



**Elavon
DCC Test Card Set**

Version 1.01

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Revision History

Version	Date	Updated By	Revisions
1.00	July 14, 2016	B2PS	<ul style="list-style-type: none">• Initial document release
1.01	June 26, 2019	B2PS	<ul style="list-style-type: none">• “UL” branding removed from page header. No change to cards themselves.

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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 - Elavon Dynamic Currency Conversion (DCC) Test Card Set Profiles

The Elavon DCC (Dynamic Currency Conversion) Test Card Set contains 4 cards featuring multiple Issuer Country and Currency codes.



	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Mastercard
Description (Card - Types)	Credit	Credit	Credit
AID list	A0000000031010	A0000000031010	A0000000041010
PAN list	4032 7600 0999 9999	4160 2944 4444 4449	5101 0800 0000 0009
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contactless, Contact, MSR	Contact, MSR	Contactless, Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$10.00	\$10.00	\$20.00
Issuer Country Code	124 - CAN	250 - FRA	826 - GBR
Application Currency Code	124 -CAD	978 - EUR	826 - GBP
Language	'enfr' - English, French	'fren' - French, English	'fren' - French, English
Card Version	v1.0	v1.0	v1.0

	Test Card 04
Brand	Mastercard
Description (Card - Types)	Credit
AID list	A0000000041010
PAN list	5120 7900 0000 0000
Expiry Date	12/2022
Service Code	201
Interface	Contact, MSR
CVM	See card definition
Approval Amount	\$20.00
Issuer Country Code	392 - JPN
Application Currency Code	392 -JPY
Language	'jpen' - Japanese, English
Card Version	v1.0

1.1 Test Card 01 - Visa, DI, English/French, Canada, CAD

A Dual Interface (Contact+Contactless), Visa card with an Issuer Country Code of Canada and Currency Code of CAD. Languages supported are English and French.

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

1.1.1 Contact Interface: CVM List - Visa, AID A000000031010

Cardholder Verification Method List ('4201 4103 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
3	Signature (paper)	Terminal supports CVM type	Next CVM
4	NO CVM required	Terminal supports CVM type	Fail

1.1.2 Contact Interface: Application Tag data, AID A000000031010

* Tag value changes with card usage

Tag	Element name	Data	v1.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	40 32 76 00 09 99 99 99 D2 21 22 01 11 43 80 44 00 00 0F	
5A	Application Primary Account Number (PAN)	40 32 76 00 09 99 99 99	
5F 20	Cardholder Name	45 4C 41 56 4F 4E 20 44 43 43 2F 54 45 53 54 20 43 41 52 44 20 30 31 20 20 20 - 'ELAVON DCC/Test Card 01'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	17 04 01	
5F 28	Issuer Country Code	01 24 - CAN	
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VSDC]	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	
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 42 01 41 03 5E 03 1F 03	
8F	Certification Authority Public Key Index	92	

Tag	Element name	Data	v1.x
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)	10 01 01 00 10 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	B8 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B8 70 BC 98 00	
9F 10	Issuer Application Data [VSDC]	06 01 0A 03 A0 30 00	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 43 72 65 64 69 74 - 'Visa Credit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 1F	Track 1 Discretionary Data	31 31 34 33 38 30 34 34 30 30 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 42	Application Currency Code	01 24 - CAD	
9F 44	Application Currency Exponent	02	

Tag	Element name	Data	v1.x
9F 46	ICC Public Key Certificate	1E 51 C1 88 F6 8F 20 83 47 BB 1B 1C BD F0 38 1D 59 44 7B 53 7D DD 8A DC 12 DA D2 0C 81 C3 71 A7 B0 DF E1 ED 34 AE 22 14 E8 2E 67 21 1F 0C 87 AA B8 60 78 34 6C BD A3 35 1C 47 9D 5F D1 3D 50 0F 4D 07 77 FE 05 EC 4B A6 96 C7 A5 7C 02 17 1A A0 D7 D6 00 3C B2 CE 17 9B 79 15 5D 89 38 C1 47 D6 DD 47 30 EF 55 77 89 16 30 F7 74 8E ED 08 BF D0 87 E0 9E C0 E1 CA 84 00 E7 74 41 2A 05 F5 90 63 FE 48 09 6C C1 6F B9 21 A0 4E 16 40 56 7E 06 B7 60 A0 27 6F FC C1 E4 51 E3 43 48 16 9E F3 45 32 76 CE C2 6D 3F 93 0A 96 B2 75 C5 AD B9 C5 36 D9	
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 24 - CAD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 30 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	03	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 02 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	01 24	
9F 58	Consecutive Transaction Counter Limit [VSDC]	03	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	07	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 04 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	07	
9F 68	Card Additional Processes [qVSDC VCPS 2.1]	0A 00 F0 00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	03	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 21 01 03 DF 31 01 07	
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 03 DF 31 01 07	
BF 57	International Counters Data Template	DF 11 01 01 DF 21 01 03 DF 31 01 07 DF 51 01 04 DF 61 01 03	
BF 58	Amounts Data Template	DF 11 06 00 00 00 01 00 00 DF 21 06 00 00 00 02 00 00 DF 31 06 00 00 00 04 00 00	
BF 5B	Application Internal Data Template	DF 01 02 00 00	

1.1.3 Contactless Interface: Application Tag data, AID A000000031010

* Tag value changes with card usage

Tag	Element name	Data	v1.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	40 32 76 00 09 99 99 99 D2 21 22 01 11 43 80 44 00 00 0F	
5A	Application Primary Account Number (PAN)	40 32 76 00 09 99 99 99	
5F 24	Application Expiration Date	22 12 31	
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VCPS]	00 00	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
8F	Certification Authority Public Key Index	92	
90	Issuer Public Key Certificate	3C 96 F7 65 8F BC 29 A2 02 F1 91 46 BD E9 21 66 B0 F6 22 1B BC CB 02 E3 26 71 0B 9E 22 9D 16 FA E9 AD 0C 87 4C 06 85 91 6E 19 F0 E3 26 93 EE 20 1B CE 23 59 50 9A 6D 65 72 F8 EC 3F C3 73 12 6B 34 3F 9C B8 15 3D 61 B7 EA B2 D4 2D E1 9D 56 08 31 85 A0 3D D1 4C 26 8D 40 DF 08 35 C5 5E AB FA 38 ED 28 BC E4 2C 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)	10 04 05 00	
9F 10	Issuer Application Data [VSDC]	06 01 0A 03 A0 00 00	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
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 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	

Tag	Element name	Data	v1.x
9F 46	ICC Public Key Certificate	35 86 F5 3C 13 95 A5 D8 84 8A A6 E0 81 DD 04 6E DC 83 F3 2F 40 4F F0 D5 C0 65 75 7D 11 E9 9E 56 5D B4 D9 58 99 49 C5 22 7D 05 66 BE 8E C0 7A A3 17 D3 07 F1 93 1A 11 27 44 BA 9C 0F 5A 55 D4 49 81 76 D0 FB 3A A5 C4 57 0A BC 56 7D 4D 29 F9 D2 D3 9E 9F D6 44 77 76 B4 28 D7 27 AF 75 2E 90 56 D9 1E 5F D2 DA C4 88 F2 0E 84 3F D8 91 15 E7 02 CE 90 29 F5 64 A0 7B 02 EF FE 46 0D C7 29 2D C4 6F 9E 89 D4 33 8F 63 AF 74 4B 7F 82 3D 4F 45 C2 F6 B5 45 D0 BC 39 26 2D 6B FB 6F 2A 1B 6D C3 A3 D1 65 7B 43 EC B1 B6 FC 6D 3F 6D E3 12 DE 01 AA	
9F 47	ICC Public Key Exponent	03	
9F 4A	Static Data Authentication Tag List	82	
9F 51	Application Currency Code [VSDC]	01 24 - CAD	
9F 52	Application Default Action [VSDC VIS 1.5]	C0 30 00 00 00 00	
9F 53	Consecutive Transaction Limit (International) [VSDC]	03	
9F 54	Cumulative Total Transaction Amount Limit [VSDC]	00 00 00 02 00 00	
9F 56	Issuer Authentication Indicator [VSDC]	80	
9F 57	Issuer Country Code [VSDC]	01 24	
9F 58	Consecutive Transaction Counter Limit [VSDC]	03	
9F 59	Consecutive Transaction Counter Upper Limit [VSDC]	07	
9F 5A	Application Program Identifier	31 08 40 08 40	
9F 5C	Cumulative Total Transaction Amount Upper Limit [VSDC]	00 00 00 04 00 00	
9F 5E	Consecutive Transaction International Upper Limit [VSDC]	07	
9F 68	Card Additional Processes [qVSDC VCPS 2.1]	0A 00 F0 00	
9F 69	Card Authentication Related Data [qVSDC]	01 D4 25 F0 F1 38 00	
9F 6C	Card Transaction Qualifiers [qVSDC VCPS 2.1]	38 00	
9F 6E	Form Factor Indicator [qVSDC]	20 70 00 00	
9F 72	Consecutive Transaction Limit (International-Country) [VSDC]	03	
BF 55	Contactless Counters Data Template	DF 11 01 00 DF 21 01 03 DF 31 01 07	
BF 56	Counters Data Template	DF 11 01 00 DF 21 01 03 DF 31 01 07	
BF 57	International Counters Data Template	DF 11 01 00 DF 21 01 03 DF 31 01 07 DF 51 01 03 DF 61 01 03	
BF 58	Amounts Data Template	DF 11 06 00 00 00 01 00 00 DF 21 06 00 00 00 02 00 00 DF 31 06 00 00 00 04 00 00	
BF 5B	Application Internal Data Template	DF 01 02 00 00	

1.2 Test Card 02 - Visa, CO, French/English, France, EUR

A contact-only Visa card with an Issuer Country Code of France and Currency Code of Euro. Languages supported are French and English.

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

1.2.1 Contact Interface: CVM List - Visa, AID A000000031010

Cardholder Verification Method List ('4201 4204 5E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Online PIN	Manual Cash	Next CVM
3	Signature (paper)	Terminal supports CVM type	Next CVM
4	NO CVM required	Terminal supports CVM type	Fail

1.2.2 Contact Interface: Application Tag data, AID A000000031010

Tag	Element name	Data	v1.x
50	Application Label	56 49 53 41 20 43 52 45 44 49 54 - 'VISA CREDIT'	
57	Track 2 Equivalent Data	41 60 29 44 44 44 44 49 D2 21 22 01 11 43 80 44 00 00 0F	
5A	Application Primary Account Number (PAN)	41 60 29 44 44 44 44 49	
5F 20	Cardholder Name	45 4C 41 56 4F 4E 20 44 43 43 2F 54 45 53 54 20 43 41 52 44 20 30 32 20 20 20 - 'ELAVON DCC/Test Card 02'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	17 04 01	
5F 28	Issuer Country Code	02 50 - FRA	
5F 2D	Language Preference	66 72 65 6E - 'fren' French, English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [VSDC]	1C 00	
84	Dedicated File (DF) Name	A0 00 00 00 03 10 10	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
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 42 01 42 04 5E 03 1F 00	
8F	Certification Authority Public Key Index	92	

Tag	Element name	Data	v1.x
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	
93	Signed Static Application Data	6A 23 11 AE EF 7E 56 45 61 FE AA 04 BD D2 3B 69 2B 0F CF 65 2C 76 44 24 22 5A 9D 69 19 30 B4 74 B5 57 EC 2D FC 33 51 E5 F5 EE AC 8C 43 8C EF 62 90 4C 5D DF 22 B0 CC 47 59 19 E0 BA BF 0A 39 85 D6 F5 58 82 EB A8 A0 4E F0 66 F1 95 31 4B 9C E1 0F 1A 7B CB B1 E0 61 3A 73 92 86 C3 29 6F 5B E6 73 A6 47 1D 0E 9D 27 37 C6 1D F1 77 E9 03 06 46 8D 4D 90 71 EB 9F FE D9 3B 39 D7 50 61 78 A3 B0 CB BB D6 B1 67 AC 4B E5 ED 11 FC 12 70 81 B5 0B F3 DE 4C 30 76 55 9B 48 2C 0B 2D F1 62 E1 FC 70 0A 58 A6 E2 1B B2 20 D6 CE CE 8C C1 36 5A 15 69	
94	Application File Locator (AFL)	10 01 01 00 10 02 04 01 10 06 06 00 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 50 80 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 50 80 98 00	
9F 10	Issuer Application Data [VSDC]	06 01 0A 03 A0 30 00	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	56 69 73 61 20 43 72 65 64 69 74 - 'Visa Credit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 1F	Track 1 Discretionary Data	31 31 34 33 38 30 34 34 30 30 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 *	

Tag	Element name	Data	v1.x
9F 42	Application Currency Code	09 78 - EUR	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	7D 9C 65 5B 34 55 36 73 06 F0 B1 29 35 39 C4 2B 68 AA 3E 0D AC D9 50 8E 79 0F 84 BF DD 7A A2 34 1E D6 F2 BB 8D 3B 0A F4 B7 2B 32 9F 40 A7 3B B1 4B 48 BA 71 20 9B E3 FD 52 CA 36 4F E6 6A E6 CB 0D 53 64 9A 9C 91 06 77 4B 49 6E 37 23 0B 20 9D 9A 3E F9 82 C6 D8 5A 52 07 EE 9E 00 F1 49 9B 74 56 E8 43 E1 4C F0 47 8B E8 3B 71 CD 32 B5 76 26 5C 64 11 56 FA 96 5B 69 99 B5 EC 13 84 32 97 5D 5E 84 5E D4 07 DB 53 18 C7 F2 5A B1 2C BC 16 6E 9B 65 9B 23 48 AD 22 A6 DF 9E B3 A5 1C 8D 80 22 37 6C 00 28 DE 67 C3 DB 83 FA 41 54 C6 CB 34 1F	
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]	09 78 - EUR	
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]	02 50	
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 68	Card Additional Processes [qVSDC VCPS 2.1]	02 00 D0 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 78	VLP Single Transaction Limit [VSDC]	00 00 00 00 00 00	
9F 79	VLP Available Funds [VSDC]	00 00 00 00 00 00	
BF 55	Contactless Counters Data Template	DF 61 06 00 00 00 00 00 00 DF 71 06 00 00 00 00 00 00 DF 41 06 00 00 00 00 00 00 DF 51 06 00 00 00 00 00 00 DF 11 01 00 DF 21 01 00 DF 31 01 00	
BF 56	Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 00	
BF 57	International Counters Data Template	DF 11 01 01 DF 21 01 00 DF 31 01 00 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	

1.3 Test Card 03 - Mastercard, DI, English, Great Britain, GBP

A Dual Interface (Contact+Contactless), Mastercard card with an Issuer Country Code of Great Britain and Currency Code of GBP. Language supported is English.

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

1.3.1 Contact Interface: CVM List - Mastercard, AID A0000000041010

Cardholder Verification Method List ('4201 4103 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
3	Signature (paper)	Terminal supports CVM type	Next CVM
4	NO CVM required	Terminal supports CVM type	Fail

1.3.2 Contact Interface: Application Tag data, AID A0000000041010

* Tag value changes with card usage

Tag	Element name	Data	v1.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	51 01 08 00 00 00 09 D2 21 22 01 01 23 40 91 72 02 9F	
5A	Application Primary Account Number (PAN)	51 01 08 00 00 00 09	
5F 20	Cardholder Name	45 4C 41 56 4F 4E 20 44 43 43 2F 54 45 53 54 20 43 41 52 44 20 30 33 20 20 20 - 'ELAVON DCC/Test Card 03'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	17 04 01	
5F 28	Issuer Country Code	08 26 - GBR	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [M/Chip, PayPass]	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	
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 41 03 5E 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element name	Data	v1.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	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 BC 80 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 BC 98 00	
9F 10	Issuer Application Data [M/Chip 4]	01 10 A0 00 09 24 00 00 01 02 00 00 00 00 00 00 00 FF	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 61 73 74 65 72 43 61 72 64 - 'MasterCard'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 1F	Track 1 Discretionary Data	30 31 32 33 34 30 39 31 37 32 30 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx 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 26 - GBP	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	16 9C 7C 8B 78 34 9F DA B6 5A FA 84 F5 EC 96 12 2D DE 94 43 CF E3 7E E2 B8 D8 F0 32 3A DA 27 2F 70 2E 0E FB 55 C7 F4 38 A1 75 6E CF 48 41 B3 80 13 1E 53 C4 60 03 F2 6A E3 83 1D BC DB 31 51 B7 32 B3 0A 2E 17 B2 F1 31 7A E2 92 D9 89 56 2F B0 E1 88 DF AA F4 DF 94 A0 11 C8 4F 69 09 55 D2 35 EE C9 CB AE 96 88 DF 3B 43 CE 76 3B 31 55 F2 EE	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	2B 37 C2 30 2E 88 FE 2E 74 1B 5C E1 11 C0 BC 41 CA CB 23 C9 97 7A 7D 93 C8 C9 16 FB 54 23 C0 AE 1E 2E C6 D0 36 D5 79 CE 5B 93	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	

Tag	Element name	Data	v1.x
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 26 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]	19 50 00	
C5	Card Issuer Action Code - Online [Mastercard]	39 FB 00	
C6	Counters [Mastercard]	00 04 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2B	
C8	CRM Country Code [Mastercard]	08 26 - GBR	
C9	CRM Currency Code [M/Chip4]	08 26 - GBP	
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	
CD	Card Issuer Action Code - Default [PayPass M/Chip]	00 58 00	
CE	Card Issuer Action Code - Online [PayPass M/Chip]	00 F8 00	
CF	Card Issuer Action Code - Denial [PayPass M/Chip]	00 00 00	
D1	Currency Conversion Table [M/Chip]	08 26 00 00 00 08 26 00 00 00 08 26 00 00 00 08 26 00 00 00 08 26 00 00 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	CC 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
D7	Application Control [PayPass M/Chip]	40 01 40	
DF 02	Security Limits Status [Mastercard]	00	

1.3.3 Contactless Interface: CVM List - Mastercard, AID A000000041010

Cardholder Verification Method List ('5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (paper)	Terminal supports CVM type	Next CVM
2	No CVM required	Terminal supports CVM type	Fail

1.3.4 Contactless Interface: Application Tag data, AID A000000041010

* Tag value changes with card usage

Tag	Element name	Data	v1.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
56	Track 1 Equivalent Data [Mastercard]	42 35 31 30 31 30 38 30 30 30 30 30 30 30 30 30 39 5E 20 2F 5E 32 32 31 32 32 30 31 30	
57	Track 2 Equivalent Data	51 01 08 00 00 00 00 09 D2 21 22 01 01 23 40 91 72 02 9F	
5A	Application Primary Account Number (PAN)	51 01 08 00 00 00 00 09	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	17 04 01	
5F 28	Issuer Country Code	08 26 - GBR	
5F 2D	Language Preference	65 6E - 'en' (English)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [M/Chip, PayPass]	19 80	
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	
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 5E 03 1F 03	
8F	Certification Authority Public Key Index	FA	
90	Issuer Public Key Certificate	18 89 B9 97 E6 FC E8 4B 4A E7 AB 87 43 1C BD B3 DF 8C 1D 5A 55 A7 F6 0D 29 59 AF 3A 51 04 E7 58 83 17 ED 74 08 66 68 CF 1A 05 47 84 F7 49 3C 6D 74 7F A7 96 EC 14 D3 33 A6 8E C7 E0 08 62 95 9A 0B D0 F0 48 20 80 B7 1A C1 B7 62 5B 1B 8B 1F 35 A6 69 19 99 BA 78 F5 92 E2 3F 95 E9 96 09 D1 08 CF 1C 0E 30 8A 8B F6 4F BD E8 37 D3 CE 13 8A 50 DC 50 AF 4B 41 EE 53 D9 8A 11 B6 A8 1D DD 44 CC 43 0C 1E F3 BB 9D 1D 75 A0 2F AA 9C 81 4A FC 58	
92	Issuer Public Key Remainder	D3 52 41 07	
94	Application File Locator (AFL)	08 01 01 00 10 01 01 01 18 01 01 00 20 01 02 00	
9F 07	Application Usage Control	FF 00	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	B4 50 80 80 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B4 70 80 80 00	
9F 10	Issuer Application Data [M/Chip 4]	01 11 A0 40 09 24 00 00 01 02 00 00 00 00 00 00 00 FF	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 61 73 74 65 72 43 61 72 64 - 'MasterCard'	
9F 14	Lower Consecutive Offline Limit	00	

Tag	Element name	Data	v1.x
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 23	Upper Consecutive Offline Limit	00	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 46	ICC Public Key Certificate	44 B7 32 92 97 B6 78 FA 87 D7 A9 E2 7E D8 9A 3E 5A 74 D2 0B AD 21 CA A9 70 2C A0 86 DB 60 01 3B 14 F4 6A C0 01 8C 32 DA 43 EA 56 EA 67 6F FA 9B E2 46 96 91 13 9B 33 DA 7E 2E 1D 69 2B 0B B6 84 29 DB D7 D1 F7 5F 87 DA 58 6F 76 E5 87 CD 25 FE 84 41 05 71 11 91 9D E7 7D 9E 49 97 C0 CC F8 CE 0B 6C 3B CB 52 DB 35 8D B2 58 BA 7B 7E F3 C3 1A	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	2B 37 C2 30 2E 88 FE 2E 74 1B 5C E1 11 C0 BC 41 CA CB 23 C9 97 7A 7D 93 C8 C9 16 FB 54 23 C0 AE 1E 2E C6 D0 36 D5 79 CE 5B 93	
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 60	CVC3track1 [Mastercard]	E8 EF	
9F 61	CVC3track2 [Mastercard]	DF 9C	
9F 62	Track 1 Bitmap for CVC3 (PCVC3 Track 1) [Mastercard]	00 00 00 38 00 00	
9F 63	Track 1 Bitmap for UN and ATC (PUNATC Track 1) [Mastercard]	00 00 00 00 E0 E0	
9F 64	Track 1 Number of ATC Digits (NATC Track 1) [Mastercard]	03	
9F 65	Track 2 Bitmap for CVC3 (PCVC3 Track 2) [Mastercard]	00 0E	
9F 66	Track 2 Bitmap for UN and ATC (PUNATC Track 2) [Mastercard]	0E 70	
9F 67	Track 2 Number of ATC Digits (NATC Track 2) [Mastercard]	03	
9F 6B	Track 2 Equivalent Data [Mastercard]	51 01 08 00 00 00 00 09 D2 21 22 01 00 00 40 00 00 00 0F	
9F 6C	Application Version [Mastercard]	00 01	
9F 6E	Third Party Data [Mastercard]	08 26 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]	19 50 00	
C5	Card Issuer Action Code - Online [Mastercard]	39 FB 00	

Tag	Element name	Data	v1.x
C6	Counters [Mastercard]	00 02 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2B	
C8	CRM Country Code [Mastercard]	08 26 - GBR	
C9	CRM Currency Code [M/Chip4]	08 26 - GBP	
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	
CD	Card Issuer Action Code - Default [PayPass M/Chip]	00 58 00	
CE	Card Issuer Action Code - Online [PayPass M/Chip]	00 F8 00	
CF	Card Issuer Action Code - Denial [PayPass M/Chip]	00 00 00	
D1	Currency Conversion Table [M/Chip]	08 26 00 00 00 08 26 00 00 00 08 26 00 00 00 08 26 00 00 00 08 26 00 00 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]	CC 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
D7	Application Control [PayPass M/Chip]	40 01 40	
DF 02	Security Limits Status [Mastercard]	00	

1.4 Test Card 04 - Mastercard, CO, Japanese/English, Japan, JPY

A contact-only Visa card with an Issuer Country Code of Japan and Currency Code of Japanese Yen. Languages supported are Japanese and English.

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

1.4.1 Contact Interface: CVM List - Mastercard, AID A0000000041010

Cardholder Verification Method List ('4201 4103 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
3	Signature (paper)	Terminal supports CVM type	Next CVM
4	NO CVM required	Terminal supports CVM type	Fail

1.4.2 Contact Interface: Application Tag data, AID A0000000041010

Tag	Element name	Data	v1.x
50	Application Label	4D 41 53 54 45 52 43 41 52 44 - 'MASTERCARD'	
57	Track 2 Equivalent Data	51 20 79 00 00 00 00 00 D2 21 22 01 01 23 40 91 72 02 9F	
5A	Application Primary Account Number (PAN)	51 20 79 00 00 00 00 00	
5F 20	Cardholder Name	45 4C 41 56 4F 4E 20 44 43 43 2F 54 45 53 54 20 43 41 52 44 20 30 34 20 20 20 - 'ELAVON DCC/Test Card 04'	
5F 24	Application Expiration Date	22 12 31	
5F 25	Application Effective Date	17 04 01	
5F 28	Issuer Country Code	03 92 - JPN	
5F 2D	Language Preference	6A 61 65 6E - 'jpen' (Japanese, English)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [M/Chip, PayPass]	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	
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 41 03 5E 03 1F 03	
8F	Certification Authority Public Key Index	FA	

Tag	Element name	Data	v1.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	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	BC 50 BC 80 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	BC 70 BC 98 00	
9F 10	Issuer Application Data [M/Chip 4]	01 10 A0 00 09 22 00 00 01 02 00 00 00 00 00 00 00 FF	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	4D 61 73 74 65 72 43 61 72 64 - 'MasterCard'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 1F	Track 1 Discretionary Data	30 31 32 33 34 30 39 31 37 32 30 30 30 30 30 30 30 30 30 30 30 30 30 30	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx 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	03 92 - JPY	
9F 44	Application Currency Exponent	00	
9F 46	ICC Public Key Certificate	87 74 41 72 D6 CE 9A A2 18 FC A3 C5 6C C4 75 4F 65 94 40 F1 72 56 CC BD AA 09 75 B9 00 D4 57 99 7D 05 E4 05 02 A6 EB 23 97 A3 9F D3 57 BA 36 06 7B 4E 8D 5F DF E2 B8 5F 55 83 5D 4F 06 8D D2 EC B0 AE 2F 68 56 70 6C 5D 7F 67 8D EA CE E9 E8 91 28 31 30 C8 16 C0 DF F3 FD 8F 7A 34 5B 84 E7 7D DF 2E 9C 7C AA 0B 84 B3 1D A6 89 F6 57 41 F3 1B	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	9A FF 36 28 0C F1 15 27 B2 0A 7D 58 DC 57 AA 84 F5 56 93 37 6C 43 76 60 8E 33 E5 81 95 99 AA 84 37 AB 4C 03 A3 ED 64 94 22 BB	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	

Tag	Element name	Data	v1.x
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]	03 92 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]	19 50 00	
C5	Card Issuer Action Code - Online [Mastercard]	39 FB 00	
C6	Counters [Mastercard]	00 02 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [Mastercard]	2B	
C8	CRM Country Code [Mastercard]	03 92 - JPN	
C9	CRM Currency Code [M/Chip4]	03 92 - JPY	
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	
CD	Card Issuer Action Code - Default [PayPass M/Chip]	00 58 00	
CE	Card Issuer Action Code - Online [PayPass M/Chip]	00 F8 00	
CF	Card Issuer Action Code - Denial [PayPass M/Chip]	00 00 00	
D1	Currency Conversion Table [M/Chip]	03 92 00 00 00 03 92 00 00 00 03 92 00 00 00 03 92 00 00 00 03 92 00 00 00	
D3	Additional Check Table [Mastercard]	00 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF	
D5	Application Control [M/Chip]	CC 00	
D6	Default ARPC Response Code [M/Chip4]	00 12	
D7	Application Control [PayPass M/Chip]	40 01 40	
DF 02	Security Limits Status [Mastercard]	00	

Chapter 2 - 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				