

# User Acceptance Test (UAT) Canada EMV™ Test Card Set Summary

Version 12.00

December 2021



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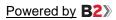
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## **Revision History**

Version	Date	Updated By	Revisions
5.50	August 25, 2016	B2PS	Initial document release
5.60	Sept. 21, 2017	B2PS	TC15: Card v6.0 has 2-byte Kernel ID
6.00	December 27, 2017	B2PS	TC04 - New version v6.0: Discretionary data updated (CVV)
			TC07 - 'Approval Amount' updated
			TC15 - New version v7.0: Increased contactless facility, 'Approval Amount' updated.
6.10	January 5, 2018	B2PS	TC12, TC13 - EMV Tags for A0000000291010 added
6.20	April 11, 2018	B2PS	TC11 - Profile table Service code corrected.
7.00	October 4, 2018	B2PS	All cards - Tags 82, 9F07, 9F69 expanded & interpreted
			Amex cards (TC12, TC13, TC14) - Expiry date changed to 24/12
			Discover cards (TC15, TC16) - Expiry date changed to 23/12
8.00	May 30, 2019	B2PS	TC12 - PAN changed - now ends in '41007',     AIP contactless changed
			TC12 & TC13 - Approval amounts changed
8.01	June 7, 2019	B2PS	Set renamed to "UAT Canada EMV Test Card Set". No change to cards themselves.
9.00	June 29, 2020	B2PS	TC01, TC05, TC06, TC07, TC10 – updated cardstock support; where applicable, "MasterCard">"Mastercard"
10.00	November 4, 2020	B2PS	TC10 - updated CVM, AIP TC11 - Correction to documentation (CVM)
11.00	March 18, 2021	B2PS	Mastercard cards change Expiry Date to 25/12
11.01	March 19, 2021	B2PS	Format-only - limit awkward page-breaks
11.10	November 30, 2021	B2PS	TC05, TC06 - Documentation correction only.     EMV Tag 5F20 has been corrected.
12.00	December 16, 2021	B2PS	TC01-TC04 - Visa cards change Expiry Date to 24/12 TC10, TC11 – now DI with new BIN range

## **Table of Contents**

Chapter 1.	UAT Canada Elliv Test Card Set Fromes	Z
1.1	Test Card 01 – Visa, DI, Credit, English, Canada, CAD	6
	1.1.1 CVM List - AID A000000031010, Visa (EMV)	6
	1.1.2 NO CVM List - AID A000000031010, Visa (qVSDC, Online)	
	1.1.3 NO CVM List - AID A000000031010, Visa (qVSDC, Offline)	6
1.2	Test Card 02 - Visa, Credit, English, USA, USD	6
	1.2.1 CVM List - AID A000000031010, Visa (EMV)	6
1.3	Test Card 03- Visa, No CVM, English, USA, USD	6
	1.3.1 CVM List - AID A000000031010, Visa (EMV)	6
1.4	Test Card 04 – Visa, Technical Fallback Card	7
1.5	Test Card 05 - Mastercard, DI, Credit, English, Canada, CAD	7
	1.5.1 CVM List - AID A000000041010, Mastercard (EMV)	7
	1.5.2 CVM List - AID A0000000041010, Mastercard (PayPass, MChip)	7
1.6	Test Card 06 - Mastercard, DI, Credit, French, Canada, CAD	8
	1.6.1 CVM List - AID A0000000041010, Mastercard (PayPass MChip)	8
1.7	Test Card 07 - Mastercard, ARPC Failure, Credit, English, USA, USD	8
	1.7.1 CVM List - AID A000000041010, Mastercard (EMV)	
1.8	Test Card 08 - Mastercard, Technical Fallback Card	8
1.9	Test Card 09 - Mastercard, ECL - MSR Fallback Card	9
1.10	Test Card 10 – Interac, Debit, English, Canada, CAD	9
	1.10.1 CVM List - AID A0000002771010 (EMV)	
	1.10.2 NO CVM List - AID A0000002771010, Interac (Flash)	9
1.11	Test Card 11 - Interac, Debit, French, Canada, CAD	9
	1.11.1 CVM List - AID A0000002771010 (EMV)	9
	1.11.2 NO CVM List - AID A0000002771010, Interac (Flash))	9
1.12	Test Card 12 – American Express, DI, Credit, English, Canada, CAD	10
	1.12.1 CVM List - AID A00000025010402 (EMV)	
	1.12.2 CVM List - AID A000000025010402 (ExpressPay EMV)	10
	1.12.3 CVM List - AID A0000000291010 (EMV)	10
1.13	Test Card 13 – American Express, DI, Credit, English, Canada, CAD	10
	1.13.1 CVM List - AID A00000025010402 (EMV)	
	1.13.2 CVM List - AID A000000025010402 (ExpressPay EMV)	11
	1.13.3 CVM List - AID A0000000291010 (EMV)	11
1.14	Test Card 14 – American Express, Technical Fallback Card	11
1.15	Test Card 15 - Discover, DI, Credit, English, USA, USD	12
	1.15.1 CVM List - AID A0000001523010 (EMV)	12
	1.15.2 CVM List - AID A0000001523010 (DPAS-EMV)	12
1 16	Test Card 16 - Discover Technical Fallback Card	12



#### **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 \*\*\*

#### **NOTICE**

Interac Flash card has a '001202' BIN range. These cards are supported by all Canadian processors but are not yet supported by all U.S. and international processors.

\*\*\* Check with your acquirer account representative to determine if the Interac Flash BIN range is supported by their development host. If your processor does not yet support Interac Flash, the card will function properly at the POS but it will not obtain a host approval. \*\*\*

#### **RECOMMENDATION**

For those that are relatively new to EMV and seek assistance in understanding 'the basics'...

Consider B2's online courses – eLearning and Virtual Training.

Learn from the comfort and convenience of your office (or home-office), at your own pace.

Visit: b2ps.com/b2-university

## Chapter 1. UAT Canada EMV Test Card Set Profiles

This User Acceptance Test (UAT) Canada EMV Test Card Set contains 16 cards with at least one card from each of the following card brands.

			mastercard
	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Visa
Туре	Credit	Credit	Credit
Description	Offline Capable	USA Signature	No CVM
AID	A000000031010	A000000031010	A000000031010
PAN	4761******0043	4761******0011	4761******0243
Expiry Date	12/2024	12/2024	12/2024
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, MSR	Contact, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN (ATM) Offline Plaintext PIN Signature No CVM required See card definition	Online PIN (ATM) Online PIN (MCash) Signature No CVM required See card definition	No CVM required See card definition
Approval Amount	\$10.00	\$10.00	\$10.00
Issuer Country Code 124 - Canada 840 -		840 - USA	840 - USA
Application Currency Code	124 - CAD	840 - USD	840 - USD
Language	'en' – English	'en' – English	'en' – English
Card Version	v7.x	v6.x	v6.x

	Test Card 04	Test Card 05	Test Card 06
Brand	Visa	Mastercard	Mastercard
Туре	Credit	Credit	Credit
Description	Fallback	Credit	MasterCard
AID	-	A000000041010	A000000041010
PAN	4761******0267	5413*****4111	5413*****4111
Expiry Date	12/2024	12/2025	12/2025
Service Code	201	201	201
Interface	MSR	Contact, Contactless, MSR	Contact, Contactless, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	N/A See card definition	Online PIN (ATM) Signature No CVM required See card definition	Online PIN (ATM) Offline Enciphered PIN Offline Plaintext PIN Signature No CVM required See card definition
Approval Amount	\$10.00	\$20.00	\$20.00
Issuer Country Code	-	124 - Canada	124 - Canada
<b>Application Currency Code</b>	Application Currency Code -		124 - CAD
Language	Language -		'fr' – French
Card Version	v7.x	v7.x	v7.x

	Test Card 07	Test Card 08	Test Card 09
Brand Masterca		Mastercard	Mastercard
Туре	Credit	Credit	Credit
Description	ARPC Failure	Fallback	Empty Candidate List
AID	A000000041010	-	-
PAN	5413******0011	5413******0029	5413******0011
Expiry Date	12/2025	12/2025	12/2025
Service Code	201	201	601
Interface	Contact, MSR	MSR	MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Signature No CVM required See card definition	N/A See card definition	N/A See card definition
Approval Amount	\$120.00	\$20.00	\$20.00
Issuer Country Code	840 - USA	-	-
Application Currency Code	840 - USD	-	-
Language	Language 'en' – English		-
Card Version	v7.x	v6.x	v6.x

	Test Card 10	Test Card 11	Test Card 12
Brand	Interac	Interac	American Express
Туре	Debit	Debit	Credit
Description	Canadian Debit	Canadian Debit	Online Only
AID	A0000002771010	A0000002771010	A00000025010402, A0000000291010
PAN	0012****0001	0012*****0001	3742*****1007
Expiry Date	12/2028	12/2028	12/2024
Service Code	220	220	201
Interface	Contact, Contactless, MSR	Contact, Contactless, MSR	Contact, Contactless, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Offline Enciphered PIN Offline Plaintext PIN Online PIN See card definition	Offline Enciphered PIN Offline Plaintext PIN Online PIN See card definition	Online PIN (ATM) Online PIN Signature No CVM required See card definition
Approval Amount	pproval Amount \$10.00		\$30.00
Issuer Country Code 124 - Canada		124 - Canada	124 - Canada
Application Currency Code	124 - CAD	124 - CAD	124 - CAD
Language 'en' – English		'fr' – French	'en' – English
Card Version	v9.x	v6.x	v7.x

	Test Card 13	Test Card 14	Test Card 15
Brand American Expres		American Express	Discover
Туре	Credit	Credit	Credit
Description	Amex Credit	Fallback	Discover Credit
AID	A00000025010402, A0000000291010	-	A0000001523010
PAN	3742*****1003	3742*****1006	6510******0216
Expiry Date	12/2024	12/2024	12/2023
Service Code	201	201	201
Interface	Contact, Contactless, MSR	MSR	Contact, Contactless, MSR
CVM (Contact) Default Condition: Terminal Supports CVM	Online PIN (ATM) Offline Plaintext PIN Signature No CVM required See card definition	N/A See card definition	Online PIN (ATM) Offline Plaintext PIN No CVM required See card definition
Approval Amount	\$39.00 or \$43.00	\$36.00	\$79.00
Issuer Country Code	124 - Canada	-	840 - USA
<b>Application Currency Code</b>	124 - CAD	-	840 - USD
Language 'en' – English		-	'en' – English
Card Version	v6.x	v6.x	v8.x

	Test Card 16
Brand	Discover
Туре	Credit
Description	Fallback
AID	-
PAN	6510******0331
Expiry Date	12/2023
Service Code	201
Interface	MSR
CVM (Contact) Default Condition: Terminal Supports CVM	N/A See card definition
Approval Amount	\$26.00
Issuer Country Code	-
Application Currency Code	-
Language	-
Card Version	v6.x

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

A Dual Interface (Contact / Contactless) Visa 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 CVM List - AID A000000031010, Visa (EMV)

Cardholder Verification Method List('4201 4103 5E03 1F03')				
CVM	Verification Method	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	

#### 1.1.2 NO CVM List - AID A000000031010, Visa (qVSDC, Online)

## 1.1.3 NO CVM List - AID A000000031010, Visa (qVSDC, Offline)

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

A Visa credit card with two AIDs, Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

#### 1.2.1 CVM List - AID A000000031010, Visa (EMV)

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	Always	Fail	

## 1.3 Test Card 03- Visa, No CVM, English, USA, USD

A Visa card with no CVM, Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

#### 1.3.1 CVM List - AID A000000031010, Visa (EMV)

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

#### 1.4 Test Card 04 – Visa, Technical Fallback Card

This card has a chip image printed on it but 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.

## 1.5 Test Card 05 – Mastercard, DI, Credit, English, 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.

#### 1.5.1 CVM List - AID A000000041010, Mastercard (EMV)

Cardholder Verification Method List ('4201 5E03 1F03')				
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	Terminal supports CVM type	Fail	

#### 1.5.2 CVM List - AID A000000041010, Mastercard (PayPass, MChip)

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	

## 1.6 Test Card 06 - 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.

#### 1.6.1 CVM List - AID A0000000041010, Mastercard (PayPass MChip)

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

#### 1.7 Test Card 07 – Mastercard, ARPC Failure, Credit, English, USA, USD

A Mastercard credit card that fails Authorization Response Cryptogram (ARPC) validation, and has Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

Note: If the host approves the transaction, the card will decline the transaction at the 2<sup>nd</sup> Generate AC.

#### 1.7.1 CVM List - AID A000000041010, Mastercard (EMV)

Cardholder Verification Method List ('5E03 1F00')				
CVM	Verification Method	Conditions	If unsuccessful	
1	Signature (paper)	Terminal supports CVM type	Next CVM	
2	No CVM required	Terminal supports CVM type	Fail	

## 1.8 Test Card 08 – Mastercard, Technical Fallback Card

This card has a chip image printed on it but 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.

#### 1.9 Test Card 09 – Mastercard, ECL - MSR Fallback Card

This card has an un-programmed chip. When inserted, an Empty Candidate List will result and the POS should invoke fallback processing.

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

## 1.10 Test Card 10 – Interac, Debit, English, Canada, CAD

An Interac Canadian 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.

#### 1.10.1 CVM List - AID A0000002771010 (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	

#### 1.10.2 NO CVM List - AID A0000002771010, Interac (Flash)

## 1.11 Test Card 11 - Interac, Debit, French, Canada, CAD

An Interac Canadian 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.

#### 1.11.1 CVM List - AID A0000002771010 (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	

#### 1.11.2 NO CVM List - AID A0000002771010, Interac (Flash))

## 1.12 Test Card 12 – 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.

#### 1.12.1 CVM List - AID A000000025010402 (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

#### 1.12.2 CVM List - AID A000000025010402 (ExpressPay EMV)

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

## 1.12.3 CVM List - AID A000000291010 (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

## 1.13 Test Card 13 – 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 \$39.00 or \$43.00.

## 1.13.1 CVM List - AID A000000025010402 (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

## 1.13.2 CVM List - AID A000000025010402 (ExpressPay EMV)

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	

## 1.13.3 CVM List - AID A0000000291010 (EMV)

Cardho	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		

## 1.14 Test Card 14 – American Express, Technical Fallback Card

This card has a chip image printed on it but 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 \$36.00.

## 1.15 Test Card 15 – 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.

#### 1.15.1 CVM List - AID A0000001523010 (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	

## 1.15.2 CVM List - AID A0000001523010 (DPAS-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

## 1.16 Test Card 16 - Discover, Technical Fallback Card

This card has a chip image printed on it but 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 transaction.

The recommended transaction amount to generate a host approval is \$26.00.

