



**Development (DEV) Canada  
EMV™ Test Card Set  
Summary**

**Version 12.00**

**January 2022**

**Powered by B2»**

To view *Technical* document online,  
scan QR Code below.



## **Disclaimer**

Information provided in this document describes capabilities available at the time of developing and delivering this document and the associated test cards and information available from industry sources. This document is intended to be used as a guideline only and B2 Payment Solutions, Inc. and/or its affiliates accept no liability for any errors or omissions in this document and/or for any results of client's reliance thereon.

## **Copyright**

© 2016 by B2 Payment Solutions, Inc. All rights reserved. All information and data contained herein and within the associated test cards is confidential and proprietary to B2 Payment Solutions. Such information shall not be disclosed, duplicated, reverse-engineered or used in part or in whole, for any purpose without prior written consent from B2 Payment Solutions, Inc. other than specific internal, non-commercial, non-assignable use in conjunction with the Development Canada EMV™ Test Card Set (8 cards) only.

## **Attribution**

EMV™ is a trademark owned by EMVCo LLC.

All trademarked symbols seen below are registered trademarks their respective organizations: American Express Company, Discover Financial Services, Interac Association, Mastercard International Incorporated and Visa Inc.



## **B2 Contact Information**

Canada  
251 Consumers Road, Suite 1200, Toronto, ON M2J 4R3  
Tel: 416.730.9827

U.S.A.  
1615 S. Congress Avenue, Suite 103, Delray Beach, FL 33445  
Tel: 470.233.7374

## Revision History

Version	Date	Updated By	Revisions
5.00	May 03, 2016	B2PS	Initial document release
5.01	May 25, 2016	B2PS	<ul style="list-style-type: none"> <li>Transaction Values added.</li> </ul> Various consistency, typographical, format corrections.
5.02	July 15, 2016	B2PS	<ul style="list-style-type: none"> <li>TC 05, TC 06 - Service code in profiles table corrected</li> <li>TC 07 - AID in profiles table corrected</li> </ul> Formatting changes to Table of Contents
5.10	August 29, 2016	B2PS	Duplex-print ready: Header, Margins, tables adjusted
5.20	Sept. 21, 2017	B2PS	TC08: Card v6.0 has 2-byte Kernel ID
6.00	January 4, 2018	B2PS	<ul style="list-style-type: none"> <li>TC02 - New version v6.0: Discretionary data updated (CVV)</li> <li>TC07 - EMV Tags for AID A0000000291010 added</li> <li>TC08 - New version v7.0: Increased contactless facility, 'Approval Amount' updated.</li> </ul>
7.00	October 4, 2018	B2PS	<ul style="list-style-type: none"> <li>All cards - Tags 82, 9F07, 9F69 expanded &amp; interpreted</li> <li>Amex card TC07 - Expiry date changed to 24/12</li> <li>Discover card TC08 - Expiry date changed to 23/12</li> </ul>
8.00	February 27, 2019	B2PS	<ul style="list-style-type: none"> <li>TC08 - Tag 57 expiry date corrected</li> </ul>
9.00	May 29, 2019	B2PS	<ul style="list-style-type: none"> <li>TC07 - PAN changed - now ends in '41007', Approval amount changed, AIP contactless changed</li> </ul>
9.01	June 7, 2019	B2PS	<ul style="list-style-type: none"> <li>Set renamed to "DEV Canada EMV Test Card Set". No change to cards themselves.</li> </ul>
10.00	July 31, 2020	B2PS	<ul style="list-style-type: none"> <li>TC01, TC03 – updated cardstock support; where applicable, "MasterCard"&gt;"Mastercard"</li> <li>TC05 - Now Offline Enciphered PIN</li> </ul>
11.00	April 14, 2021	B2PS	<ul style="list-style-type: none"> <li>TC03, TC04 - Expiry Date change</li> </ul>
12.00	January 25, 2022	B2PS	<ul style="list-style-type: none"> <li>TC01, TC02 - Expiry Date change</li> <li>TC05, TC06 - New BIN PAN, Dual Interface</li> </ul>

## Table of Contents

<b>Chapter 1 - DEV Canada EMV Test Card Set Profiles</b> .....	<b>2</b>
<b>1.1 Test Card 01 - Visa, DI, Credit, English, Canada, CAD</b> .....	<b>4</b>
1.1.1 Contact: CVM List – AID A0000000031010, Visa (EMV) .....	4
<b>1.2 Test Card 02 - Visa, Technical Fallback Card</b> .....	<b>4</b>
<b>1.3 Test Card 03 - Mastercard, DI, Credit, French, Canada, CAD</b> .....	<b>4</b>
1.3.1 Contact: CVM List - AID A0000000041010, Mastercard (EMV) .....	4
1.3.2 CTLS: CVM List - AID A0000000041010, Mastercard (PayPass).....	5
<b>1.4 Test Card 04 - Mastercard, Technical Fallback Card</b> .....	<b>5</b>
<b>1.5 Test Card 05 - Interac, DI, Debit, Eng/Fre, Canada, CAD</b> .....	<b>5</b>
1.5.1 Contact: CVM List - AID A0000002771010, Interac (EMV) .....	5
<b>1.6 Test Card 06 - Interac, DI, Debit, Fre/Eng, Canada, CAD</b> .....	<b>5</b>
1.6.1 Contact: CVM List - AID A0000002771010, Interac (EMV) .....	5
<b>1.7 Test Card 07 - American Express, DI, Credit, English, Canada, CAD</b> .....	<b>6</b>
1.7.1 Contact: CVM List - A000000025010402, Amex (EMV).....	6
1.7.2 CTLS: CVM List - A000000025010402, Amex (ExpressPay) .....	6
1.7.3 Contact: CVM List - A0000000291010, Amex (EMV).....	6
<b>1.8 Test Card 08 - Discover, DI, Credit, English, USA, USD</b> .....	<b>7</b>
1.8.1 Contact: CVM List - A0000001523010, Discover (EMV).....	7
1.8.2 CTLS: CVM List - A0000001523010, Discover (D-PAS EMV).....	7

**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 - DEV Canada EMV Test Card Set Profiles

This Development (DEV) Canada EMV Test Card Set contains 8 cards with at least one card from each of the following card brands.



	Test Card 01	Test Card 02	Test Card 03
<b>Brand</b>	Visa	Visa	Mastercard
<b>Type</b>	Credit	Credit	Credit
<b>Description</b>	Offline Capable	Fallback	Mastercard
<b>AID</b>	A0000000031010	-	A0000000041010
<b>PAN</b>	4761*****0043	4761*****0267	5413*****4111
<b>Expiry Date</b>	12/2024	12/2024	12/2025
<b>Service Code</b>	201	201	201
<b>Interface</b>	Contact, Contactless, MSR	MSR	Contact, Contactless, MSR
<b>CVM (Contact) Default Condition: Terminal Supports CVM</b>	Online PIN (ATM) Offline Plaintext PIN Signature No CVM required <a href="#">See card definition</a>	- <a href="#">See card definition</a>	Online PIN (ATM) Offline Enciphered PIN Offline Plaintext PIN Signature No CVM required <a href="#">See card definition</a>
<b>Approval Amount</b>	\$10.00	\$10.00	\$20.00
<b>Issuer Country Code</b>	124 - Canada	-	124 - Canada
<b>Application Currency Code</b>	124 - CAD	-	124 - CAD
<b>Language</b>	'en' - English	-	'fr' - French
<b>Card Version</b>	v7.x	v7.x	v7.x

	Test Card 04	Test Card 05	Test Card 06
Brand	Mastercard	Interac	Interac
Type	Credit	Debit	Debit
Description	Fallback	Canadian Debit	Canadian Debit
AID	-	A0000002771010	A0000002771010
PAN	5413*****0029	0012*****0001	0012*****0001
Expiry Date	12/2025	12/2028	12/2028
Service Code	201	220	220
Interface	MSR	Contact, Contactless, MSR	Contact, Contactless, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	- <a href="#">See card definition</a>	Offline Enciphered PIN Offline Plaintext PIN Online PIN <a href="#">See card definition</a>	Offline Enciphered PIN Offline Plaintext PIN Online PIN <a href="#">See card definition</a>
Approval Amount	\$20.00	\$10.00	\$10.00
Issuer Country Code	-	124 - Canada	124 - Canada
Application Currency Code	-	124 - CAD	124 - CAD
Language	-	'enfr' – English, French	'fren' – French, English
Card Version	v6.x	v7.x	v6.x

	Test Card 07	Test Card 08
Brand	American Express	Discover
Type	Credit	Credit
Description	Online Only	Discover Credit
AID	A000000025010402, A0000000291010	A0000001523010
PAN	3742*****1007	6510*****0216
Expiry Date	12/2024	12/2023
Service Code	201	201
Interface	Contact, Contactless, MSR	Contact, Contactless, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN (ATM) Offline Plaintext PIN Signature No CVM required <a href="#">See card definition</a>	Online PIN (ATM) Offline Plaintext PIN No CVM required <a href="#">See card definition</a>
Approval Amount	\$30.00	\$79.00
Issuer Country Code	124 - Canada	840 - USA
Application Currency Code	124 - CAD	840 - USD
Language	'en' - English	'en' - English
Card Version	v7.x	v9.x

## 1.1 Test Card 01 - Visa, DI, Credit, English, Canada, CAD

A Dual Interface (Contact / Contactless) Visa credit card with Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

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

### 1.1.1 Contact: CVM List – AID A000000031010, Visa (EMV)

CVM 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	Always	Fail

## 1.2 Test Card 02 - Visa, Technical Fallback Card

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 Technical Fallback transaction.

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

Note: The test host may Approve / Decline based on its configuration with respect to CVV processing.

## 1.3 Test Card 03 - Mastercard, DI, Credit, French, Canada, CAD

A Dual Interface (Contact / Contactless) Mastercard credit card with Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

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

### 1.3.1 Contact: CVM List - AID A000000041010, Mastercard (EMV)

Cardholder Verification Method List ('4201 4403 4103 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Offline Enciphered PIN	Terminal supports CVM type	Next CVM
3	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
4	Signature (paper)	Terminal supports CVM type	Next CVM
5	No CVM required	Terminal supports CVM type	Fail

### 1.3.2 CTLS: CVM List - AID A000000041010, Mastercard (PayPass)

Cardholder Verification Method List ('4201 4403 4103 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Offline Enciphered PIN	Terminal supports CVM type	Next CVM
3	Offline Plaintext PIN	Terminal supports CVM type	Next CVM
4	Signature (paper)	Terminal supports CVM type	Next CVM
5	No CVM required	Terminal supports CVM type	Fail

### 1.4 Test Card 04 - Mastercard, Technical Fallback Card

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 Technical Fallback transaction.

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

### 1.5 Test Card 05 - Interac, DI, Debit, Eng/Fre, Canada, CAD

A Dual Interface (Contact / Contactless) Interac debit card with Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

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

#### 1.5.1 Contact: CVM List - AID A0000002771010, Interac (EMV)

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

### 1.6 Test Card 06 - Interac, DI, Debit, Fre/Eng, Canada, CAD

A Dual Interface (Contact / Contactless) Interac debit card with Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

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

#### 1.6.1 Contact: CVM List - AID A0000002771010, Interac (EMV)

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



## 1.7 Test Card 07 - American Express, DI, Credit, English, Canada, CAD

A Dual Interface (Contact / Contactless) American Express credit card with Issuer Country Code of 'Canada' and Currency Code of 'CAD'.

The recommended transaction amount to generate a host approval is \$30.00

### 1.7.1 Contact: CVM List - A00000025010402, Amex (EMV)

Cardholder Verification Method List ('4201 4103 5E03 5F03')			
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	Next CVM

### 1.7.2 CTLS: CVM List - A00000025010402, Amex (ExpressPay)

Cardholder Verification Method List ('4201 5E03 1F02')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Signature (paper)	Terminal supports CVM type	Next CVM
3	No CVM required	Not Unattended Cash, Manual Cash or Cashback	Fail

### 1.7.3 Contact: CVM List - A000000291010, Amex (EMV)

Cardholder Verification Method List ('4201 4203 5E03 5F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Next CVM
2	Online PIN	Terminal supports CVM type	Next CVM
3	Signature (paper)	Terminal supports CVM type	Next CVM
4	No CVM required	Terminal supports CVM type	Next CVM

## 1.8 Test Card 08 - Discover, DI, Credit, English, USA, USD

A Dual Interface (Contact / Contactless) Discover credit card with Issuer Country Code of 'USA' and Currency Code of 'USD'.

The recommended transaction amount to generate a host approval is \$79.00.

### 1.8.1 Contact: CVM List - A0000001523010, Discover (EMV)

Cardholder Verification Method List ('4201 4103 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	No CVM required	Terminal supports CVM type	Fail

### 1.8.2 CTLs: CVM List - A0000001523010, Discover (D-PAS EMV)

Cardholder Verification Method List ('4201 4103 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	No CVM required	Terminal supports CVM type	Fail