

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

Version 11.00 March 2021



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Revision History

Version	Date	Updated By	Revisions
5.00	May 03, 2016	B2PS	Initial document release
5.01	May 24, 2016	B2PS	 Transaction Values added. Various consistency, typographical, format corrections
5.02	July 11, 2016	B2PS	 TC 05, TC 06 - Interface in profiles table corrected TC 09 - Service code in profiles table corrected TC 12, TC 13 - AID in profiles table corrected
5.03	July 20, 2016	B2PS	TC 09 - PAN in profiles table correctedFormatting changes to Table of contents
5.10	August 30, 2016	B2PS	 Duplex-print ready: Header, Margins, tables adjusted
5.20	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 A000000291010 added
6.20	April 11, 2018	B2PS	TC11 - Profile table Service code corrected.
7.00	October 4, 2018	B2PS	 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, AIPTC11 - Correction to documentation (CVM)
11.00	March 18, 2021	B2PS	Mastercard cards change Expiry Date to 25/12

Table of Contents

Chapter 1 -	UAT Canada EMV Test Card Set Profiles	2
1.1	Test Card 01 – Visa, DI, Credit, English, Canada, CAD	6
	1.1.1 Cardholder Verification Method List	.6
1.2	Test Card 02 – Visa, Credit, English, USA, USD	6
	1.2.1 Cardholder Verification Method List	.6
1.3	Test Card 03– Visa, No CVM, English, USA, USD	6
	1.3.1 Cardholder Verification Method List	.6
1.4	Test Card 04 – Visa, Technical Fallback Card	7
1.5	Test Card 05 – Mastercard, DI, Credit, English, Canada, CAD	
	1.5.1 Cardholder Verification Method List	
	1.5.2 Cardholder Verification Method List (CL)	
1.6	Test Card 06 – Mastercard, DI, Credit, French, Canada, CAD	
	1.6.1 Cardholder Verification Method List	
	1.6.2 Cardholder Verification Method List (CL)	
1.7	Test Card 07 – Mastercard, ARPC Failure, Credit, English, USA, USD	
4.0	1.7.1 Cardholder Verification Method List	-
1.8	Test Card 08 – Mastercard, Technical Fallback Card	
1.9	Test Card 09 – Mastercard, MSR Fallback Card	
1.10	Test Card 10 – Interac, Debit, English, Canada, CAD	
	1.10.1 Cardholder Verification Method List	
1.11	Test Card 11 – Interac, Debit, French, Canada, CAD. 1.11.1 Cardholder Verification Method List	
1.12	Test Card 12 – American Express, DI, Credit, English, Canada, CAD 1.12.1 Cardholder Verification Method List - AID A000000025010402	
	1.12.2 Cardholder Verification Method List - AID A00000025010402 1.12.2 Cardholder Verification Method List (CL) - AID A000000025010402	
	1.12.3 Cardholder Verification Method List - AID A0000000291010	
1.13	Test Card 13 – American Express, DI, Credit, English, Canada, CAD 1	
-	1.13.1 Cardholder Verification Method List - AID A000000025010402	
	1.13.2 Cardholder Verification Method List (CL) - AID A00000025010402	10
	1.13.3 Cardholder Verification Method List - AID A000000291010	11
1.14	Test Card 14 – American Express, Technical Fallback Card 1	2
1.15	Test Card 15 – Discover, DI, Credit, English, USA, USD 1	2
	1.15.1 Cardholder Verification Method List	
	1.15.2 Cardholder Verification Method List (CL)	
1.16	Test Card 16 – Discover, Technical Fallback Card 1	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 ***

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.

			VISA
	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Visa
Туре	Credit	Credit	Credit
Description	Offline Capable	USA Signature	No CVM
IIN	-	-	-
AID	A000000031010	A000000031010	A000000031010
PAN	476173 ****** 0119	476173 ***** 0119	476173 *****0010
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$10.00	\$10.00	\$10.00
Issuer Country Code	124 – Canada	840 - USA	840 - USA
Application Currency Code	124 - CAD	840 - USD	840 - USD
Language	'en' – English	'en' – English	'en' – English
Card Version	v6.0	v5.0	v5.0

	Test Card 04	Test Card 05	Test Card 06
Brand	Visa	Mastercard	Mastercard
Туре	Credit	Credit	Credit
Description	Fallback	Credit	Mastercard
IIN	-	-	-
AID	-	A0000000041010	A0000000041010
PAN	476173 ****** 0267	541333 ***** 4111	541333 ***** 4111
Expiry Date	12/2022	12/2025	12/2025
Service Code	201	201	201
Interface	MSR	Contact, Contactless, MSR	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$10.00	\$20.00	\$20.00
Issuer Country Code	-	124 - Canada	124 - Canada
Application Currency Code	-	124 - CAD	124 - CAD
Language	-	'en' – English	ʻfr' – French
Card Version	v6.0	v7.0	v7.0

	Test Card 07	Test Card 08	Test Card 09
Brand	Mastercard	Mastercard	Mastercard
Туре	Credit	Credit	Credit
Description	ARPC Failure	Fallback	Fallback
IIN	-	-	-
AID	A0000000041010	-	-
PAN	541333 ****** 0011	54133 ****** 0029	541333 ****** 0011
Expiry Date	12/2025	12/2025	12/2025
Service Code	201	201	601
Interface	Contact, MSR	MSR	MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$120.00	\$20.00	\$20.00
Issuer Country Code	840 - USA	-	840 - USA
Application Currency Code	840 - USD	-	840 - USD
Language	'en' – English	-	'en' – English
Card Version	v7.0	v6.0	v6.0

	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
IIN			-
AID	A0000002771010	A0000002771010	A00000025010402, A000000291010
PAN	450644 ****** 1933	450644 ****** 1933	374245 ****** 1007
Expiry Date	12/2022	12/2022	12/2024
Service Code	201	220	201
Interface	Contact, MSR	Contact, MSR	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$10.00	\$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	v8.0	v5.0	v7.0

	Test Card 13	Test Card 14	Test Card 15
Brand	American Express	American Express	Discover
Туре	Credit	Credit	Credit
Description	Amex Credit Fallback Discover Credi		Discover Credit
IIN	-	-	-
AID	A00000025010402, A000000291010	-	A0000001523010
PAN	374245 ***** 1003	374245 ***** 1006	651000 ***** 0216
Expiry Date	12/2024	12/2024	12/2023
Service Code	201	201	201
Interface	Contact, Contactless, MSR	MSR	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$39 or \$43	\$36.00	\$79.00
Issuer Country Code	124 – Canada	-	840 - USA
Application Currency Code	pplication Currency Code 124 - CAD		840 - USD
Language	'en' – English	-	'en' – English
Card Version	v6.0	v6.0	v8.0

	Test Card 16
Brand	Discover
Туре	Credit
Description	Fallback
IIN	-
AID	-
PAN	65100 ****** 0331
Expiry Date	12/2023
Service Code	201
Interface	MSR
CVM	See card definition
Approval Amount	\$26.00
Issuer Country Code	-
Application Currency Code	-
Language	-
Card Version	v6.0

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 Cardholder Verification Method List

Cardholder Verification Method 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, Credit, English, USA, USD

A Visa debit 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 Cardholder Verification Method List

Cardho	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 Cardholder Verification Method List

Cardholder Verification Method List ('1F00')				
CVM	Verification 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 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.

1.5 Test Card 05 – Mastercard, DI, Credit, English, Canada, CAD

A Dual Interface (Contact / Contactless) Mastercard 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 Cardholder Verification Method List

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 Cardholder Verification Method List (CL)

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.

Cardho	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	

1.6.1 Cardholder Verification Method List

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

1.6.2 Cardholder Verification Method List (CL)

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 \$20.00.

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

1.7.1 Cardholder Verification Method List

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 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.

1.9 Test Card 09 – Mastercard, 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 Cardholder Verification Method List

Cardholder Verification Method List ('4103 0203')				
CVM	M Verification Method Conditions If unsuccessful			
1	Offline Plaintext PIN	Terminal supports CVM type	Fail	
2	Online PIN	Terminal supports CVM type	Fail	

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 Cardholder Verification Method List

Cardholder Verification Method List ('4103 0203')			
CVM	Verification Method	Conditions	If unsuccessful
1	Offline Plaintext PIN	Terminal supports CVM type	Fail
2	Online PIN	Terminal supports CVM type	Fail

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 Cardholder Verification Method List - AID A00000025010402

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	

1.12.2 Cardholder Verification Method List (CL) - AID A0000002501					
Cardho	Cardholder Verification Method List ('4201 5E03 1F02')				
CVM	Verification Method	Conditions			

10402

Cardho	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 Cardholder Verification Method List - AID A000000291010

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	

1.13 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 Cardholder Verification Method List - AID A00000025010402

Cardho	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 Cardholder Verification Method List (CL) - AID A00000025010402

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

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		

1.13.3 Cardholder Verification Method List - AID A000000291010

1.14 Test Card 14 – American Express, 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 \$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 Cardholder Verification Method List

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 Cardholder Verification Method List (CL)

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 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 transaction.

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