



**B2 Fleet
EMV™ Test Card Set**

Version 3.00

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B2 Contact Information

Canada
251 Consumers Road, Suite 1200, Toronto, ON M2J 4R3
Tel: 416.730.9827

U.S.A.
1615 S. Congress Avenue, Suite 103, Delray Beach, FL 33445
Tel: 470.233.7374

Revision History

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1.00	July 10, 2019	<ul style="list-style-type: none">• Initial document release
2.00	January 17, 2020	<ul style="list-style-type: none">• TC01 – TC04: All cards v4.0 have new expiry date
3.00	September 16, 2020	<ul style="list-style-type: none">• TC05-TC12 – updated cardstock support, where applicable "MasterCard" > "Mastercard"

Table of Contents

Chapter 1 - Overview	3
1.1 B2 Fleet EMV Test Cards - Purpose	3
1.2 Target Audience	3
Chapter 2 - Fleet Cards Overview	3
2.1 Liability Shift and EMV	3
2.2 Fleet Card Industry Standards.....	3
2.3 Fleet Service Indicators (FSI).....	3
2.4 Fleet Cards - Mastercard & Visa	4
Chapter 3 - B2 Fleet EMV Test Card Set Profiles	8
3.1 Test Card 01 - Visa, CO, FSI 004, English, USA, USD	10
3.1.1 Contact: CVM List - AID A0000000031010	10
3.1.2 Contact: Application Tag Data, AID A0000000031010	10
3.2 Test Card 02 - Visa, CO, FSI 013, English, USA, USD	13
3.2.1 Contact: CVM List - AID A0000000031010	13
3.2.2 Contact: Application Tag Data, AID A0000000031010	13
3.3 Test Card 03 - Visa, CO, FSI 022, English, USA, USD	16
3.3.1 Contact: CVM List - AID A0000000031010	16
3.3.2 Contact: Application Tag Data, AID A0000000031010	16
3.4 Test Card 04 - Visa, CO, FSI 005, English, USA, USD	19
3.4.1 Contact: CVM List - AID A0000000031010	19
3.4.2 Contact: Application Tag Data, AID A0000000033010	19
3.5 Test Card 05 - Mastercard, CO, FSI 012, English, USA, USD	22
3.5.1 Contact: CVM List - AID A0000000041010	22
3.5.2 Contact: Application Tag Data, AID A0000000041010	22
3.6 Test Card 06 - Mastercard, CO, FSI 024, English, USA, USD	25
3.6.1 Contact: CVM List - AID A0000000041010	25
3.6.2 Contact: Application Tag Data, AID A0000000041010	25
3.7 Test Card 07 - Mastercard, CO, FSI 023, English, USA, USD	28
3.7.1 Contact: CVM List - AID A0000000041010	28
3.7.2 Contact: Application Tag Data, AID A0000000041010	28
3.8 Test Card 08 - Mastercard, CO, FSI 011, English, USA, USD	31
3.8.1 Contact: CVM List - AID A0000000041010	31
3.8.2 Contact: Application Tag Data, AID A0000000041010	31
3.9 Test Card 09 - Mastercard, CO, FSI 014, English, USA, USD	34
3.9.1 Contact: CVM List - AID A0000000041010	34
3.9.2 Contact: Application Tag Data, AID A0000000041010	34
3.10 Test Card 10 - Mastercard, CO, FSI 015, English, USA, USD	37
3.10.1 Contact: CVM List - AID A0000000041010	37
3.10.2 Contact: Application Tag Data, AID A0000000041010	37
3.11 Test Card 11 - Mastercard, CO, FSI 022, English, USA, USD	40
3.11.1 Contact: CVM List - AID A0000000041010	40
3.11.2 Contact: Application Tag Data, AID A0000000041010	40
3.12 Test Card 12 - Mastercard, CO, FSI 011, English, USA, USD	43

3.12.1	Contact: CVM List - AID A0000000041010	43
3.12.2	Contact: Application Tag Data, AID A0000000041010	43
Chapter 4 - ASCII Character Conversion Chart.....		46

Chapter 1 - Overview

1.1 B2 Fleet EMV Test Cards - Purpose

This set of test cards is designed for clients who wish to perform internal development, testing and training of EMV fleet card solutions.

1.2 Target Audience

This document is intended for integrators, developers, POS vendors and merchants who wish to develop an EMV solution that supports EMV fleet functionality.

Chapter 2 - Fleet Cards Overview

2.1 Liability Shift and EMV

The U.S. market is preparing for the October 2020 Automatic Fuel Dispenser (AFD) EMV counterfeit liability shift.

At the time of this document's publication, the card brands have not yet established certification processes specific for the acceptance of fleet cards.

Merchants are encouraged to work with their acquirer, terminal developers and suppliers to define, develop and test EMV terminal configurations for the acceptance of EMV fleet cards.

2.2 Fleet Card Industry Standards

No single industry organization exists to define specifications and guidelines on how stakeholders should prepare for the liability shift. However, Conexus www.conexus.org and the US Payment Forum <https://www.uspaymentsforum.org/> are working together to define a common standard for EMV based fleet cards.

2.3 Fleet Service Indicators (FSI)

Due to the co-existence of magnetic stripe and chip terminals, the simplest way to incorporate fleet prompts is to mirror the process in use for today's existing magnetic stripe environment, by adding Fleet Service Indicators to the chip content.

The current standard uses the last three non-zero digits of the magstripe Track 2 Discretionary Data to specify fleet information which is used to determine which prompts should be presented to the cardholder.

Layout:

Digit 1 - Reserved for Future Use

Digit 2 - Service Enhancement Indicator (SEI) - see below

Digit 3 - Service Prompt (SP) - see below

Prompts:

It is important to consult your acquirer to determine any specific (test) host values for such things as Vehicle Number or Driver ID, etc.

2.4 Fleet Cards - Mastercard & Visa

The definition and terminology for the prompts differs, though only very slightly, from card brand to brand. The Visa and Mastercard Fleet Service Indicator mapping are shown below.

Fleet Service Indicator - Visa Fleet cards

The Fleet Service Indicator is located in the last 3 non-zero digits of the Track 2 Discretionary Data. This indicator is present on both the magstripe and in the Track 2 Equivalent Data - EMV Tag ('57').

Field Position 1 - Reserved for Future Use; default value is 0 (zero)

Field Position 2 - Service Enhancement Indicator

- 0 = No Restriction - i.e. fuel, maintenance, non-fuel purchases
- 1 = Fuel and maintenance-only purchases
- 2 = Fuel-only purchases
- 3-9 = Reserved

Field Position 3 - Service Prompt

- 0 = Reserved (no prompt required)
- 1 = Identification (ID) and odometer reading
- 2 = Vehicle ID and odometer reading
- 3 = Driver ID and odometer reading
- 4 = Odometer reading
- 5 = No prompt
- 6 = ID1 (six-digit vehicle, driver or generic ID)

Visa Card Table			
Test Card	Fleet Service Indicator	Service Enhancement Indicator	Service Prompt
01	004	Fuel, Maintenance, Non-fuel	Odometer
02	013	Fuel, Maintenance	Driver, Odometer
03	022	Fuel-only	Vehicle, Odometer
04	005	Fuel, Maintenance, Non-fuel	No prompt

Fleet Service Indicator - Mastercard Fleet Cards:

The Fleet Service Indicator is located in the last 3 non-zero digits in Track 2 Discretionary Data. This indicator is present on both the magstripe and in the Track 2 Equivalent Data - EMV Tag ('57').

Field Position 1 - Reserved for Future Use; the default value is 0 (zero)

Field Position 2 - Service Enhancement Indicator

- 0 = No Restriction - i.e. fuel, maintenance, non-fuel purchases
- 1 = Fuel and other goods purchases
- 2 = Fuel-only purchases
- 3-9 = Reserved

Field Position 3 - Service Prompt

- 0 = Reserved (no prompts are required)
- 1 = Identification (ID) and odometer reading
- 2 = Vehicle number and odometer reading
- 3 = Driver number and odometer reading
- 4 = Odometer reading
- 5 = No prompts
- 6 = ID1

Mastercard Card Table			
Test Card	Fleet Service Indicator	Service Enhancement Indicator	Service Prompt
05	012	Fuel, Other goods	Vehicle, odometer
06	024	Fuel-only	Odometer
07	023	Fuel-only	Driver, Odometer
08	011	Fuel, Other goods	ID Number, Odometer
09	014	Fuel, Other goods	Odometer
10	015	Fuel, Other goods	No Prompt
11	022	Fuel-only	Vehicle, Odometer
12	011	Fuel, Other goods	ID, Odometer, ID Number

Mastercard Third Party Data (Tag 9F6E)

Card Number	05 Profile 1	06 Profile 11	07 Profile 12	08 Profile 13	09 Profile 14	10 Profile 15	11 MTIP40	12 MTIP41
Content	0840 8003 0001 01 0A 80 345678	0840 8003 0001 02 88 80 345678	0840 8003 0001 02 8C 40 345678	0840 8003 0001 01 89 40 345678	0840 0003 3030 0001 01 88 40 345678	0840 0003 3139 0001 01 80 40 345678	0840 0003 3032 0001 02 0A 80 345678	0840 0000 00
Country Code	0840	0840	0840	0840	0840	0840	0840	0840
Unique ID (Device Type Present)					0003	0003	0003	
Unique ID (Device Type NOT Present)	8003	8003	8003	8003				
Card					3030			
Watch (Payment application running in host processor)						3139		
Unknown							3032	
Product Identifier	0001	0001	0001	0001	0001	0001	0001	00
Valid for fuel, other goods	01			01	01	01		
Valid for fuel only		02	02				02	
Prompt Vehicle Number & Odometer	0A						0A	
Prompt for Odometer		88			88			
Prompt for Odometer & Driver Number			8C					
Prompt for Odometer & ID				89				

Card Number	05 Profile 1	06 Profile 11	07 Profile 12	08 Profile 13	09 Profile 14	10 Profile 15	11 MTIP40	12 MTIP41
Number *								
Fleet Prompt Script File						80		
Driver card	80	80					80	
Vehicle Card			40	40	40	40		
Driver Number	345678	345678						
Vehicle Number			345678	345678	345678	345678	345678	

* Prompt for script file is present

** See MTIP Cases below

MTIP Cases - Terminal Prompts (Acquirer-dependent)**

Card Number	05	06	07	08	09	10	11	12
PIN (If requested)							4315	4315
Vehicle Number							987654/ 345678	987654/ 345678
Odometer							123456	123456

Chapter 3 - B2 Fleet 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 *****

The B2 Fleet EMV Test Card Set contains 12 cards (4 Visa cards and 8 Mastercard cards).



	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Visa
AID list	A0000000031010	A0000000031010	A0000000031010
PAN on plastic	4485 5800 0001 0105	4485 5800 0001 0105	4485 5800 0001 0105
Expiry Date	12/2024	12/2024	12/2024
Service Code	201	201	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Fleet Service Indicator	004	013	022
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 04	Test Card 05	Test Card 06
Brand	Visa	Mastercard	Mastercard
AID list	A0000000031010	A0000000041010	A0000000041010
PAN on plastic	4485 5800 0001 0105	5567 6300 0008 8011	5567 6300 0008 8110
Expiry Date	12/2024	12/2025	12/2025
Service Code	201	201	601
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Fleet Service Indicator	005	012	024
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
AID list	A0000000041010	A0000000041010	A0000000041010
PAN on plastic	5567 6300 0008 8128	5567 6300 0008 8136	5567 6300 0008 8144
Expiry Date	12/2025	12/2025	12/2025
Service Code	601	601	601
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Fleet Service Indicator	023	011	014
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 10	Test Card 11	Test Card 12
Brand	Mastercard	Mastercard	Mastercard
AID list	A0000000041010	A0000000041010	A0000000041010
PAN on plastic	5567 6300 0008 8151	5567 6300 0008 8409	5567 6300 0008 8417
Expiry Date	12/2025	12/2025	12/2025
Service Code	601	601	601
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Fleet Service Indicator	015	022	011
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

3.1 Test Card 01 - Visa, CO, FSI 004, English, USA, USD

A contact-only English-language Visa credit 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.

3.1.1 Contact: CVM List - AID A000000031010

Cardholder Verification Method List ('0201 1E04 0005 5E00 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Signature (paper)	Manual Cash	Fail
3	Fail CVM Processing	Purchase with Cashback	Fail
4	Signature (paper)	Always	Next CVM
5	No CVM required	Always	Fail

3.1.2 Contact: Application Tag Data, AID A000000031010

Tag	Element Name	Data	Card v4.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	44 85 58 00 00 01 01 05 D2 41 22 01 10 22 09 92 00 4F	
5A	Application Primary Account Number (PAN)	44 85 58 00 00 01 01 05	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 31 20 20 20 20 20 - 'B2 FLEET/Test Card 01'	
5F 24	Application Expiration Date	24 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VIS]	18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Auth command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 1E 04 00 05 5E 00 1F 00	
8F	Certification Authority Public Key Index	A1	

Tag	Element Name	Data	Card v4.x
90	Issuer Public Key Certificate	EF 78 44 37 24 58 AE E7 67 E9 AF 5E F2 DD 46 FB 65 54 E1 34 90 11 D4 F5 53 14 46 30 AA 47 8B 6B 9C E7 EB 8C 8E DD 43 5B C5 05 22 DE D4 4D 80 37 D1 49 B4 AB 44 C2 DC EE F5 8A 2F 64 B4 ED B6 C1 26 4E 7B B0 2F DB 4D B8 0E 84 03 43 BD B1 B3 18 D9 41 EF DD 20 96 E8 AD 61 EB 12 D2 CA 04 C6 C4 FD 98 15 B6 E9 EE 2A 5F EB 76 D1 0A 36 7B C3 61 3E 77 DC EB C0 F6 B8 23 E0 17 1B F2 87 5C 15 15 07 2C 05 EB 17 AF 96 45 9E 34 6C 5C 33 C9 72 0D BD 6C B3 40 C4 D2 43 AA 32 CE 10 17 F9 D1 9E 5C 74 72 72 CA C9 CA 16 07 DB 0B 5D F5 EB 8C A0 A8 48 97 14 42 B2 44 E1 13 DC D8 C8 AD ED 88 AE E8 31 55 B1 F0 34 A7 A5 F3 24 73 BE 87 6A 53 7F EE 2D 11 D8 42 22 34 95 B4 43 4A E2 7D F7 B2 04 2F DC 5E 2D 06 98 C9 EB 89 9E D9 12 34 91 15 C0 71 39 8F E0 DE CB 57 94 E6	
94	Application File Locator (AFL)	10 01 01 00 10 02 05 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number [VIS]	00 96	
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 46 6C 65 65 74 - 'Visa Fleet'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 30 32 32 30 35 30 36 30 30 34 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 44	Application Currency Exponent	02	

Tag	Element Name	Data	Card v4.x
9F 46	ICC Public Key Certificate	4C 6D AC 3D AA 58 BF A5 85 10 AB F8 4A 72 78 16 1E 0B 19 22 32 CD 3A BF 9B 8D EF E5 C1 5E C2 2F 22 FD D4 A0 1A E6 1E D1 B2 57 22 C9 DF 1E 44 06 C2 F6 64 58 6D 3E A0 E8 A0 5D C7 AE 6F FA 10 DC 26 97 1E E2 97 FD 41 85 4A 05 38 F9 C1 F2 69 DD 97 19 23 22 A5 29 08 81 73 83 C6 8C F3 9F 0F C8 1F D3 C4 DC 44 1D 74 05 F5 17 E8 64 0C 87 BF 88 F1 58 EB 06 33 DB 2B 70 C8 E3 85 81 7C 15 30 2A E8 6F 81 26 1E 35 65 CD 54 3D C5 70 79 8A BC 18 92 A1 39 1C A5 EE 03 DF FF 16 CF 62 E9 A1 D9 B3 F7 67 52 27 F4 8D 49 D4 38 87 48 8E 16 5A 61 6F	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 51	Application Currency Code [VSDC]	08 40 - USD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 00 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	08 40 - USA	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	00	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	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 00 DF 21 01 00 DF 31 01 00 DF 51 01 00 DF 61 01 00	
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 00 00 DF 21 06 00 00 00 00 00 00 DF 31 06 00 00 00 00 00 00	

* Tag value changes with card usage

3.2 Test Card 02 - Visa, CO, FSI 013, English, USA, USD

A contact-only English-language Visa credit 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.

3.2.1 Contact: CVM List - AID A000000031010

Cardholder Verification Method List ('0201 1E04 0005 5E00 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Signature (paper)	Manual Cash	Fail
3	Fail CVM Processing	Purchase with Cashback	Fail
4	Signature (paper)	Always	Next CVM
5	No CVM required	Always	Fail

3.2.2 Contact: Application Tag Data, AID A000000031010

Tag	Element Name	Data	Card v4.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	44 85 58 00 00 01 01 05 D2 41 22 01 10 22 09 92 01 3F	
5A	Application Primary Account Number (PAN)	44 85 58 00 00 01 01 05	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 32 20 20 20 20 20 - 'B2 FLEET/Test Card 02'	
5F 24	Application Expiration Date	24 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VIS]	18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Auth command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 1E 04 00 05 5E 00 1F 00	
8F	Certification Authority Public Key Index	A1	
90	Issuer Public Key Certificate	EF 78 44 37 24 58 AE E7 67 E9 AF 5E F2 DD 46 FB 65 54 E1 34 90 11 D4 F5 53 14 46 30 AA 47 8B 6B 9C E7 EB 8C 8E DD 43 5B C5 05 22 DE D4 4D 80 37	

Tag	Element Name	Data	Card v4.x
		D1 49 B4 AB 44 C2 DC EE F5 8A 2F 64 B4 ED B6 C1 26 4E 7B B0 2F DB 4D B8 0E 84 03 43 BD B1 B3 18 D9 41 EF DD 20 96 E8 AD 61 EB 12 D2 CA 04 C6 C4 FD 98 15 B6 E9 EE 2A 5F EB 76 D1 0A 36 7B C3 61 3E 77 DC EB C0 F6 B8 23 E0 17 1B F2 87 5C 15 15 07 2C 05 EB 17 AF 96 45 9E 34 6C 5C 33 C9 72 0D BD 6C B3 40 C4 D2 43 AA 32 CE 10 17 F9 D1 9E 5C 74 72 72 CA C9 CA 16 07 DB 0B 5D F5 EB 8C A0 A8 48 97 14 42 B2 44 E1 13 DC D8 C8 AD ED 88 AE E8 31 55 B1 F0 34 A7 A5 F3 24 73 BE 87 6A 53 7F EE 2D 11 D8 42 22 34 95 B4 43 4A E2 7D F7 B2 04 2F DC 5E 2D 06 98 C9 EB 89 9E D9 12 34 91 15 C0 71 39 8F E0 DE CB 57 94 E6	
94	Application File Locator (AFL)	10 01 01 00 10 02 05 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number [VIS]	00 96	
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 46 6C 65 65 74 - 'Visa Fleet	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 30 32 32 30 35 30 36 30 31 33 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	39 96 58 30 45 E5 FB 76 D7 15 E5 AC EA 89 D5 95 ED B0 00 28 0A 77 A6 13 2F A3 1B 1D 8B 61 34 B2 E2 97 C6 BE D4 8D E1 C3 9E 35 A5 7E A2 8F 2F 5F 48 86 BD CF 27 5E B7 35 34 C6 24 9E 5E 75 7A C2 FB 72 E4 17 51 4B FD 7A B3 25 D5 71 E4 C8 48 C4 D1 EA 9F C2 56 A4 B2 36 D3 D8 E8 AD D9 B4 EB 57 CE E3 1A 2F 93 CB 89 86 AF DC 0F 5C 27 39 66 D9 C4 0A 1B EC 2F 00 61 2A 67 6A CB A5 61 BF 4E B3 1B 3C F3 BF 57 C8 19 E6 B3 67 41 B3 FA 1B C2 E9	

Tag	Element Name	Data	Card v4.x
		FD 2E C5 B2 31 45 3B 43 CA 5A 35 6F 54 8E 60 9C 63 9E E9 04 BB 7E 32 1E 73 2E E0 BB 91 F1 3B 94	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 51	Application Currency Code [VSDC]	08 40 - USD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 00 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	08 40 - USA	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	00	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	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 00 DF 21 01 00 DF 31 01 00 DF 51 01 00 DF 61 01 00	
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 00 00 DF 21 06 00 00 00 00 00 00 DF 31 06 00 00 00 00 00 00	

* Tag value changes with card usage

3.3 Test Card 03 - Visa, CO, FSI 022, English, USA, USD

A contact-only English-language Visa credit 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.

3.3.1 Contact: CVM List - AID A000000031010

Cardholder Verification Method List ('0201 1E04 0005 5E00 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Signature (paper)	Manual Cash	Fail
3	Fail CVM Processing	Purchase with Cashback	Fail
4	Signature (paper)	Always	Next CVM
5	No CVM required	Always	Fail

3.3.2 Contact: Application Tag Data, AID A000000031010

Tag	Element Name	Data	Card v4.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54	
57	Track 2 Equivalent Data	44 85 58 00 00 01 01 05 D2 41 22 01 10 22 09 92 02 2F	
5A	Application Primary Account Number (PAN)	44 85 58 00 00 01 01 05	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 33 20 20 20 20 20 - 'B2 FLEET/Test Card 03'	
5F 24	Application Expiration Date	24 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VIS]	18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Auth command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 1E 04 00 05 5E 00 1F 00	
8F	Certification Authority Public Key Index	A1	

Tag	Element Name	Data	Card v4.x
90	Issuer Public Key Certificate	EF 78 44 37 24 58 AE E7 67 E9 AF 5E F2 DD 46 FB 65 54 E1 34 90 11 D4 F5 53 14 46 30 AA 47 8B 6B 9C E7 EB 8C 8E DD 43 5B C5 05 22 DE D4 4D 80 37 D1 49 B4 AB 44 C2 DC EE F5 8A 2F 64 B4 ED B6 C1 26 4E 7B B0 2F DB 4D B8 0E 84 03 43 BD B1 B3 18 D9 41 EF DD 20 96 E8 AD 61 EB 12 D2 CA 04 C6 C4 FD 98 15 B6 E9 EE 2A 5F EB 76 D1 0A 36 7B C3 61 3E 77 DC EB C0 F6 B8 23 E0 17 1B F2 87 5C 15 15 07 2C 05 EB 17 AF 96 45 9E 34 6C 5C 33 C9 72 0D BD 6C B3 40 C4 D2 43 AA 32 CE 10 17 F9 D1 9E 5C 74 72 72 CA C9 CA 16 07 DB 0B 5D F5 EB 8C A0 A8 48 97 14 42 B2 44 E1 13 DC D8 C8 AD ED 88 AE E8 31 55 B1 F0 34 A7 A5 F3 24 73 BE 87 6A 53 7F EE 2D 11 D8 42 22 34 95 B4 43 4A E2 7D F7 B2 04 2F DC 5E 2D 06 98 C9 EB 89 9E D9 12 34 91 15 C0 71 39 8F E0 DE CB 57 94 E6	
94	Application File Locator (AFL)	10 01 01 00 10 02 05 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number [VIS]	00 96	
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 46 6C 65 65 74 - 'Visa Fleet'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 30 32 32 30 35 30 36 30 32 32 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 44	Application Currency Exponent	02	

Tag	Element Name	Data	Card v4.x
9F 46	ICC Public Key Certificate	C3 9F 65 57 DE 81 B7 AD 43 9C 42 09 AE 6C FF 50 F8 4A 34 65 A3 C9 13 25 ED 06 80 0D B6 B5 E7 C4 41 9F 9F 7C 12 B6 0E 3A B3 79 E2 DB E5 0D C2 0C 4C 7A 8E 30 6D 69 0E 44 48 FC 3C 63 75 53 B2 CB A0 E3 E8 2D E6 DF E2 DC A1 EC FD 6D B1 96 A1 45 CA 81 6F 4A 4E 9A 6B 95 5C 4A FD 38 FC 95 15 25 31 42 26 EE F3 D8 7A 35 79 B1 33 00 95 03 69 C7 CB 3A 93 D2 BE 7B 8C 53 DC B8 F2 8A B6 1D A7 41 8E C0 BE 16 AD 42 1F D6 5A 7A BB 21 70 4A EA 2F C6 1C 90 A2 A7 26 89 DF D8 0F F7 4D 7B 5C E2 98 3A C8 56 C8 DA E1 6A 9E 1B 3E D3 A6 C3 06 50 06	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 51	Application Currency Code [VSDC]	08 40 - USD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 00 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	08 40 - USA	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	00	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	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 00 DF 21 01 00 DF 31 01 00 DF 51 01 00 DF 61 01 00	
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 00 00 00 DF 21 06 00 00 00 00 00 00 00 DF 31 06 00 00 00 00 00 00	

* Tag value changes with card usage

3.4 Test Card 04 - Visa, CO, FSI 005, English, USA, USD

A contact-only English-language Visa credit 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.

3.4.1 Contact: CVM List - AID A0000000031010

Cardholder Verification Method List ('0201 1E04 0005 5E00 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Signature (paper)	Manual Cash	Fail
3	Fail CVM Processing	Purchase with Cashback	Fail
4	Signature (paper)	Always	Next CVM
5	No CVM required	Always	Fail

3.4.2 Contact: Application Tag Data, AID A0000000033010

Tag	Element Name	Data	Card v4.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	44 85 58 00 00 01 01 05 D2 41 22 01 10 22 09 02 00 5F	
5A	Application Primary Account Number (PAN)	44 85 58 00 00 01 01 05	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 34 20 20 20 20 20 - 'B2 FLEET/Test Card 04'	
5F 24	Application Expiration Date	24 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VIS]	18 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported using External Auth command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Use for Visa NOT supported b7 - Is NOT Mobile handset	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 1E 04 00 05 5E 00 1F 00	
8F	Certification Authority Public Key Index	A1	

Tag	Element Name	Data	Card v4.x
90	Issuer Public Key Certificate	EF 78 44 37 24 58 AE E7 67 E9 AF 5E F2 DD 46 FB 65 54 E1 34 90 11 D4 F5 53 14 46 30 AA 47 8B 6B 9C E7 EB 8C 8E DD 43 5B C5 05 22 DE D4 4D 80 37 D1 49 B4 AB 44 C2 DC EE F5 8A 2F 64 B4 ED B6 C1 26 4E 7B B0 2F DB 4D B8 0E 84 03 43 BD B1 B3 18 D9 41 EF DD 20 96 E8 AD 61 EB 12 D2 CA 04 C6 C4 FD 98 15 B6 E9 EE 2A 5F EB 76 D1 0A 36 7B C3 61 3E 77 DC EB C0 F6 B8 23 E0 17 1B F2 87 5C 15 15 07 2C 05 EB 17 AF 96 45 9E 34 6C 5C 33 C9 72 0D BD 6C B3 40 C4 D2 43 AA 32 CE 10 17 F9 D1 9E 5C 74 72 72 CA C9 CA 16 07 DB 0B 5D F5 EB 8C A0 A8 48 97 14 42 B2 44 E1 13 DC D8 C8 AD ED 88 AE E8 31 55 B1 F0 34 A7 A5 F3 24 73 BE 87 6A 53 7F EE 2D 11 D8 42 22 34 95 B4 43 4A E2 7D F7 B2 04 2F DC 5E 2D 06 98 C9 EB 89 9E D9 12 34 91 15 C0 71 39 8F E0 DE CB 57 94 E6	
94	Application File Locator (AFL)	10 01 01 00 10 02 05 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number [VIS]	00 96	
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC 70 BC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx 0A xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 46 6C 65 65 74 - 'Visa Fleet'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 30 32 32 30 35 30 36 30 30 35 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 44	Application Currency Exponent	02	

Tag	Element Name	Data	Card v4.x
9F 46	ICC Public Key Certificate	48 B0 D5 23 B2 FF 2A 4B F6 85 9F 68 76 5C B7 46 13 B5 C8 30 3D DC 3D EB 33 A1 40 47 48 BD 28 06 1B E0 81 DE D2 7A 97 64 AB 18 83 D6 55 F0 E6 56 B1 0A 87 20 6F 7E CE 90 25 10 2C 9C 36 48 83 2B 92 6D 7E 7E 9D 44 A9 92 0D B9 4E 13 DB 6D 45 CA E2 2D E1 EF 8B 09 5C E6 D3 96 69 F1 0B E7 10 EC 7E D7 17 0F D2 BB 9A 8D 40 C8 98 47 C1 D2 E6 80 8E F2 80 B6 33 3A AA C8 15 5C C5 11 4F C2 E8 E2 51 D4 B6 4F CD 15 E4 E3 D2 FC 51 5D 72 90 1D 3A A2 C4 3D E0 64 08 D7 05 9A 38 15 72 88 E3 54 C0 D9 41 B4 78 6D B0 71 FA F5 30 6E AB 9C F4 67 0C	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 51	Application Currency Code [VSDC]	08 40 - USD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 00 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	08 40 - USA	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	00	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	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 00 DF 21 01 00 DF 31 01 00 DF 51 01 00 DF 61 01 00	
BF 58	Amounts Data Template	DF 11 06 00 00 00 00 00 00 DF 21 06 00 00 00 00 00 00 DF 31 06 00 00 00 00 00 00	

* Tag value changes with card usage

3.5 Test Card 05 - Mastercard, CO, FSI 012, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.5.1 Contact: CVM List - AID A0000000041010

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

3.5.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	55 67 63 00 00 08 80 11 D2 51 26 01 07 93 60 80 00 01 2F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 80 11	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 35 20 20 20 20 20 - 'B2 FLEET/Test Card 05'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - EMV Contactless NOT supported	
84	Dedicated File (DF) Name	A0 00 00 00 04 10 10	
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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 31 32	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	69 C7 44 3E C7 99 E4 39 2D 29 EE F2 41 3A 9B 02 D3 60 67 37 CB A9 06 1E EC 0D 8C DE 12 7B A8 C6 96 FF E8 60 1A 60 07 BB C6 91 A4 9A 74 71 7E D4 93 43 BB 25 16 81 FE 0A 5B A7 74 19 F2 DF 94 42 AD 03 72 1F D4 7F DE D0 44 8B 35 7A 7E D9 9B CE D5 CB 7B B9 D0 3A 09 27 53 9B 59 0C F8 B6 3B ED 95 A1 A9 D0 D3 EA 85 67 34 DF F5 AB 5F 29 87 D3	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	25 17 7E 04 2F 28 81 52 B5 12 C7 32 CE B5 D3 18 6F 2D 19 EB 33 B1 75 AE 28 3F 36 98 64 DD B2 31 74 06 A4 EB F4 45 99 3F 4B C5	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 80 03 00 01 01 0A 80 34 56 78	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

3.6 Test Card 06 - Mastercard, CO, FSI 024, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.6.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4103 0203 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
2	Online PIN	Terminal supports CVM type	Fail
3	Fail CVM Processing	Always	Fail

3.6.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 45 53 54 52 4F 31	- 'MAESTRO1'
57	Track 2 Equivalent Data	4D 41 53 54 45 52 43 41 52 44	- 'MASTERCARD'
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 81 10 D2 51 26 01 07 93 60 80 00 02 4F	
5F 20	Cardholder Name	55 67 63 00 00 08 81 10	
5F 24	Application Expiration Date	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 36 20 20 20 20 - 'B2 FLEET/Test Card 06'	
5F 25	Application Effective Date	25 12 31	
5F 28	Issuer Country Code	xx xx xx *	
5F 2D	Language Preference	08 40	- USA
5F 30	Service Code	65 6E	- 'en' (English)
5F 34	Application PAN Sequence Number	06 01	
82	Application Interchange Profile [M/Chip, PayPass]	03	
84	Dedicated File (DF) Name	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	
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 9B 02	
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 00 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 32 34	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	75 DD A1 2F 0A DD DE 3B 73 BB A9 8D 2F DF 11 6A 7E 61 71 95 9C 1E 0F 22 67 66 B6 5A 32 F8 B9 D0 F6 71 86 B6 61 9B C2 60 A7 9B B8 F2 87 B2 BB D0 96 06 98 B6 3A 16 49 A6 04 38 42 A4 26 5A 1E 41 89 D7 A4 0F B4 C2 7D 79 78 B4 C6 8D C5 C0 2D E9 70 60 56 DB F0 9C 41 62 3A DF DA C7 91 84 6D 07 3D D9 AB 2C CE 5A 82 99 8A 73 D9 CA 8A 78 C4 A2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	15 3A EE 3E 32 3F CA 91 A2 CD 38 8C B1 F6 4F B1 1F 32 5E 61 53 BE 0A C2 65 51 72 15 CC B6 AA 4A 97 18 C2 C5 33 4D 57 33 28 37	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 80 03 00 01 02 88 80 34 56 78	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

3.7 Test Card 07 - Mastercard, CO, FSI 023, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.7.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.7.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 -	
57	Track 2 Equivalent Data	07 93 60 80 00 02 3F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 81 28	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 37 20 20 20 20 20 - 'B2 FLEET/Test Card 07'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 32 33	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	49 6E 46 44 69 B7 AC DD 93 C5 CD 1C 6D 2A 6B 12 E1 0F 32 EE 55 82 97 84 32 83 64 7F 51 95 3A 87 E0 AF F1 72 48 66 3F 41 C6 46 C9 53 89 EA BC 3A 85 A4 A6 55 16 56 02 DB 1A 5B 7D 86 A0 5D B8 F2 79 3F E5 18 CF 54 0C 2F 7B A5 9A 5D C3 D4 78 AC C5 4B C0 2A 4B 8B 01 D5 13 98 3D FD AA 47 78 73 0B C5 51 2C B5 26 A0 36 04 FB BC D5 4D 7F 87 FC	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	AA 12 C5 85 02 9C E1 02 C9 24 BC AE D9 CB 82 64 1A D0 CE 6A EE 8C 94 39 F9 84 B5 2F 6B 2E E0 9A 2C 85 EB CB 8C D1 DD 60 47 F7	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 80 03 00 01 02 8C 40 34 56 78	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

3.8 Test Card 08 - Mastercard, CO, FSI 011, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.8.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.8.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 -	
57	Track 2 Equivalent Data	07 93 60 80 00 01 1F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 81 36	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 38 20 20 20 20 20 - 'B2 FLEET/Test Card 08'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 31 31	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	06 87 53 C4 51 55 3A A3 4B 12 07 64 D9 75 11 18 EA 2D 27 B7 15 43 EC 5A CC 2F DF E2 C2 B3 0F 9B 71 F4 8C 41 DE B0 CF B2 4F 16 C9 88 EA 71 D1 DA CB 61 06 09 17 2D C5 D4 A9 89 8C 8C 2C 10 4E AF 15 FA 30 B5 55 B1 67 EB 7D B5 1A 27 DA C6 39 36 22 0B 5A 35 DB EA A0 C2 26 80 DD AF 00 DD 04 4A 6E B8 FD 3E 2B BB F7 B8 DF D3 2C B0 21 78 F7 4F	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	D6 EC 1B 67 88 6C BF 01 CF 08 56 EB 55 23 06 E6 7F B2 C0 3A F5 EB 9B 4A 63 73 92 7F CC 41 4E FD 4F A9 28 A1 A0 FF 29 23 A6 C3	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 80 03 00 01 01 89 40 34 56 78	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

3.9 Test Card 09 - Mastercard, CO, FSI 014, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.9.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.9.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 -	
57	Track 2 Equivalent Data	55 67 63 00 00 08 81 44 D2 51 26 01 07 93 60 80 00 01 4F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 81 44	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 30 39 20 20 20 20 20 - 'B2 FLEET/Test Card 09'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 31 34	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	3C F7 52 86 59 97 28 91 2E 29 D5 FE 03 82 3D C0 82 1D F9 F3 9E AE AB E9 69 41 D6 BE F7 3E 22 56 22 F0 76 A9 C2 A4 A7 86 D1 29 D0 BC D1 38 82 8A 09 E7 E3 77 66 E4 DD F2 94 47 3E DC 38 64 39 63 96 D9 4C 85 01 CC 9E 4D 40 4F ED 50 85 ED 95 E5 5F 68 19 C6 A9 B8 EA A9 A8 AD C2 5C D5 4D DF 37 32 20 F2 4A 55 BB 9A E5 0F 0E 76 57 A1 0A 45 76	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	67 F8 9D B8 3A 67 2F 6E DF 94 C9 B8 33 A5 67 D5 FB 64 53 19 95 00 89 4E 2E 75 27 9F 29 B9 F0 5E 45 D8 64 7E 7B B6 4C 96 41 01	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 00 03 30 30 00 01 01 88 40 34 56 78	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

3.10 Test Card 10 - Mastercard, CO, FSI 015, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.10.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.10.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 -	
57	Track 2 Equivalent Data	'MASTERCARD'	
5A	Track 2 Equivalent Data	55 67 63 00 00 08 81 51 D2 51 26 01	
5A	Application Primary Account Number (PAN)	07 93 60 80 00 01 5F	
5F 20	Cardholder Name	55 67 63 00 00 08 81 51	
5F 24	Application Expiration Date	42 32 20 46 4C 45 45 54 2F 54 65 73	
5F 25	Application Effective Date	74 20 43 61 72 64 20 31 30 20 20 20	
5F 28	Issuer Country Code	20 20 - 'B2 FLEET/Test Card 10'	
5F 2D	Language Preference	25 12 31	
5F 30	Service Code	xx xx xx *	
5F 34	Application PAN Sequence Number	08 40 - USA	
82	Application Interchange Profile [M/Chip, PayPass]	65 6E - 'en' (English)	
84	Dedicated File (DF) Name	06 01	
87	Application Priority Indicator	03	
8C	Card Risk Management Data Object List 1 (CDOL1)	03	
8D	Card Risk Management Data Object List 2 (CDOL2)	18 00	
8E	Cardholder Verification Method (CVM) List	1E 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 31 35	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	00 02 47 3C D4 B6 D3 AC 41 01 74 13 85 1A FE 7C 0A E0 C0 89 B7 E9 99 55 B6 E4 43 A2 01 AB 7B 80 59 10 58 6F 26 F6 56 CD 23 82 04 B0 E6 13 4E 18 47 F8 7F 22 8F 00 C6 BF 15 B9 45 D8 92 B1 30 1A 6D B1 0D EE 71 BA 43 0F 16 5A 92 AF 1F 02 EC 1D AE B3 E2 AE E8 FF BD 1A 32 46 AC 32 21 8B 69 48 2E 96 44 70 93 E8 5C B2 FE CB 6B FB DD 7B EB 15	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	EE 2E 13 61 D8 5D 53 EA 3C B4 31 F6 3F 67 6C C2 E6 83 D8 1E 71 4D 2F 96 89 85 91 F8 E6 D0 9C 42 52 01 86 05 5E 15 9F 56 57 79	

3.11 Test Card 11 - Mastercard, CO, FSI 022, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.11.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.11.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	55 67 63 00 00 08 84 09 D2 51 26 01 07 93 60 80 00 02 2F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 84 09	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 31 31 20 20 20 20 20 - 'B2 FLEET/Test Card 11'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 30 32 32 30 30 30 30 30 30 30 30 30 31 32	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	47 D6 EC 3E DC AC D3 10 10 1B 45 BC 34 E0 88 D5 85 22 4B 00 A0 50 3B 52 F5 09 A7 8A 38 B4 4D 5F 5E E2 86 4D 2D F5 3B 67 4A 6E 82 3F AC 07 51 1D 5D C1 B6 65 98 9F 65 AF 6A 66 99 95 B2 5E 18 F3 27 E3 5D 76 0B 65 30 BD 52 6D 15 69 CE 49 3D 54 A1 05 53 F9 FF 5F D6 D4 DE 56 49 92 EF 9B 32 62 FE 89 11 A5 7B BD 2E D7 C6 B4 56 A4 7B 82 90 42	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	3F F3 0F C3 3B AC 9E 6C F4 E8 40 B8 F4 19 BD F3 CA 31 01 F0 7C 03 D9 63 39 E4 35 87 6B 01 6B B6 44 C7 23 C3 F0 1C C4 A8 E0 97	

3.12 Test Card 12 - Mastercard, CO, FSI 011, English, USA, USD

A contact-only English-language Mastercard credit 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.

3.12.1 Contact: CVM List - AID A0000000041010

Cardholder Verification Method List ('4201 1E03 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Fail

3.12.2 Contact: Application Tag Data, AID A0000000041010

Tag	Element Name	Data	Card v4.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	55 67 63 00 00 08 84 17 D2 51 26 01 07 93 60 80 00 01 1F	
5A	Application Primary Account Number (PAN)	55 67 63 00 00 08 84 17	
5F 20	Cardholder Name	42 32 20 46 4C 45 45 54 2F 54 65 73 74 20 43 61 72 64 20 31 32 20 20 20 20 20 - 'B2 FLEET/Test Card 12'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	xx xx xx *	
5F 28	Issuer Country Code	08 40 - USA	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	06 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile [M/Chip, PayPass]	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 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 9B 02	
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 42 01 1E 03 42 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element Name	Data	Card v4.x
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 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 9C 08 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 10 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 43 20 46 6C 65 65 74 - 'MC Fleet'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	30 37 39 33 36 30 38 30 30 30 31 32 30 30 30 30 30 30 30 30 30 31 31	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx 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	3B 35 69 F9 92 82 4A 94 91 87 A4 4F AD 29 9E E4 65 F2 2A 6E F1 AA F5 61 79 48 E2 97 25 32 15 FA B7 13 48 0C 2F 89 4A A9 F1 53 F7 65 AD 34 E0 ED 85 42 BF BD 7B FC 23 2D A0 89 F0 8A C8 CE 64 7D E7 28 04 BE C6 6C 9C 00 38 1B 5D 40 0A BD A4 91 04 0C EC 56 66 7D 36 E6 09 BA CC 31 9F AC 6D 1E 2D 23 85 63 2D 64 E5 1A 37 8B 45 5D 76 E6 15 D2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	57 81 8D 27 CE AE 68 F5 BA 0B DC F0 AD 3E B6 6D 3D 7A 06 8D 71 A7 C5 E3 AE 11 C2 22 BB 57 81 BD 16 D5 F5 E9 20 3A B7 E6 C3 F5	

Tag	Element Name	Data	Card v4.x
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 27 01 9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 52 06	
9F 6E	Third Party Data [Mastercard]	08 40 00 00 00	
9F 7E	Application Life Cycle Data [Mastercard]	03 10 0C 12 00 09 00 00 FF 00 04 00 00 02 60 00 00 38 4A 02 11 50 35 43 44 30 37 32 20	
C3	Card Issuer Action Code - Decline [Mastercard]	00 00 00	
C4	Card Issuer Action Code - Default [Mastercard]	00 00 00	
C5	Card Issuer Action Code - Online [Mastercard]	00 00 00	
C6	Counters [Mastercard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2D	
C8	CRM Country Code [Mastercard]	08 40 - USA	
C9	CRM Currency Code [M/Chip4]	08 40 - USD	
CA	Lower Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
CB	Upper Cumulative Offline Transaction Amount [M/Chip]	00 00 00 00 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00 08 40 00 01 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 00	
DF 02	Security Limits Status [Mastercard]	00	

* Tag value changes with card usage

Chapter 4 - ASCII Character Conversion Chart

Dec	Bin	Hex	Char	Dec	Bin	Hex	Char	Dec	Bin	Hex	Char
00	00000000	00	NUL	44	00101100	2C	,	88	01011000	58	X
01	00000001	01	SOH	45	00101101	2D	-	89	01011001	59	Y
02	00000010	02	STX	46	00101110	2E	.	90	01011010	5A	Z
03	00000011	03	ETX	47	00101111	2F	/	91	01011011	5B	[
04	00000100	04	EOT	48	00110000	30	0	92	01011100	5C	\
05	00000101	05	ENQ	49	00110001	31	1	93	01011101	5D]
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	a
10	00001010	0A	LF	54	00110110	36	6	98	01100010	62	b
11	00001011	0B	VT	55	00110111	37	7	99	01100011	63	c
12	00001100	0C	FF	56	00111000	38	8	100	01100100	64	d
13	00001101	0D	CR	57	00111001	39	9	101	01100101	65	e
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	l
21	00010101	15	NAK	65	01000001	41	A	109	01101101	6D	m
22	00010110	16	SYM	66	01000010	42	B	110	01101110	6E	n
23	00010111	17	ETB	67	01000011	43	C	111	01101111	6F	o
24	00011000	18	CAN	68	01000100	44	D	112	01110000	70	p
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	H	116	01110100	74	t
29	00011101	1D	GS	73	01001001	49	I	117	01110101	75	u
30	00011110	1E	RS	74	01001010	4A	J	118	01110110	76	v
31	00011111	1F	US	75	01001011	4B	K	119	01110111	77	w
32	00100000	20	SP	76	01001100	4C	L	120	01111000	78	x
33	00100001	21	!	77	01001101	4D	M	121	01111001	79	y
34	00100010	22	"	78	01001110	4E	N	122	01111010	7A	z
35	00100011	23	#	79	01001111	4F	O	123	01111011	7B	{
36	00100100	24	\$	80	01010000	50	P	124	01111100	7C	
37	00100101	25	%	81	01010001	51	Q	125	01111101	7D	}
38	00100110	26	&	82	01010010	52	R	126	01111110	7E	~
39	00100111	27	'	83	01010011	53	S	127	01111111	7F	DEL
40	00101000	28	(84	01010100	54	T				
41	00101001	29)	85	01010101	55	U				
42	00101010	2A	*	86	01010110	56	V				
43	00101011	2B	+	87	01010111	57	W				