



First Data U.S. Debit Test Card Set

Version 1.20

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B2 Contact Information

251 Consumers Road, Suite 1200 Toronto, ON M2J 4R3
555 Northpoint Center, Suite 400, Alpharetta, GA 30022
Tel: 855.730.9827 www.b2ps.com

Revision History

Version	Date	Updated By	Revisions
1.00	March 10, 2016	B2PS	Document creation
1.20	August 30, 2016	B2PS	Correction to CVM list item 5 in TC 02 (no change to cards) Tag 8E (CVM) data added for each card Transaction Values added TOC formatting adjusted for readability with new CVM "EMV" removed from Cover page to reduce confusion with other FD set (FD EMV) Duplex-print ready: Header, Margins, tables adjusted

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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 - First Data Debit Test Card Profiles

This Test Card Set contains two cards, defined as follows:

	Test Card 01	Test Card 02
Brand	Visa	MasterCard
Type	Debit	Debit
IIN	476173	541333
AID	A0000000980840	A0000000042203
PAN	4761 7390 0101 0176	5413 3300 8909 9130
Expiry Date	01/2022	01/2022
Service Code	201	201
Interface	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition
Approval Amount	\$10.00	\$20.00
Online / Offline	Online Only	Online Only
Issuer Country Code	840 (USA)	840 (USA)
Application Currency Code	840 (USD)	840 (USD)
Language	'en' – English	'en' – English
Application Confirmation	No	No
Card Purpose	U.S. Common Debit	U.S. Maestro Debit
Card Version	v1.0	v1.0

1.1 Test Card 01 – Visa, Debit, English, USA, USD

A Visa debit card with Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

1.1.1 Cardholder Verification Method List (Tag 8E) – AID (A0000000031010)

Cardholder Verification Method List ('02010004020542001F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Fail CVM Processing	Manual Cash	Fail
3	Online PIN	Purchase with Cashback	Fail
4	Online PIN	Always	Next CVM
5	No CVM required	Always	Fail

1.1.2 Application Tag data

* Tag value changes with card usage

Tag	Element name	Data	v1.0
42	IIN	47 61 73	
50	Application Label	55 53 20 44 45 42 49 54 'US DEBIT'	
57	Track 2 Equivalent Data	47 61 73 90 01 01 01 76 D2 20 12 01 14 83 59 49 00 02 9F	
5A	Application Primary Account Number (PAN)	47 61 73 90 01 01 01 76	
5F 20	Cardholder Name	46 44 20 44 45 42 49 54 2F 54 65 73 74 20 43 61 72 64 20 30 31 20 20 20 20 'FD DEBIT/Test Card 01'	
5F 24	Application Expiration Date	22 01 31	
5F 25	Application Effective Date	16 02 01	
5F 28	Issuer Country Code	08 40 USA	
5F 2D	Language Preference	65 6E 'en' – English	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
5F 55	Issuer Country Code (alpha2 format)	55 53 'US' – U.S.A.	
82	Application Interchange Profile [VSDC]	18 00	
84	Dedicated File (DF) Name	A0 00 00 00 98 08 40	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 01 00 04 02 05 42 00 1F 00	
8F	Certification Authority Public Key Index	92	
94	Application File Locator (AFL)	10 01 01 00 10 02 04 01 B0 01 01 00	
9F 07	Application Usage Control	AB 80	
9F 08	Application Version Number	00 96	
9F 0D	Issuer Action Code - Default	FC 50 AC 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	

Tag	Element name	Data	v1.0
9F 0F	Issuer Action Code - Online	FC 70 BC 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	55 53 20 44 65 62 69 74 'US Debit'	
9F 1F	Track 1 Discretionary Data	31 34 38 33 35 39 34 39 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 *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 44	Application Currency Exponent	02	
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]	00 00 00 00 00 00	
9F 57	Issuer Country Code [VSDC]	08 40 USA	

1.2 Test Card 02 – MasterCard, Debit, English, USA, USD

A MasterCard debit card with Issuer Country Code of 'USA' and Application Currency Code of 'USD'.

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

1.2.1 Cardholder Verification Method List (Tag 8E) – AID (A0000000041010)

Cardholder Verification Method List ('02054203440341031F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Purchase with Cashback	Fail
2	Online PIN	Terminal supports CVM type	Next CVM
3	Offline PIN	Terminal supports CVM type	Next CVM
4	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
5	No CVM required	Terminal supports CVM type	Fail

1.2.2 Application Tag data

* Tag value changes with card usage

Tag	Element name	Data	v1.0
42	IIN	54 13 33	
50	Application Label	55 53 20 44 45 42 49 54 'US DEBIT'	
57	Track 2 Equivalent Data	54 13 33 00 89 09 91 30 D2 20 12 01 03 02 70 38 90 02 9F	
5A	Application Primary Account Number (PAN)	54 13 33 00 89 09 91 30	
5F 20	Cardholder Name	46 44 20 44 45 42 49 54 2F 54 65 73 74 20 43 61 72 64 20 30 32 20 20 20 20 'FD DEBIT/Test Card 02'	
5F 24	Application Expiration Date	22 01 31	
5F 25	Application Effective Date	16 02 01	
5F 28	Issuer Country Code	08 40 USA	
5F 2D	Language Preference	65 6E 'en' – English	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
5F 55	Issuer Country Code (alpha2 format)	55 53 'US' – U.S.A.	
82	Application Interchange Profile [M/Chip, PayPass]	18 00	
84	Dedicated File (DF) Name	A0 00 00 00 04 22 03	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 35 01 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 02 05 42 03 44 03 41 03 1F 03	
8F	Certification Authority Public Key Index	FA	
94	Application File Locator (AFL)	08 02 04 01 18 01 01 00 20 01 01 00	
9F 07	Application Usage Control	FF C0	

Tag	Element name	Data	v1.0
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	B0 50 9C 88 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	B0 70 9C 98 00	
9F 10	Issuer Application Data [M/Chip 4]	xx 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	55 53 20 44 65 62 69 74 'US Debit'	
9F 14	Lower Consecutive Offline Limit	00	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 17	Personal Identification Number (PIN) Try Counter	03	
9F 1F	Track 1 Discretionary Data	30 33 30 32 37 30 33 38 39 30 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 40 USD	
9F 44	Application Currency Exponent	02	
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 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]	06 50 00	
C5	Card Issuer Action Code - Online [MasterCard]	06 FB 00	
C6	Counters [MasterCard]	00 01 00 00 00 00 00 00 00 00	
C7	CDOL1 Related Data Length [MasterCard]	2B	
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	

Tag	Element name	Data	v1.0
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]	08 00 00	
D1	Currency Conversion Table [M/Chip]	08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 08 40 00 00 00 08 40 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]	82 00	
D6	Default ARPC Response Code [M/Chip4]	00 10	
D7	Application Control [PayPass M/Chip]	40 00 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				