72	r
27	00011011	1B	ESC	71	01000111	47	G	115	01110011	73	S
28	00011100	1C	FS	72	01001000	48	Н	116	01110100	74	t
30	00011101	1D 1E	GS RS	73 74	01001001	49 4A	J	117 118	01110101 01110110	75 76	u
31	00011110	1F	US	75	01001010	4A 4B	K	119	01110110	77	V W
32	00111111	20	SP	76	01001011	4C	L	120	011110111	78	
33	00100000	21	۶r !	77	01001100	4C 4D	M	121	01111000	79	У
34	00100001	22		78	01001101	4E	N	122	01111001	7A	z
35	00100011	23	#	79	01001111	4F	0	123	01111010	7B	- -
36	00100011	24	\$	80	01010000	50	P	124	01111100	7C	ı
37	00100100	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				