



**Fiserv  
UAT Clover  
EMV™ Test Card Set Summary**

**Version 1.00**

**October 2021**

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## Revision History

Version	Date	Updated By	Revisions
1.00	October 27, 2021	B2PS	Initial document release

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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, for those cards supporting offline PIN, it will no longer be possible to enter an Offline PIN, causing all future transactions to be declined.

**\*\*\* It is not possible to unblock a 'PIN Blocked' card \*\*\***

## Chapter 1 - Fiserv UAT Clover EMV Test Card Profiles

This Test Card Set contains five cards containing at least one sample of the card brands shown below:



	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Mastercard	Interac
Card Purpose	Online-Only U.S. Credit Card	Online-Only U.S. Credit Card	Canadian Debit Card supporting contact OEP
AID	A0000000031010	A0000000041010	A0000002771010
PAN	4761 7390 0101 0119	5413 3300 8960 4111	0012 0200 00001
Expiry Date	12/2022	12/2025	12/2028
Service Code	201	201	220
Card Interface(s)	Contact, Contactless, MSR	Contact, Contactless, MSR	Contact, Contactless, 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	\$10.00
Issuer Country Code	840 (USA)	840 (USA)	124 (CAN)
Application Currency Code	840 (USD)	840 (USD)	124 (CAD)
Language(s)	'en' – English	'en' – English	'enfr' – English, French
Card Version	v1.x	v1.x	v1.x

	Test Card 04	Test Card 05
<b>Brand</b>	Interac	Maestro
<b>Card Purpose</b>	Canadian Debit Card supporting contact OEP	U.S. Debit Card
<b>AID</b>	A0000002771010	A0000002742203
<b>PAN</b>	0012 0200 00001	5413 3300 8909 9130
<b>Expiry Date</b>	12/2028	12/2025
<b>Service Code</b>	220	220
<b>Card Interface(s)</b>	Contact, Contactless, MSR	Contact, MSR
<b>CVM</b>	<a href="#">See card definition</a>	<a href="#">See card definition</a>
<b>Approval Amount</b>	\$10.00	\$20.00
<b>Issuer Country Code</b>	124 (CAN)	840 (USA)
<b>Application Currency Code</b>	124 (CAD)	840 (USD)
<b>Language(s)</b>	'fren' – French, English	'en' – English
<b>Card Version</b>	v1.x	v1.x

## 1.1 Test Card 01 – Visa, Credit, English, USA, USD

A Visa credit 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 CVM List – AID A0000000031010, Visa (EMV)

Cardholder Verification Method List ('0201 4204 1E04 0005 5E00 1F00)			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Online PIN	Manual Cash	Next CVM
3	Signature (paper)	Manual Cash	Fail
4	Fail CVM Processing	Purchase with Cashback	Fail
5	Signature (paper)	Always	Next CVM
6	No CVM required	Always	Fail

\* Tag value changes with card usage

### 1.1.2 No CVM List – AID A0000000031010, Visa (qVSDC, offline)

## 1.2 Test Card 02 – Mastercard, Credit, English, USA, USD

A Mastercard credit card with Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

### 1.2.1 CVM List – AID A0000000041010, Mastercard (EMV)

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

### 1.2.2 CVM List – AID A0000000041010, Mastercard (PayPass MChip)

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

### 1.3 Test Card 03 – Interac, Debit, English/French, CAN, CAD

An Interac (Canadian) debit card with Issuer Country Code of 'CAN' and Currency Code of 'CAD'.

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

#### 1.3.1 CVM List – AID A0000002771010, Interac (EMV)

Cardholder Verification Method List ('0403 0103 0203')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Enciphered PIN	Terminal supports CVM type	Fail
2	Offline Plaintext PIN	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Fail

#### 1.3.2 NO CVM List – AID A0000002771010, Interac (Flash)

### 1.4 Test Card 04 – Interac, Debit, French/English, CAN, CAD

An Interac (Canadian) debit card with Issuer Country Code of 'CAN' and Currency Code of 'CAD'.

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

#### 1.4.1 CVM List – AID A0000002771010, Interac (EMV)

Cardholder Verification Method List ('0403 0103 0203')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Enciphered PIN	Terminal supports CVM type	Fail
2	Offline Plaintext PIN	Terminal supports CVM type	Fail
3	Online PIN	Terminal supports CVM type	Fail

#### 1.4.2 No CVM List – AID A0000002771010, Interac (Flash)

### 1.5 Test Card 05 – Maestro, U.S. Debit, English, USA, USD

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

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

#### 1.5.1 CVM List – AID A0000000042203, Maestro (EMV)

Cardholder Verification Method List ('0205 4203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Purchase with Cashback	Fail
2	Online PIN	Terminal supports CVM type	Next CVM
3	No CVM required	Terminal supports CVM type	Fail



## 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	<b>!</b>	77	01001101	4D	<b>M</b>	121	01111001	79	<b>y</b>
34	00100010	22	<b>"</b>	78	01001110	4E	<b>N</b>	122	01111010	7A	<b>z</b>
35	00100011	23	<b>#</b>	79	01001111	4F	<b>O</b>	123	01111011	7B	{
36	00100100	24	<b>\$</b>	80	01010000	50	<b>P</b>	124	01111100	7C	
37	00100101	25	<b>%</b>	81	01010001	51	<b>Q</b>	125	01111101	7D	}
38	00100110	26	<b>&amp;</b>	82	01010010	52	<b>R</b>	126	01111110	7E	~
39	00100111	27	<b>'</b>	83	01010011	53	<b>S</b>	127	01111111	7F	<b>DEL</b>
40	00101000	28	<b>(</b>	84	01010100	54	<b>T</b>				
41	00101001	29	<b>)</b>	85	01010101	55	<b>U</b>				
42	00101010	2A	<b>*</b>	86	01010110	56	<b>V</b>				
43	00101011	2B	<b>+</b>	87	01010111	57	<b>W</b>				