



**First Data  
DCC Supplementary Test Card Set**

**Version 1.20**

**September, 2016**

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## Revision History

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## Table of Contents

<b>Chapter 1 - First Data DCC Supplementary Test Card Set Profiles .....</b>	<b>2</b>
<b>1.1 Test Card 06 – Visa, Credit, English, CHL, CLP .....</b>	<b>4</b>
1.1.1 Cardholder Verification Method List – AID (A0000000031010) .....	4
1.1.2 Application Tag data .....	4
<b>1.2 Test Card 07 – MasterCard, Debit, English, NOR, NOK .....</b>	<b>7</b>
1.2.1 Cardholder Verification Method List – AID (A0000000041010) .....	7
1.2.2 Application Tag data .....	7
<b>1.3 Test Card 08 – MasterCard, Credit, English, MEX, MXN .....</b>	<b>10</b>
1.3.1 Cardholder Verification Method List – AID (A0000000041010) .....	10
1.3.2 Application Tag data .....	10
<b>1.4 Test Card 09 – MasterCard, Credit, English, ZAF, ZAR .....</b>	<b>13</b>
1.4.1 Cardholder Verification Method List – AID (A0000000041010) .....	13
1.4.2 Application Tag data .....	13
<b>1.5 Test Card 10 – MasterCard, Credit, English, KOR, WON .....</b>	<b>16</b>
1.5.1 Cardholder Verification Method List – AID (A0000000041010) .....	16
1.5.2 Application Tag data .....	16
<b>1.6 Test Card 11 – Visa, Credit, English, CHE, CHF .....</b>	<b>19</b>
1.6.1 Cardholder Verification Method List – AID (A0000000031010) .....	19
1.6.2 Application Tag data .....	19
<b>1.7 Test Card 12 – Visa, Credit, English, SWE, SEK .....</b>	<b>22</b>
1.7.1 Cardholder Verification Method List – AID (A0000000031010) .....	22
1.7.2 Application Tag data .....	22
<b>Chapter 2 - ASCII Character Conversion Chart .....</b>	<b>25</b>

**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 \*\*\***

## Chapter 1 - First Data DCC Supplementary Test Card Set Profiles

The First Data DCC (Dynamic Currency Conversion) Supplementary Test Card Set is an extension to the First Data DCC Card Set (sold separately).

This supplementary card set contains 7 cards featuring multiple Issuer Country and Currency codes and is intended for extended Dynamic Currency Conversion testing.

Note: Being a continuation of the 5-card First Data DCC Test Card Set, the card numbers in this set begin at '06'

	Card 06 – CLP	Card 07 – NOK	Card 08 – MXN
<b>Brand</b>	Visa	MasterCard	MasterCard
<b>Type</b>	Credit	Credit	Credit
AID	A0000000031010	A0000000041010	A0000000041010
PAN	4023 6500 0000 0007	5549 7400 0000 0008	5288 4300 0000 0001
Expiry Date	12/2022	12/2025	12/2025
Service Code	201	601	601
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	<a href="#">See card definition</a>	<a href="#">See card definition</a>	<a href="#">See card definition</a>
Approval Amount	\$10.00	\$20.00	\$20.00
Issuer Country Code	152 (CHL - Chile)	578 (NOR - Norway)	484 (MEX - Mexico)
Application Currency Code	152	578	484
Currency Desc.	Chilean Peso	Norwegian Krone	Mexican Peso
Language	'en' – English	'en' – English	'en' – English
Card Version	v1.00	v1.00	v1.00

	Card 09 – ZAR	Card 10 – WON	Card 11 – CHF
<b>Brand</b>	MasterCard	MasterCard	Visa
<b>Type</b>	Credit	Credit	Credit
AID	A0000000041010	A0000000041010	A0000000031010
PAN	5222 5000 0000 0018	5100 0300 0000 0005	4435 9200 0000 0006
Expiry Date	12/2025	12/2025	12/2022
Service Code	601	601	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	<a href="#">See card definition</a>	<a href="#">See card definition</a>	<a href="#">See card definition</a>
Approval Amount	\$20.00	\$20.00	\$10.00
Issuer Country Code	710 (ZAF – S. Africa)	410 (KOR – S. Korea)	756 (CHE - Switzerland)
Application Currency Code	710	410	756
Currency Desc.	S. African Rand	S. Korean Won	Swiss Franc
Language	'en' – English	'en' – English	'en' – English
Card Version	v1.00	v1.00	v1.00

	Card 12 – SEK
<b>Brand</b>	Visa
<b>Type</b>	Credit
AID	A0000000031010
PAN	4567 5900 0000 0007
Expiry Date	12/2022
Service Code	201
Interface	Contact, MSR
CVM	<a href="#">See card definition</a>
Approval Amount	\$10.00
Issuer Country Code	752 (SWE - Sweden)
Application Currency Code	752
Currency Desc.	Swedish Krona
Language	'en' – English
Card Version	v1.00

## 1.1 Test Card 06 – Visa, Credit, English, CHL, CLP

A Visa credit card with Issuer Country Code of 'Chile' and Currency Code of 'CLP'.

The recommended transaction amount to generate a host approval is \$10.00.

### 1.1.1 Cardholder Verification Method List – AID (A0000000031010)

Cardholder Verification Method List ('1E0302031F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (paper)	Terminal supports CVM type	Next CVM
2	Online PIN	Terminal supports CVM type	Next CVM
3	No CVM required	Always	Fail

### 1.1.2 Application Tag data

\* Tag value changes with card usage

Tagr	Element name	Data	v1.00
50	Application Label	56 69 73 61 20 43 72 65 64 69 74 - 'Visa Credit'	
57	Track 2 Equivalent Data	40 23 65 00 00 00 07 D2 21 22 01 11 43 87 80 89 90 0F	
5A	Application Primary Account Number (PAN)	40 23 65 00 00 00 07	
5F 20	Cardholder Name	43 41 52 44 20 30 36 2F 20 2D 20 43 4C 50 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 06/ CLP'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	14 07 01	
5F 28	Issuer Country Code	01 52 - Chile	
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	1C 00	
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 9B 02	
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 9B 02	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	92	

Tagr	Element name	Data	v1.00
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 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	
94	Application File Locator (AFL)	08 01 01 00 08 02 04 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00	
9F 08	Application Version Number	00 96	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 49 53 41 20 43 68 69 6C 65 - 'VISA Chile'	
9F 13	Last Online Application Transaction Counter (ATC) Register	00 00	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 37 35 38 39 30 30 38 39 33 30 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	



Tagr	Element name	Data	v1.00
9F 46	ICC Public Key Certificate	19 C1 00 60 D3 2A 5D 51 A0 B0 D5 E4 23 8A 5A 91 4F 50 9C FF 1B 65 AC A0 E3 2C E2 CD 64 5C 1F 85 76 7F C1 C3 DB AF 86 81 22 F2 93 01 BA 23 59 36 BE EE CE 7F 30 9C 4B C4 4F 8D 45 7C 0D C4 95 E1 FC AB E2 D9 B2 BE 45 C3 FA AF 09 98 C9 8F 8E E5 C5 1D 78 64 28 8C 17 D7 0C FE 10 9F 11 B3 85 C7 6C 7C D8 E9 CA 27 5A 9F 40 B5 9E 77 C2 06 17 04 BD 0C C0 00 44 D4 E0 85 1A 53 D4 F5 8B 7D 8C 54 6B FB D6 96 07 3E 84 A7 72 AF EB 41 56 DE EF FE 66 44 FA E3 D5 B7 8C B5 B9 45 E2 A6 51 F4 85 F2 E0 DB EA A1 62 1C C3 AD C0 65 82 33 6C 5C D7 F8	
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]	01 52 - CLP	
9F 52	Application Default Action [VSDC VIS 1.5]	03 38 20 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	01	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	01	
9F 68	Card Additional Processes [qVSDC VCPS 2.1]	10 00 10 00	
9F 6D	VLP Reset Threshold [VSDC]	00 00 00 00 00 00	
9F 77	VLP Funds Limit [VSDC]	00 00 00 00 00 00	
9F 79	VLP Available Funds [VSDC]	00 00 00 00 00 00	
9F 7D	Application Code Level [VSDC]	30 38 30 33 31 32 20 56 53 44 43 20 32 38 31 41 4D 32	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 51 06 00 00 00 00 00 00 DF 61 06 00 00 00 00 00 DF 71 06 00 00 00 00 00 00	
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01	
BF 57	International Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01 DF 51 01 01	
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	
BF 5B	Application Internal Data Template	DF 01 02 00 00	

## 1.2 Test Card 07 – MasterCard, Debit, English, NOR, NOK

A Visa credit card with Issuer Country Code of 'Norway' and Currency Code of 'NOK'.

The recommended transaction amount to generate a host approval is \$20.00.

### 1.2.1 Cardholder Verification Method List – AID (A0000000041010)

Cardholder Verification Method List ('410342031E031F00')			
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	Fail
4	No CVM required	Always	Fail

### 1.2.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	55 49 74 00 00 00 00 08 D2 51 26 01 07 93 60 80 50 02 9F	
5A	Application Primary Account Number (PAN)	55 49 74 00 00 00 00 08	
5F 20	Cardholder Name	43 41 52 44 20 30 37 2F 2D 20 4E 4F 4B 20 20 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 07/- NOK '	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	04 01 01	
5F 28	Issuer Country Code	05 78 - Norway	
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	18 00	
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 41 03 42 03 5E 03 1F 00	
8F	Certification Authority Public Key Index	FA	

Tag	Element name	Data	v1.00
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	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx xx 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 4E 6F 72 77 61 79 - 'MC Norway'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	20 20	
9F 23	Upper Consecutive Offline Limit	01	
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	05 78 - NOK	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	71 ED DD 82 52 6D CC 84 CE F5 96 DA 95 55 66 C8 E6 29 C8 42 15 80 78 21 8F 69 B4 4B 21 71 F4 C2 F3 97 C2 7D 10 4F 01 1C D3 EF 1F 8F 1F 63 BA E4 14 22 EA 05 EA 39 29 EA CD CF 9A C1 76 83 91 03 7F FF 1A 8E DB 4F 68 41 4F 4D 28 3D CC 27 B2 15 37 8F 6A 22 48 9D 26 D0 08 EA 75 E5 24 F9 94 D2 C8 E5 79 98 D2 E0 6D 7F 03 1B 5E C6 A0 34 FD 30	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	9D 64 15 9C 52 2E 53 BB 29 29 19 0C FD E5 03 2D 91 B3 48 5C F4 9D 35 58 6E AA D2 17 FA 1D EE 89 68 AF C2 73 20 7F 59 15 91 6D	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	

Tag	Element name	Data	v1.00
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]	05 78 00 00 30 30 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]	5F 58 00	
C5	Card Issuer Action Code - Online [MasterCard]	3F FC 00	
C7	CDOL1 Related Data Length [MasterCard]	2D	
C8	CRM Country Code [MasterCard]	05 78 - Norway	
C9	CRM Currency Code [M/Chip4]	05 78 - NOK	
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]	05 78 00 00 00 05 78 00 00 00 05 78 00 00 00 05 78 00 00 00 05 78 00 00 00	
D3	Additional Check Table [MasterCard]	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
DF 02	Security Limits Status [MasterCard]	00	

### 1.3 Test Card 08 – MasterCard, Credit, English, MEX, MXN

A MasterCard credit card with Issuer Country Code of 'Mexico' and Currency Code of 'MXN'.

The recommended transaction amount to generate a host approval is \$20.00.

#### 1.3.1 Cardholder Verification Method List – AID (A0000000041010)

Cardholder Verification Method List ('410342031E031F00')			
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	Fail
4	No CVM required	Always	Fail

#### 1.3.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	52 88 43 00 00 00 00 01 D2 51 26 01 07 93 60 80 50 02 9F	
5A	Application Primary Account Number (PAN)	52 88 43 00 00 00 00 01	
5F 20	Cardholder Name	43 41 52 44 20 30 38 2F 2D 20 4D 58 4E 20 20 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 08/- MXN '	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	04 01 01	
5F 28	Issuer Country Code	04 84 - Mexico	
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	18 00	
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 41 03 42 03 5E 03 1F 00	
8F	Certification Authority Public Key Index	FA	

Tag	Element name	Data v1.00
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
9F 08	Application Version Number	00 02
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00
9F 0E	Issuer Action Code - Denial	00 00 00 00 00
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00
9F 10	Issuer Application Data [M/Chip 4]	xx xx 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 4D 65 78 69 63 6F - 'MC Mexico'
9F 14	Lower Consecutive Offline Limit	00
9F 17	Personal Identification Number (PIN) Try Counter	0F
9F 1F	Track 1 Discretionary Data	20 20
9F 23	Upper Consecutive Offline Limit	01
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	04 84 - MXN
9F 44	Application Currency Exponent	02
9F 46	ICC Public Key Certificate	45 BB 75 59 35 7B 75 73 E0 10 A5 31 E2 68 90 4F EB C6 32 1E 1F 05 FB 2F 81 5D C9 44 AE 63 7B 35 CB 72 0A 8F D1 D8 34 B9 A3 67 11 4A 12 84 8B 92 FB BF 24 5C 64 8A D1 4E 37 0E 30 5B CF 25 E0 0F E7 9B 91 7C 96 70 2C F0 EE DE 19 AE 7A 59 1B D3 EC A3 66 B5 A6 05 1C 22 4D 60 71 09 D5 EC 7C 3C 13 E4 CB A7 21 2A 86 F4 E9 CE 53 47 52 3B 48 CB
9F 47	ICC Public Key Exponent	03
9F 48	ICC Public Key Remainder	5E 68 33 FB 9B 31 60 59 4B C3 F9 61 8B 2A 5F A2 AC 40 D2 5C EE 70 22 E8 A1 1B D1 16 A3 48 20 85 B9 A5 56 EF 51 9F 76 22 38 3B
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04

Tag	Element name	Data	v1.00
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]	04 84 00 00 30 30 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]	5F 58 00	
C5	Card Issuer Action Code - Online [MasterCard]	3F FC 00	
C7	CDOL1 Related Data Length [MasterCard]	2D	
C8	CRM Country Code [MasterCard]	04 84 - Mexico	
C9	CRM Currency Code [M/Chip4]	04 84 - MXN	
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]	04 84 00 00 00 04 84 00 00 00 04 84 00 00 00 04 84 00 00 00 04 84 00 00 00	
D3	Additional Check Table [MasterCard]	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
DF 02	Security Limits Status [MasterCard]	00	

## 1.4 Test Card 09 – MasterCard, Credit, English, ZAF, ZAR

A MasterCard credit card with Issuer Country Code of 'S. Africa' and Currency Code of 'ZAR'.

The recommended transaction amount to generate a host approval is \$20.00.

### 1.4.1 Cardholder Verification Method List – AID (A0000000041010)

Cardholder Verification Method List ('410342031E031F00')			
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	Fail
4	No CVM required	Always	Fail

### 1.4.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	52 22 50 00 00 00 00 18 D2 51 26 01 07 93 60 80 50 02 9F	
5A	Application Primary Account Number (PAN)	52 22 50 00 00 00 00 18	
5F 20	Cardholder Name	43 41 52 44 20 30 39 2F 2D 20 5A 41 52 20 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 09/ ZAR'	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	04 01 01	
5F 28	Issuer Country Code	07 10 - South Africa	
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	18 00	
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 41 03 42 03 5E 03 1F 00	
8F	Certification Authority Public Key Index	FA	
90	Issuer Public Key Certificate	18 89 B9 97 E6 FC E8 4B 4A E7 AB 87 43 1C BD B3 DF 8C 1D 5A 55 A7 F6 0D 29 59 AF 3A 51 04 E7 58 83 17 ED 74 08 66 68 CF 1A 05 47 84 F7 49 3C 6D 74 7F A7 96 EC 14 D3 33 A6 8E C7 E0 08 62 95 9A 0B D0 F0 48 20 80 B7 1A C1 B7 62 5B 1B 8B 1F 35 A6 69 19 99 BA 78 F5 92 E2 3F 95 E9 96 09 D1 08 CF 1C 0E 30 8A 8B F6 4F BD E8 37 D3 CE 13 8A 50 DC 50 AF 4B 41 EE 53 D9 8A 11 B6 A8 1D DD 44 CC 43 0C 1E F3 BB 9D 1D 75 A0 2F AA 9C	



Tag	Element name	Data	v1.00
		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	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx xx 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 53 6F 75 74 68 20 41 66 72 69 63 61 - 'MC South Africa'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	20 20	
9F 23	Upper Consecutive Offline Limit	01	
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	07 10 - ZAR	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	94 A1 DA 4C 35 B2 16 62 D1 C1 B5 2B 95 43 F9 69 D4 99 B1 79 08 F1 09 E4 BE A5 EE EE BD 1E 5E F2 9B 80 48 01 75 49 49 1F 56 1A E3 F4 81 43 C7 45 E0 63 BC 8A BD 09 60 40 9F 6A E9 93 85 58 44 55 C9 EB A1 ED 3E 28 EC 6D 5B 22 A0 A3 C4 20 6C 4D F5 47 F8 59 9A 6E 7D 27 EA CA 87 D0 E9 6F 94 F2 01 57 09 33 5F A8 70 D4 77 53 0D A1 D3 BE 9C AC	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	7D AD F0 4D 41 77 80 4F 76 BB 40 5E 2E B2 43 BF 82 25 97 01 A2 38 6B A9 B2 EF 31 42 A7 F5 4B CC 1B D1 A3 FA 13 4C 35 75 E8 B7	
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]	07 10 00 00 30 30 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	

Tag	Element name	Data	v1.00
C3	Card Issuer Action Code - Decline [MasterCard]	00 00 00	
C4	Card Issuer Action Code - Default [MasterCard]	5F 58 00	
C5	Card Issuer Action Code - Online [MasterCard]	3F FC 00	
C7	CDOL1 Related Data Length [MasterCard]	2D	
C8	CRM Country Code [MasterCard]	07 10 - South Africa	
C9	CRM Currency Code [M/Chip4]	07 10 - ZAR	
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]	07 10 00 00 00 07 10 00 00 00 07 10 00 00 00 07 10 00 00 00 07 10 00 00 00	
D3	Additional Check Table [MasterCard]	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
DF 02	Security Limits Status [MasterCard]	00	

## 1.5 Test Card 10 – MasterCard, Credit, English, KOR, WON

A MasterCard credit card with Issuer Country Code of 'S. Korea' and Currency Code of 'WON'.  
 The recommended transaction amount to generate a host approval is \$20.00.

### 1.5.1 Cardholder Verification Method List – AID (A0000000041010)

Cardholder Verification Method List ('410342031E031F00')			
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	Fail
4	No CVM required	Always	Fail

### 1.5.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	51 00 03 00 00 00 00 05 D2 51 22 01 07 93 60 80 50 00 0F	
5A	Application Primary Account Number (PAN)	51 00 03 00 00 00 00 05	
5F 20	Cardholder Name	43 41 52 44 20 31 30 2F 2D 20 57 4F 4E 20 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 10/- WON '	
5F 24	Application Expiration Date	25 12 31	
5F 25	Application Effective Date	04 01 01	
5F 28	Issuer Country Code	04 10 - South Korea	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	03	
82	Application Interchange Profile	18 00	
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 41 03 42 03 1E 03 1F 00	
8F	Certification Authority Public Key Index	FA	

Tag	Element name	Data	v1.00
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	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx xx 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 53 6F 75 74 68 20 4B 6F 72 65 61 - 'MC South Korea'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	0F	
9F 1F	Track 1 Discretionary Data	20 20	
9F 23	Upper Consecutive Offline Limit	01	
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	04 10 - KRW	
9F 44	Application Currency Exponent	00	
9F 46	ICC Public Key Certificate	1E 36 C4 03 1A 1A DF B0 C1 D6 95 46 81 FD B2 51 72 C2 A5 BC 9C EE 42 92 3F 3D 9A C1 E3 DD 54 DA C4 CF 7E 30 9A 08 43 41 AE F4 99 CB 81 80 A1 F3 C0 57 99 0C 87 0E 6A B9 31 ED 56 6E 3D 20 B5 F6 B5 E5 6D 78 3C 35 26 42 88 5C 43 74 72 07 EC A4 1D 2F 7D FD BA D9 03 DA 64 C6 26 A9 4F AF 86 6D 55 6D D1 0C 01 61 7F 8E ED D0 0C 30 27 D8 9A 5C	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	67 8B 45 97 40 59 3A 1F 26 64 71 20 92 50 4F 30 DC 59 D6 BC 51 B4 EB E7 55 E0 E6 0E 6A 0F EA E9 14 2B 88 64 21 7E C6 AD 42 EF	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	

Tag	Element name	Data	v1.00
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]	04 10 00 00 30 30 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]	1F 58 00	
C5	Card Issuer Action Code - Online [MasterCard]	3F FC 00	
C7	CDOL1 Related Data Length [MasterCard]	2D	
C8	CRM Country Code [MasterCard]	04 10 - South Korea	
C9	CRM Currency Code [M/Chip4]	04 10 - KRW	
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]	04 10 00 00 00 04 10 00 00 00 04 10 00 00 00 04 10 00 00 00 04 10 00 00 00	
D3	Additional Check Table [MasterCard]	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
D5	Application Control [M/Chip]	C4 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
DF 02	Security Limits Status [MasterCard]	00	

## 1.6 Test Card 11 – Visa, Credit, English, CHE, CHF

A MasterCard credit card with Issuer Country Code of 'Switzerland' and Currency Code of 'CHF'.  
 The recommended transaction amount to generate a host approval is \$10.00.

### 1.6.1 Cardholder Verification Method List – AID (A0000000031010)

Cardholder Verification Method List ('1E0302031F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (paper)	Terminal supports CVM type	Next CVM
2	Online PIN	Terminal supports CVM type	Next CVM
3	No CVM required	Always	Fail

### 1.6.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	56 69 73 61 20 43 72 65 64 69 74 - 'Visa Credit'	
57	Track 2 Equivalent Data	44 35 92 00 00 00 00 06 D2 21 22 01 11 43 87 80 89 90 0F	
5A	Application Primary Account Number (PAN)	44 35 92 00 00 00 00 06	
5F 20	Cardholder Name	43 41 52 44 20 31 31 2F 20 2D 20 43 48 46 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 11/- CHF'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	14 07 01	
5F 28	Issuer Country Code	07 56 - Switzerland	
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	1C 00	
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 9B 02	
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 9B 02	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	92	

Tag	Element name	Data	v1.00
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 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	
94	Application File Locator (AFL)	08 01 01 00 08 02 04 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00	
9F 08	Application Version Number	00 96	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 49 53 41 20 53 77 69 74 7A 65 72 6C 61 6E 64 - 'VISA Switzerland'	
9F 13	Last Online Application Transaction Counter (ATC) Register	00 00	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 37 35 38 39 30 30 38 39 33 30 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	v1.00
9F 46	ICC Public Key Certificate	28 14 F9 9E C2 04 3C 95 19 DC AE 38 45 F5 C2 2C 09 1C C8 D0 68 B5 2A 6E 03 52 EA 5F 45 19 66 EF 8D 74 69 29 CF 0C 6B 9D 88 BC 89 1F 47 63 30 64 79 17 25 90 21 CD B3 1A 52 86 35 1D 89 22 AF 33 99 9C C6 11 FF FF 4F D0 DA C8 AC BC A8 B5 AC 32 A6 44 BD A5 A0 47 70 6F 9A 3E 63 1D 12 D7 17 3F 9F EF 5B DE 85 0D 83 D3 93 F1 E0 E8 DA 79 47 E5 1C 64 1C 89 D0 36 FF E0 71 08 48 FE 5A 92 4B F6 45 C6 6A 3F 76 DA 06 FA B0 F6 21 A0 38 12 B3 1A 6C 90 4A 3F 61 50 5A 4A D3 EA F4 13 E0 D4 FD 4E 43 69 F1 B4 7A CE CD 0A B2 3E AD A2 4E F6 04 DE	
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]	07 56 - CHF	
9F 52	Application Default Action [VSDC VIS 1.5]	03 38 20 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	01	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	01	
9F 68	Card Additional Processes [qVSDC VCPS 2.1]	10 00 10 00	
9F 6D	VLP Reset Threshold [VSDC]	00 00 00 00 00 00	
9F 77	VLP Funds Limit [VSDC]	00 00 00 00 00 00	
9F 79	VLP Available Funds [VSDC]	00 00 00 00 00 00	
9F 7D	Application Code Level [VSDC]	30 38 30 33 31 32 20 56 53 44 43 20 32 38 31 41 4D 32	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 51 06 00 00 00 00 00 00 DF 61 06 00 00 00 00 00 00 DF 71 06 00 00 00 00 00 00	
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01	
BF 57	International Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01 DF 51 01 01	
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	
BF 5B	Application Internal Data Template	DF 01 02 00 00	



## 1.7 Test Card 12 – Visa, Credit, English, SWE, SEK

A Visa credit card with Issuer Country Code of ‘Sweden’ and Currency Code of ‘SEK’.

The recommended transaction amount to generate a host approval is \$10.00.

### 1.7.1 Cardholder Verification Method List – AID (A0000000031010)

Cardholder Verification Method List ('1E0302031F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (paper)	Terminal supports CVM type	Next CVM
2	Online PIN	Terminal supports CVM type	Next CVM
3	No CVM required	Always	Fail

### 1.7.2 Application Tag data

\* Tag value changes with card usage

Tag	Element name	Data	v1.00
50	Application Label	56 69 73 61 20 43 72 65 64 69 74 - 'Visa Credit'	
57	Track 2 Equivalent Data	45 67 59 00 00 00 00 07 D2 21 22 01 11 43 87 80 89 90 0F	
5A	Application Primary Account Number (PAN)	45 67 59 00 00 00 00 07	
5F 20	Cardholder Name	43 41 52 44 20 31 32 2F 20 2D 20 53 45 4B 20 20 20 20 20 20 20 20 20 20 20 20 - 'CARD 12/- SEK'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	14 07 01	
5F 28	Issuer Country Code	07 52 - Sweden	
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	1C 00	
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 9B 02	
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 9B 02	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	92	

Tag	Element name	Data	v1.00
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 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	
94	Application File Locator (AFL)	08 01 01 00 08 02 04 01 B0 01 01 00	
9F 07	Application Usage Control	FF 00	
9F 08	Application Version Number	00 96	
9F 0D	Issuer Action Code - Default	B0 78 FC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 78 FC 98 00	
9F 10	Issuer Application Data [VSDC]	xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 49 53 41 20 53 77 65 64 65 6E - 'VISA Sweden'	
9F 13	Last Online Application Transaction Counter (ATC) Register	00 00	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	31 37 35 38 39 30 30 38 39 33 30 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	v1.00
9F 46	ICC Public Key Certificate	01 71 50 4D 95 12 13 44 76 35 75 94 4F 70 7A B2 82 5F 51 72 D1 9B 11 6F 86 F1 79 49 2D AF C8 06 0D 14 8A 8E 3E 39 2F B6 6C E6 F8 97 FE 2B 5D B2 0B F0 C4 6F 3B EC F3 E6 64 6C 04 33 D8 B8 88 29 20 4B 6B DF C7 E5 24 19 55 A7 AE 35 CB C5 99 73 A6 11 03 E8 96 76 C3 2F D3 0F 95 AC D7 B9 80 6F C1 01 7E 69 95 12 B8 5E 46 A8 44 D5 F7 AC 4B 21 1A 38 2B 7A 95 9B C5 2E AF 09 37 42 21 AA CD AC 1B FE 63 B3 DF 5A 08 9A E8 8A 94 A2 A6 55 C7 11 CD B0 91 1D 35 01 84 BF 3B 3F FB 71 DE 53 EC C0 53 73 97 32 CE 01 09 0B AA B0 D1 73 EC C6 73 2C	
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]	07 52 - SEK	
9F 52	Application Default Action [VSDC VIS 1.5]	03 38 20 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	00	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 00 00 00	
9F 58	Consecutive Transaction Counter Limit [VSDC]	00	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	01	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 00 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	01	
9F 68	Card Additional Processes [qVSDC VCPS 2.1]	10 00 10 00	
9F 6D	VLP Reset Threshold [VSDC]	00 00 00 00 00 00	
9F 77	VLP Funds Limit [VSDC]	00 00 00 00 00 00	
9F 79	VLP Available Funds [VSDC]	00 00 00 00 00 00	
9F 7D	Application Code Level [VSDC]	30 38 30 33 31 32 20 56 53 44 43 20 32 38 31 41 4D 32	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 51 06 00 00 00 00 00 00 DF 61 06 00 00 00 00 00 00 DF 71 06 00 00 00 00 00 00	
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01	
BF 57	International Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 01 DF 51 01 01	
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	
BF 5B	Application Internal Data Template	DF 01 02 00 00	

## Chapter 2 - ASCII Character Conversion Chart

Dec	Bin	Hex	Char	Dec	Bin	Hex	Char	Dec	Bin	Hex	Char
00	00000000	00	<b>NUL</b>	44	00101100	2C	,	88	01011000	58	<b>X</b>
01	00000001	01	<b>SOH</b>	45	00101101	2D	-	89	01011001	59	<b>Y</b>
02	00000010	02	<b>STX</b>	46	00101110	2E	.	90	01011010	5A	<b>Z</b>
03	00000011	03	<b>ETX</b>	47	00101111	2F	/	91	01011011	5B	[
04	00000100	04	<b>EOT</b>	48	00110000	30	<b>0</b>	92	01011100	5C	\
05	00000101	05	<b>ENQ</b>	49	00110001	31	<b>1</b>	93	01011101	5D	]
06	00000110	06	<b>ACK</b>	50	00110010	32	<b>2</b>	94	01011110	5E	^
07	00000111	07	<b>BEL</b>	51	00110011	33	<b>3</b>	95	01011111	5F	_
08	00001000	08	<b>BS</b>	52	00110100	34	<b>4</b>	96	01100000	60	`
09	00001001	09	<b>HT</b>	53	00110101	35	<b>5</b>	97	01100001	61	<b>a</b>
10	00001010	0A	<b>LF</b>	54	00110110	36	<b>6</b>	98	01100010	62	<b>b</b>
11	00001011	0B	<b>VT</b>	55	00110111	37	<b>7</b>	99	01100011	63	<b>c</b>
12	00001100	0C	<b>FF</b>	56	00111000	38	<b>8</b>	100	01100100	64	<b>d</b>
13	00001101	0D	<b>CR</b>	57	00111001	39	<b>9</b>	101	01100101	65	<b>e</b>
14	00001110	0E	<b>SO</b>	58	00111010	3A	:	102	01100110	66	<b>f</b>
15	00001111	0F	<b>SI</b>	59	00111011	3B	;	103	01100111	67	<b>g</b>
16	00010000	10	<b>DLE</b>	60	00111100	3C	<	104	01101000	68	<b>h</b>
17	00010001	11	<b>DC1</b>	61	00111101	3D	=	105	01101001	69	<b>i</b>
18	00010010	12	<b>DC2</b>	62	00111110	3E	>	106	01101010	6A	<b>j</b>
19	00010011	13	<b>DC3</b>	63	00111111	3F	?	107	01101011	6B	<b>k</b>
20	00010100	14	<b>DC4</b>	64	01000000	40	@	108	01101100	6C	<b>l</b>
21	00010101	15	<b>NAK</b>	65	01000001	41	<b>A</b>	109	01101101	6D	<b>m</b>
22	00010110	16	<b>SYM</b>	66	01000010	42	<b>B</b>	110	01101110	6E	<b>n</b>
23	00010111	17	<b>ETB</b>	67	01000011	43	<b>C</b>	111	01101111	6F	<b>o</b>
24	00011000	18	<b>CAN</b>	68	01000100	44	<b>D</b>	112	01110000	70	<b>p</b>
25	00011001	19	<b>EM</b>	69	01000101	45	<b>E</b>	113	01110001	71	<b>q</b>
26	00011010	1A	<b>SUB</b>	70	01000110	46	<b>F</b>	114	01110010	72	<b>r</b>
27	00011011	1B	<b>ESC</b>	71	01000111	47	<b>G</b>	115	01110011	73	<b>s</b>
28	00011100	1C	<b>FS</b>	72	01001000	48	<b>H</b>	116	01110100	74	<b>t</b>
29	00011101	1D	<b>GS</b>	73	01001001	49	<b>I</b>	117	01110101	75	<b>u</b>
30	00011110	1E	<b>RS</b>	74	01001010	4A	<b>J</b>	118	01110110	76	<b>v</b>
31	00011111	1F	<b>US</b>	75	01001011	4B	<b>K</b>	119	01110111	77	<b>w</b>
32	00100000	20	<b>SP</b>	76	01001100	4C	<b>L</b>	120	01111000	78	<b>x</b>
33	00100001	21	!	77	01001101	4D	<b>M</b>	121	01111001	79	<b>y</b>
34	00100010	22	"	78	01001110	4E	<b>N</b>	122	01111010	7A	<b>z</b>
35	00100011	23	#	79	01001111	4F	<b>O</b>	123	01111011	7B	{
36	00100100	24	\$	80	01010000	50	<b>P</b>	124	01111100	7C	
37	00100101	25	%	81	01010001	51	<b>Q</b>	125	01111101	7D	}
38	00100110	26	&	82	01010010	52	<b>R</b>	126	01111110	7E	~
39	00100111	27	'	83	01010011	53	<b>S</b>	127	01111111	7F	<b>DEL</b>
40	00101000	28	(	84	01010100	54	<b>T</b>				
41	00101001	29	)	85	01010101	55	<b>U</b>				
42	00101010	2A	*	86	01010110	56	<b>V</b>				
43	00101011	2B	+	87	01010111	57	<b>W</b>				