



**USA**  
**EMV™ Test Card Set**  
**Summary**

**Version 1.80**

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**Powered by B2»**

## **Disclaimer**

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## Revision History

Version	Date	Updated By	Revisions
1.70	30-Aug-2016	B2PS	Initial document
1.80	5-Jan-2018	B2PS	<ul style="list-style-type: none"><li>• TC10, TC11, TC12 - Approval Amount changed to \$120</li><li>• “MasterCard” replaced with “Mastercard” where appropriate</li></ul>

## Table of Contents

<b>Chapter 1 - B2 USA EMV Test Card Profiles .....</b>	<b>2</b>
<b>1.1 Test Card 01 – Visa, Signature Preferring, English, USD, USA .....</b>	<b>5</b>
1.1.1 Cardholder Verification Method List – AID (A0000000031010) .....	5
<b>1.2 Test Card 02 – Visa, Offline PIN=1234, English, USD, USA .....</b>	<b>5</b>
1.2.1 Cardholder Verification Method List – AID (A0000000031010) .....	5
<b>1.3 Test Card 03 – Visa, Online PIN=1234, English, USD, USA .....</b>	<b>5</b>
1.3.1 Cardholder Verification Method List – AID (A0000000031010) .....	5
<b>1.4 Test Card 04 – Visa, Signature Only, French, CAD, Canada, Appl Confirm ...</b>	<b>6</b>
1.4.1 Cardholder Verification Method List – AID (A0000000031010) .....	6
<b>1.5 Test Card 05 – Visa, Offline PIN=1234, Spanish, USD, Mexico.....</b>	<b>6</b>
1.5.1 Cardholder Verification Method List – AID (A0000000031010) .....	6
<b>1.6 Test Card 06 – Visa, Offline PIN=1234, Spanish, MXN, Mexico .....</b>	<b>7</b>
1.6.1 Cardholder Verification Method List – AID (A0000000031010) .....	7
<b>1.7 Test Card 07 – Visa, Empty Candidate List .....</b>	<b>7</b>
<b>1.8 Test Card 08 – Visa, Chip Error .....</b>	<b>7</b>
<b>1.9 Test Card 09 – Mastercard, Online PIN=4315, English, USD, USA .....</b>	<b>8</b>
1.9.1 Cardholder Verification Method List – AID (A0000000041010) .....	8
<b>1.10 Test Card 10 – Mastercard, NO CVM, English, USD, USA, Bad ARPC .....</b>	<b>8</b>
1.10.1 Cardholder Verification Method List – AID (A0000000041010) .....	8
<b>1.11 Test Card 11 – Mastercard, Offline PIN=4315, English, USD, USA, Bad ARPC .....</b>	<b>8</b>
1.11.1 Cardholder Verification Method List – AID (A0000000041010) .....	9
<b>1.12 Test Card 12 – Mastercard, Online PIN=4315, English, USD, USA, Bad ARPC .....</b>	<b>9</b>
1.12.1 Cardholder Verification Method List – AID (A0000000041010) .....	9
<b>1.13 Test Card 13 – Mastercard, Empty Candidate List .....</b>	<b>9</b>
<b>1.14 Test Card 14 – Mastercard, Chip Error .....</b>	<b>9</b>
<b>1.15 Test Card 15 – Interac, Offline PIN=1234, English, CAD, Canada .....</b>	<b>10</b>
1.15.1 Cardholder Verification Method List – AID (A0000002771010) .....	10
<b>1.16 Test Card 16 – Interac, Offline PIN=1234, French, CAD, Canada .....</b>	<b>10</b>
1.16.1 Cardholder Verification Method List – AID (A0000002771010) .....	10

**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 - B2 USA EMV Test Card Profiles

The USA EMV™ Test Card Set contains 16 cards, defined as follows.

	Test Card 01	Test Card 02	Test Card 03
<b>Brand</b>	Visa	Visa	Visa
<b>AID</b>	A0000000031010	A0000000031010	A0000000031010
<b>PAN</b>	476173 ***** 0010	476173 ***** 0010	476173 ***** 0010
<b>Expiry Date</b>	12/2018	12/2018	12/2018
<b>Service Code</b>	201	201	201
<b>Interface</b>	Contact, MSR	Contact, MSR	Contact, MSR
<b>CVM</b>	Signature Online PIN No CVM <a href="#">See Card Definition</a>	Offline Plaintext PIN <a href="#">See Card Definition</a>	Online PIN <a href="#">See Card Definition</a>
<b>Approval Amount</b>	\$10.00	\$10.00	\$10.00
<b>Issuer Country Code</b>	840 (USA)	840 (USA)	840 (USA)
<b>Currency Code</b>	840 (USD)	840 (USD)	840 (USD)
<b>Language</b>	'en' – English	'en' – English	'en' – English
<b>Application Confirmation</b>	No	No	No
<b>Card Purpose</b>	USA Signature Preferring	USA Offline Plaintext PIN Only	USA Online PIN Only
<b>Card Version</b>	v3.3	v3.3	v3.3

	Test Card 04	Test Card 05	Test Card 06
<b>Brand</b>	Visa	Visa	Visa
<b>AID</b>	A0000000031010	A0000000031010	A0000000031010
<b>PAN</b>	476173 ***** 0010	476173 ***** 0010	476173 ***** 0010
<b>Expiry Date</b>	12/2018	12/2018	12/2018
<b>Service Code</b>	201	201	201
<b>Interface</b>	Contact, MSR	Contact, MSR	Contact, MSR
<b>CVM</b>	Signature No CVM <a href="#">See Card Definition</a>	Offline Plaintext PIN <a href="#">See Card Definition</a>	Offline Plaintext PIN <a href="#">See Card Definition</a>
<b>Approval Amount</b>	\$10.00	\$10.00	\$10.00

	Test Card 04	Test Card 05	Test Card 06
Issuer Country Code	124 (Canada)	484 (Mexico)	484 (Mexico)
Currency Code	124 (CAD)	840 (USD)	484 (MXN)
Language	'fr' – French	'es' - Spanish	'es' - Spanish
Application Confirmation	Yes	No	No
Card Purpose	Canadian – French Appl. Confirmation	Mexico – Spanish Currency USD	Mexico – Spanish Currency MXN
Card Version	v3.3	v3.3	v3.3

	Test Card 07	Test Card 08	Test Card 09
Brand	Visa	Visa	Mastercard
AID			A0000000041010
PAN	476173 ***** 0010	476173 ***** 0010	541333 ***** 4111
Expiry Date	12/2018	12/2018	12/2025
Service Code	201	201	201
Interface	Contact, MSR	MSR	Contact, MSR
CVM	-	-	Online PIN, Signature <a href="#">See Card Definition</a>
Approval Amount	\$10.00	\$10.00	\$20.00
Issuer Country Code	-	-	840 (USA)
Currency Code	-	-	840 (USD)
Language	-	-	'en' – English
Application Confirmation	-	-	No
Card Purpose	Fallback Empty Candidate List	Fallback Chip Error	Online PIN
Card Version	v3.1	v3.1	v3.3

	Test Card 10	Test Card 11	Test Card 12
Brand	Mastercard	Mastercard	Mastercard
AID	A0000000041010	A0000000041010	A0000000041010
PAN	541333 ***** 0434	541333 ***** 0434	541333 ***** 0434
Expiry Date	12/2018	12/2018	12/2018
Service Code	201	201	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	NO CVM <a href="#">See Card Definition</a>	Offline Plaintext PIN <a href="#">See Card Definition</a>	Online PIN <a href="#">See Card Definition</a>
Approval Amount	\$120.00	\$120.00	\$20.00
Issuer Country Code	840 (USA)	840 (USA)	840 (USA)
Currency Code	840 (USD)	840 (USD)	840 (USD)
Language	'en' – English	'en' – English	'en' – English

	Test Card 10	Test Card 11	Test Card 12
Application Confirmation	No	No	No
Card Purpose	NO CVM ARPC Verify Fails	Offline PIN ARPC Verify Fails	Online PIN ARPC Verify Fails
Card Version	v3.2	v3.2	v3.2

	Test Card 13	Test Card 14	Test Card 15
Brand	Mastercard	Mastercard	Interac
AID	-	-	A0000002771010
PAN	541333 ***** 0434	541333 ***** 0434	450644 ***** 1933
Expiry Date	12/2018	12/2018	12/2018
Service Code	201	201	220
Interface	Contact, MSR	MSR	Contact, MSR
CVM	-	-	Offline Plaintext PIN <a href="#">See Card Definition</a>
Approval Amount	\$20.00	\$20.00	\$10.00
Issuer Country Code	-	-	124 (Canada)
Currency Code	-	-	124 (CAD)
Language	-	-	'en' – English
Application Confirmation	-	-	No
Card Purpose	Fallback Empty Candidate List	Fallback Chip Error	English Interac Debit
Card Version	v3.1	v3.1	v3.3

	Test Card 16
Brand	Interac
AID	A0000002771010
PAN	450636 ***** 8106
Expiry Date	12/2018
Service Code	220
Interface	Contact, MSR
CVM	Offline Plaintext PIN <a href="#">See Card Definition</a>
Approval Amount	\$10.00
Issuer Country Code	124 (Canada)
Currency Code	124 (CAD)
Language	'fr' – French
Application Confirmation	No
Card Purpose	French Interac Debit
Card Version	v3.3

## 1.1 Test Card 01 – Visa, Signature Preferring, English, USD, USA

USA English Visa, Signature / Online PIN card (Currency=USD).

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 ('1E03 0203 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (paper)	Terminal supports CVM type	Fail
2	Online PIN	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

## 1.2 Test Card 02 – Visa, Offline PIN=1234, English, USD, USA

USA English Visa, Offline Plaintext PIN Only card (Currency=USD).

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

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

Cardholder Verification Method List ('0103 0100 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Terminal supports CVM type	Fail
2	Offline Plaintext PIN	Always	Fail
3	Fail CVM Processing	Always	Fail

## 1.3 Test Card 03 – Visa, Online PIN=1234, English, USD, USA

USA English Visa, Online PIN Only card (Currency=USD).

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

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

Cardholder Verification Method List ('0203 0200 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Fail
2	Online PIN	Always	Fail
3	Fail CVM Processing	Always	Fail



## 1.4 Test Card 04 – Visa, Signature Only, French, CAD, Canada, Appl Confirm

Canadian French Visa, Signature Only card (Currency=CAD).

This card will prompt the cardholder to confirm the application (Visa Credit).

If French is supported by the POS, French should be auto-selected. If the POS supports only one language and it's not French, the POS language should be auto-selected. If the POS supports multiple languages but not French, the list of POS languages should be displayed for cardholder selection.

Once selected, cardholder prompts and the customer receipt should be in the selected language.

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

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

Cardholder Verification Method List ('1E03 1F03 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (Paper)	Terminal supports CVM type	Fail
2	No CVM Required	Terminal supports CVM type	Fail
3	Fail CVM Processing	Always	Fail

## 1.5 Test Card 05 – Visa, Offline PIN=1234, Spanish, USD, Mexico

Mexican Spanish Visa, Offline Plaintext PIN Only card (Currency=USD).

If Spanish is supported by the POS, Spanish should be auto-selected. If the POS supports only one language and it's not Spanish, the POS language should be auto-selected. If the POS supports multiple languages but not Spanish, the list of POS languages should be displayed for cardholder selection.

Once selected, cardholder prompts and the customer receipt should be in the selected language.

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

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

Cardholder Verification Method List ('1E03 1F03 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Signature (Paper)	Terminal supports CVM type	Fail
2	No CVM Required	Terminal supports CVM type	Fail
3	Fail CVM Processing	Always	Fail

## 1.6 Test Card 06 – Visa, Offline PIN=1234, Spanish, MXN, Mexico

Mexican Spanish Visa, Offline Plaintext PIN Only card (Currency=MXN).

If Spanish is supported by the POS, Spanish should be auto-selected. If the POS supports only one language and it's not Spanish, the POS language should be auto-selected. If the POS supports multiple languages but not Spanish, the list of POS languages should be displayed for cardholder selection.

Once selected, cardholder prompts and the customer receipt should be in the selected language.

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 ('0103 0100 0000')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Terminal supports CVM type	Fail
2	Offline Plaintext PIN	Always	Fail
3	Fail CVM Processing	Always	Fail

## 1.7 Test Card 07 – Visa, Empty Candidate List

Application Selection will fail due to an Empty Candidate List.

This should trigger MSR Fallback processing and the transaction should continue as a magstripe transaction.

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

## 1.8 Test Card 08 – Visa, Chip Error

This card has a chip image printed on the card but it does not contain an actual chip.

When inserted, a chip error will be detected.

This should trigger Technical Fallback processing and the transaction should continue as a magstripe transaction.

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

## 1.9 Test Card 09 – Mastercard, Online PIN=4315, English, USD, USA

USA English Mastercard, Online PIN Only card (Currency=USD).

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

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

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 CVM type	Fail
3	No CVM required	Terminal supports CVM type	Fail

## 1.10 Test Card 10 – Mastercard, NO CVM, English, USD, USA, Bad ARPC

USA English Mastercard, NO CVM card (Currency=USD) that may generate an ACC at the 2<sup>nd</sup> Gen AC.

If the host returns an Application Response Cryptogram (Tag 91), the ARPC will fail verification causing the card to return an AAC at the 2<sup>nd</sup> Gen AC. In this case the POS should decline the transaction and send a host reversal.

If the host approves the transaction and an Application Response Cryptogram (Tag 91) is not returned, the transaction should be approved.

The recommended transaction amount to generate a host approval is \$120.00.

**Note:** This behavior may change if the Mastercard Authorization Simulator (MAS) test cases change.

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

Cardholder Verification Method List ('1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	No CVM Required	Always	Fail

## 1.11 Test Card 11 – Mastercard, Offline PIN=4315, English, USD, USA, Bad ARPC

USA English Mastercard, Offline Plaintext PIN Only card (Currency=USD) that may generate an ACC at the 2<sup>nd</sup> Gen AC.

If the host returns an Application Response Cryptogram (Tag 91), the ARPC will fail verification causing the card to return an AAC at the 2<sup>nd</sup> Gen AC. In this case the POS should decline the transaction and send a host reversal.

If the host approves the transaction and an Application Response Cryptogram (Tag 91) is not returned, the transaction should be approved.

The recommended transaction amount to generate a host approval is \$120.00.

**Note:** This behavior may change if the Mastercard Authorization Simulator (MAS) test cases change.

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

Cardholder Verification Method List ('0100')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Always	Fail

### 1.12 Test Card 12 – Mastercard, Online PIN=4315, English, USD, USA, Bad ARPC

USA English Mastercard, Online PIN Only card (Currency=USD) that may generate an ACC at the 2<sup>nd</sup> Gen AC.

If the host returns an Application Response Cryptogram (Tag 91), the ARPC will fail verification causing the card to return an AAC at the 2<sup>nd</sup> Gen AC. In this case the POS should decline the transaction and send a host reversal.

If the host approves the transaction and an Application Response Cryptogram (Tag 91) is not returned, the transaction should be approved.

The recommended transaction amount to generate a host approval is \$120.00.

**Note:** This behavior may change if the Mastercard Authorization Simulator (MAS) test cases change.

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

Cardholder Verification Method List ('0200')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Always	Fail

### 1.13 Test Card 13 – Mastercard, Empty Candidate List

Application Selection will fail due to an Empty Candidate List.

This should trigger MSR Fallback processing and the transaction should continue as a magstripe transaction.

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

### 1.14 Test Card 14 – Mastercard, Chip Error

This card has a chip image printed on the card but it does not contain an actual chip. When inserted a chip error will be detected.

This should trigger Technical Fallback processing and the transaction should continue as a magstripe transaction.

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

### 1.15 Test Card 15 – Interac, Offline PIN=1234, English, CAD, Canada

Canadian English Interac, Offline Plaintext PIN Only debit card (Currency=CAD).

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

#### 1.15.1 Cardholder Verification Method List – AID (A0000002771010)

Cardholder Verification Method List ('0100')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Always	Fail

### 1.16 Test Card 16 – Interac, Offline PIN=1234, French, CAD, Canada

Canadian French Interac, Offline Plaintext PIN Only debit card (Currency=CAD).

If French is supported by the POS, French should be auto-selected. If the POS supports only one language and it's not French, the POS language should be auto-selected. If the POS supports multiple languages but not French, the list of POS languages should be displayed for cardholder selection.

Once selected, cardholder prompts and the customer receipt should be in the selected language.

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

#### 1.16.1 Cardholder Verification Method List – AID (A0000002771010)

Cardholder Verification Method List ('0100')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Always	Fail