



User Acceptance Test (UAT) Flash BIN '00' EMV™ Test Card Set

Version 3.00

March 2022

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Revision History

Version	Date	Updated By	Revisions
1.00	October 8, 2020	B2PS	<ul style="list-style-type: none">Initial document release
2.00	February 18, 2021	B2PS	<ul style="list-style-type: none">TC01, TC02: MTI (Contactless) tags 9F52, 9F54, 9F55, 9F56, 9F57 updated.
2.01	November 5, 2021	B2PS	<ul style="list-style-type: none">TC01, TC02: Correction to typos in card description text
3.00	March 4, 2022	B2PS	<ul style="list-style-type: none">TC01, TC02: New PAN, DES Keys, KDI

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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, 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 *****

IMPORTANT NOTICES

The Interac Flash test cards in this set have 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 this 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 device but it will not obtain a host approval. ******

IMPORTANT TECHNICAL NOTICE from Interac – ACQUIRERS' SUPPORT

Link to Interac document: [Interac Letter - Issuer simulator setup for Flash Cards](#)

“When using the contact interface in an Acquirer test environment, the Issuer simulator must be configured to return value '88 40' in ARPCrc response (ARPCrc byte 1 bits 6-3 should be set to zero).

Unless issuer simulator is configured to return '88 40', a contact transaction may block the card.”

--- B2 will charge to replace cards blocked in this manner ---

Chapter 1 - User Acceptance Test Flash BIN '00' EMV Test Card Set Profiles

This User Acceptance Test (UAT) Flash BIN '00' EMV Test Card Set contains 2 Interac cards.



	Test Card 01	Test Card 02
Brand	Interac	Interac
Description (Card - Types)	Canadian Debit	Canadian Debit
AID list	A0000002771010	A0000002771010
PAN list	0012 0800 00008	0012 0800 00008
Expiry Date	12/2028	12/2028
Service Code	220	220
Interface	Contactless, Contact, MSR	Contactless, Contact, 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
Approval Amount	\$10.00	\$10.00
Issuer Country Code	124 - CAN	124 - CAN
Application Currency Code	124 -CAD	124 - CAD
Language	'enfr' - English, French	'fren' - French, English
Card Version	v4.x	v4.x

Notes:

- Both cards support Offline Enciphered PIN (OEP) for Contact transactions
- Both cards support CDA using a 1984-bit length CA Public Key and Issuer Public key

1.1 Test Card 01 - Interac, DI, 1-AID (Interac), English/French, CAN, CAD

A Dual Interface (Contact / Contactless), Interac (Canadian) debit card with an Issuer Country Code of 'Canada' and Currency Code of 'CAD'. Languages supported are English and French.

All Merchant Type Indicator (MTI) Limits (tags 9F52, 9F54, 9F55, 9F56, 9F57) set to \$250.01

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

1.1.1 Contact: CVM List - Interac, AID A000002771010 (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

1.1.2 Contact: Application Tag data, AID A000002771010 (EMV)

Tag	Element name	Data	v4.x
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'	
57	Track 2 Equivalent Data	00 12 08 00 00 00 8D 28 12 22 00 01 23 00 00 00 02 00 0F	
5A	Application Primary Account Number (PAN)	00 12 08 00 00 00 8F	
5F 20	Cardholder Name	55 41 54 20 49 4E 54 46 4C 2F 54 65 73 74 20 43 61 72 64 20 30 31 20 20 20 200 - 'UAT INTFL/Test Card 01'	
5F 24	Application Expiration Date	28 12 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 24 - CAN	
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)	
5F 30	Service Code	02 20	
5F 34	Application PAN Sequence Number	01	
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'	
82	Application Interchange Profile	19 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported	
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02 9F 4C 08 9F 34 03	
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04 9F 4C 08	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 04 03 01 03 02 03	
8F	Certification Authority Public Key Index	07	

Tag	Element name	Data	v4.x
90	Issuer Public Key Certificate	1D 20 2E 58 DD 49 87 AC F7 62 08 02 0E 4A D4 33 E3 E1 97 2B 37 E2 23 1B 2B 8D 3C 46 BB 61 9C 50 DC E8 03 25 54 93 C3 45 7B 98 05 B0 B0 FF E4 22 9D 07 32 F6 3E C0 FA 8A 2C 93 95 7C 23 BB 6F DB 59 16 17 B8 C1 AB 27 D6 93 46 32 D8 0D 78 1E 6A CF 63 76 01 DE 6E 25 69 4A A7 C6 2A 68 80 B7 C8 93 A0 EB 0D 0B CD 50 64 76 4E 9E 8E C6 95 1B D1 FF DE 43 81 1D 6D 27 A8 CE 5C 6F 03 9D 38 EF 20 EC F7 1C E8 36 AB E3 85 04 0E 98 B1 A8 06 82 32 62 6F 4F D6 33 BF 5B EE 6F 76 C4 73 12 7F 96 8C 6F A4 65 26 AC FB D7 68 CF 04 63 BE ED 63 5A 23 4B 87 84 8A C0 9B A4 D3 77 2A 75 E4 E7 3E 14 6A C6 A2 74 7D 1D 9C EC AB F2 25 49 5D 61 E7 48 5A 92 F1 60 AE B7 5D CA 55 53 57 F7 67 58 71 DC C3 93 A5 7B 53 B4 DB E8 72 CB F1 60 66 01 B0 59 1E 48 98 2F 20 55 42 C7 25	
94	Application File Locator (AFL)	08 01 04 00 10 01 01 01 18 01 04 01	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	FC 78 FC A8 40	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC F8 FC F8 70	
9F 10	Issuer Application Data [InteracFlash]	xx 02 xx *	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	01 00 01	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 42	Application Currency Code	01 24 - CAD	
9F 44	Application Currency Exponent	02	

Tag	Element name	Data	v4.x
9F 46	ICC Public Key Certificate	4D 85 39 7A 51 10 4C E1 E7 69 56 6C D4 F9 2A AF 32 19 B5 5A 75 1C F1 E1 BE 64 41 D5 77 91 18 87 22 CD 20 8F 01 7B 70 1D 47 B9 22 BB 9D B8 03 BE 5C AA 59 16 DC EF 46 73 84 67 AD 67 AA 31 FF 9D 5C 4B 33 44 E1 FE 3D FD FE 37 B4 18 DC 65 20 E1 F5 89 F4 E2 04 E9 30 69 68 98 7F 2F 55 1C 25 C7 2D D9 67 EF 0F 1A 6E 6F 11 27 BC 4E 0F 80 81 ED 7F 6D 8C 31 3D 2C 35 89 F7 51 87 3F A9 9F 94 36 36 00 AB 2E 84 60 D4 0D A6 36 B0 B7 2B 89 5F EE	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	72 6E 51 81 75 4D 8B B5 BE CD 21 F1 03 D1 DE 13 25 2B 4A 1C 35 57 E3 6F 3A C3	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 95 05 9C 01 8A 02	
9F 62	Card Product Code [InteracFlash]	00 01	

* Tag value changes with card usage

1.1.3 CTLS: CVM List - AID A000002771010 (Flash)

Cardholder Verification Method List ('0203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Fail
2	No CVM required	Terminal supports CVM type	Fail

1.1.4 CTLS: Application Tag data, AID A000002771010 (Flash)

Tag	Element name	Data	v4.x
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'	
57	Track 2 Equivalent Data	00 12 08 00 00 00 8D 28 12 22 00 01 23 00 00 00 02 00 0F	
5A	Application Primary Account Number (PAN)	00 12 08 00 00 00 8F	
5F 24	Application Expiration Date	28 12 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 24 - CAN	
5F 2D	Language Preference	65 6E 66 72 - 'enfr' (English, French)	
5F 30	Service Code	02 20	
5F 34	Application PAN Sequence Number	01	
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'	
82	Application Interchange Profile	01 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification NOT supported b4 - Terminal risk mgmt NOT to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported	
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10	

Tag	Element name	Data	v4.x
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02 9F 4C 08 9F 34 03	
8F	Certification Authority Public Key Index	07	
90	Issuer Public Key Certificate	1D 20 2E 58 DD 49 87 AC F7 62 08 02 0E 4A D4 33 E3 E1 97 2B 37 E2 23 1B 2B 8D 3C 46 BB 61 9C 50 DC E8 03 25 54 93 C3 45 7B 98 05 B0 B0 FF E4 22 9D 07 32 F6 3E C0 FA 8A 2C 93 95 7C 23 BB 6F DB 59 16 17 B8 C1 AB 27 D6 93 46 32 D8 0D 78 1E 6A CF 63 76 01 DE 6E 25 69 4A A7 C6 2A 68 80 B7 C8 93 A0 EB 0D 0B CD 50 64 76 4E 9E 8E C6 95 1B D1 FF DE 43 81 1D 6D 27 A8 CE 5C 6F 03 9D 38 EF 20 EC F7 1C E8 36 AB E3 85 04 0E 98 B1 A8 06 82 32 62 6F 4F D6 33 BF 5B EE 6F 76 C4 73 12 7F 96 8C 6F A4 65 26 AC FB D7 68 CF 04 63 BE ED 63 5A 23 4B 87 84 8A C0 9B A4 D3 77 2A 75 E4 E7 3E 14 6A C6 A2 74 7D 1D 9C EC AB F2 25 49 5D 61 E7 48 5A 92 F1 60 AE B7 5D CA 55 53 57 F7 67 58 71 DC C3 93 A5 7B 53 B4 DB E8 72 CB F1 60 66 01 B0 59 1E 48 98 2F 20 55 42 C7 25	
94	Application File Locator (AFL)	08 01 04 00 10 01 05 03	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	FC F8 FC F8 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC F8 FC F8 00	
9F 10	Issuer Application Data [InteracFlash]	xx 02 xx *	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	01 00 01	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 59 03 9F 5A 01 9F 02 06 9F 1A 02 5F 2A 02 9F 37 04 9F 58 01	
9F 42	Application Currency Code	01 24 - CAD	

Tag	Element name	Data	v4.x
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	59 6A 6A 27 27 8A A0 90 EF C5 FE 4C 83 C2 40 AB 7B 4F 5E 86 16 28 A4 92 84 2A CD 9C 30 AD 62 18 E2 9C 08 41 7C D6 66 91 82 42 E8 8F E1 B9 93 03 AA 6D A2 D3 CE 21 AC 94 23 23 81 FF 60 EA 9D DA 61 8E 19 46 5A F7 CD 2D A3 3F FE 6D 00 67 CE FA 4D 9F 6F 7B BA 5A 6D DF 97 4A D4 DE 0B C2 A7 7E 95 E1 E9 4A D2 67 E3 BF FD F3 64 1F 1C 12 1C 12 85 F1 01 71 6A D2 4B 34 E5 61 1A AA 79 41 6F DC C6 FC 25 FF 44 3A 9C 93 86 B9 87 55 A4 91 B8 9B	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	72 6E 51 81 75 4D 8B B5 BE CD 21 F1 03 D1 DE 13 25 2B 4A 1C 35 57 E3 6F 3A C3	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 95 05 9C 01 8A 02	
9F 52	Merchant Type Indicator Limits 01	00 00 00 02 50 01 99 99 99 99 99 99	
9F 54	Merchant Type Indicator Limits 02	00 00 00 02 50 01 99 99 99 99 99 99	
9F 55	Merchant Type Indicator Limits 03	00 00 00 02 50 01 99 99 99 99 99 99	
9F 56	Merchant Type Indicator Limits 04	00 00 00 02 50 01 99 99 99 99 99 99	
9F57	Merchant Type Indicator Limits 05	00 00 00 02 50 01 99 99 99 99 99 99	
9F 62	Card Product Code [InteracFlash]	00 01	
9F 63	Card Transaction Information [InteracFlash]	00 10 00 00	
9F 70	Form Factor Indicator [InteracFlash]	00	
DF 62	Application Selection Flag [Canada]	80 80	

* Tag value changes with card usage

1.2 Test Card 02 - Interac, DI, 1-AID (Interac), French/English, CAN, CAD

A Dual Interface (Contact / Contactless), Interac (Canadian) debit card with an Issuer Country Code of 'Canada' and Currency Code of 'CAD'. Languages supported are French and English.

All Merchant Type Indicator (MTI) Limits (tags 9F52, 9F54, 9F55, 9F56, 9F57) set to \$250.01

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

1.2.1 Contact: CVM List - Interac, AID A000002771010 (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

1.2.2 Contact: Application Tag data, AID A000002771010 (EMV)

Tag	Element name	Data	v4.x
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'	
57	Track 2 Equivalent Data	00 12 08 00 00 00 8D 28 12 22 00 01 23 00 00 00 02 00 0F	
5A	Application Primary Account Number (PAN)	00 12 08 00 00 00 8F	
5F 20	Cardholder Name	55 41 54 20 49 4E 54 46 4C 2F 54 65 73 74 20 43 61 72 64 20 30 32 20 20 20 20 - 'UAT INTFL/Test Card 02'	
5F 24	Application Expiration Date	28 12 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 24 - CAN	
5F 2D	Language Preference	66 72 65 6E - 'fren' (French, English)	
5F 30	Service Code	02 20	
5F 34	Application PAN Sequence Number	01	
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'	
82	Application Interchange Profile	19 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported	
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02 9F 4C 08 9F 34 03	
8D	Card Risk Management Data Object List 2 (CDOL2)	91 0A 8A 02 95 05 9F 37 04 9F 4C 08	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 04 03 01 03 02 03	
8F	Certification Authority Public Key Index	07	

Tag	Element name	Data	v4.x
90	Issuer Public Key Certificate	1D 20 2E 58 DD 49 87 AC F7 62 08 02 0E 4A D4 33 E3 E1 97 2B 37 E2 23 1B 2B 8D 3C 46 BB 61 9C 50 DC E8 03 25 54 93 C3 45 7B 98 05 B0 B0 FF E4 22 9D 07 32 F6 3E C0 FA 8A 2C 93 95 7C 23 BB 6F DB 59 16 17 B8 C1 AB 27 D6 93 46 32 D8 0D 78 1E 6A CF 63 76 01 DE 6E 25 69 4A A7 C6 2A 68 80 B7 C8 93 A0 EB 0D 0B CD 50 64 76 4E 9E 8E C6 95 1B D1 FF DE 43 81 1D 6D 27 A8 CE 5C 6F 03 9D 38 EF 20 EC F7 1C E8 36 AB E3 85 04 0E 98 B1 A8 06 82 32 62 6F 4F D6 33 BF 5B EE 6F 76 C4 73 12 7F 96 8C 6F A4 65 26 AC FB D7 68 CF 04 63 BE ED 63 5A 23 4B 87 84 8A C0 9B A4 D3 77 2A 75 E4 E7 3E 14 6A C6 A2 74 7D 1D 9C EC AB F2 25 49 5D 61 E7 48 5A 92 F1 60 AE B7 5D CA 55 53 57 F7 67 58 71 DC C3 93 A5 7B 53 B4 DB E8 72 CB F1 60 66 01 B0 59 1E 48 98 2F 20 55 42 C7 25	
94	Application File Locator (AFL)	08 01 04 00 10 01 01 01 18 01 04 01	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	FC 78 FC A8 40	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC F8 FC F8 70	
9F 10	Issuer Application Data [InteracFlash]	xx 02 xx *	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	01 00 01	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 42	Application Currency Code	01 24 - CAD	
9F 44	Application Currency Exponent	02	

Tag	Element name	Data	v4.x
9F 46	ICC Public Key Certificate	22 9E 65 C1 F3 15 CA E7 0D 14 BB 51 CD 67 56 35 39 8D 71 D5 90 E7 3A 2A EA 81 18 8A CD 77 6F 76 D7 CF 84 4B 44 3D 59 40 CB E5 19 76 E5 48 86 A1 44 D6 F3 0D 00 F8 12 BF 6D 69 38 9D 19 C1 4D 11 CA 2A 83 ED 3F ED 54 FF 98 12 11 C4 38 C0 81 FB D6 6F 08 27 1D 60 1A 8A 3A 2C 24 FF 74 FA 09 C0 4D 5F 7C 39 4E D8 C5 41 0F D1 02 A2 6B 41 E5 1B BB D9 68 21 E7 0F EA 32 1D 45 CC 9C C2 F6 B6 95 51 45 55 7F AB BA 34 43 E1 D0 14 1E 17 B6 4F C3	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	91 F7 46 28 23 D8 BC AA 2A DC F3 7E 56 25 AE 86 70 49 11 33 E1 1C 0E E0 4B B3	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 95 05 9C 01 8A 02	
9F 62	Card Product Code [InteracFlash]	00 01	
9F 70	Form Factor Indicator [InteracFlash]	00	
DF 62	Application Selection Flag [Canada]	80 80	

* Tag value changes with card usage

1.2.3 CTLS: CVM List - Interac Flash, AID A000002771010 (Flash)

Cardholder Verification Method List ('0203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Fail
2	No CVM required	Terminal supports CVM type	Fail

1.2.4 CTLS: Application Tag data, AID A000002771010 (Flash)

Tag	Element name	Data	v4.x
50	Application Label	49 6E 74 65 72 61 63 - 'Interac'	
57	Track 2 Equivalent Data	00 12 08 00 00 00 8D 28 12 22 00 01 23 00 00 00 02 00 0F	
5A	Application Primary Account Number (PAN)	00 12 08 00 00 00 8F	
5F 24	Application Expiration Date	28 12 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 24 - CAN	
5F 2D	Language Preference	66 72 65 6E - 'fren' (French, English)	
5F 30	Service Code	02 20	
5F 34	Application PAN Sequence Number	01	
5F 56	Issuer Country Code (alpha3 format)	43 41 4E - 'CAN'	

Tag	Element name	Data	v4.x
82	Application Interchange Profile	01 00 BYTE 1: b7 - Offline SDA NOT supported b6 - Offline DDA NOT supported b5 - Cardholder verification NOT supported b4 - Terminal risk mgmt NOT to be performed b3 - Issuer authentication NOT supported b1 - Combined DDA / GEN AC supported BYTE 2: b8 - EMV Contactless NOT supported	
84	Dedicated File (DF) Name	A0 00 00 02 77 10 10	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 45 02 9F 4C 08 9F 34 03	
8F	Certification Authority Public Key Index	07	
90	Issuer Public Key Certificate	1D 20 2E 58 DD 49 87 AC F7 62 08 02 0E 4A D4 33 E3 E1 97 2B 37 E2 23 1B 2B 8D 3C 46 BB 61 9C 50 DC E8 03 25 54 93 C3 45 7B 98 05 B0 B0 FF E4 22 9D 07 32 F6 3E C0 FA 8A 2C 93 95 7C 23 BB 6F DB 59 16 17 B8 C1 AB 27 D6 93 46 32 D8 0D 78 1E 6A CF 63 76 01 DE 6E 25 69 4A A7 C6 2A 68 80 B7 C8 93 A0 EB 0D 0B CD 50 64 76 4E 9E 8E C6 95 1B D1 FF DE 43 81 1D 6D 27 A8 CE 5C 6F 03 9D 38 EF 20 EC F7 1C E8 36 AB E3 85 04 0E 98 B1 A8 06 82 32 62 6F 4F D6 33 BF 5B EE 6F 76 C4 73 12 7F 96 8C 6F A4 65 26 AC FB D7 68 CF 04 63 BE ED 63 5A 23 4B 87 84 8A C0 9B A4 D3 77 2A 75 E4 E7 3E 14 6A C6 A2 74 7D 1D 9C EC AB F2 25 49 5D 61 E7 48 5A 92 F1 60 AE B7 5D CA 55 53 57 F7 67 58 71 DC C3 93 A5 7B 53 B4 DB E8 72 CB F1 60 66 01 B0 59 1E 48 98 2F 20 55 42 C7 25	
94	Application File Locator (AFL)	08 01 04 00 10 01 05 03	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 02	
9F 0D	Issuer Action Code - Default	FC F8 FC F8 00	
9F 0E	Issuer Action Code - Denial	00 00 00 00 00	
9F 0F	Issuer Action Code - Online	FC F8 FC F8 00	

Tag	Element name	Data	v4.x
9F 10	Issuer Application Data [InteracFlash]	xx 02 xx *	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 17	Personal Identification Number (PIN) Try Counter	09	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	01 00 01	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 59 03 9F 5A 01 9F 02 06 9F 1A 02 5F 2A 02 9F 37 04 9F 58 01	
9F 42	Application Currency Code	01 24 - CAD	
9F 44	Application Currency Exponent	02	
9F 46	ICC Public Key Certificate	57 AE B6 A5 E4 B1 37 82 16 B8 DD EF FC EF 40 E9 B3 23 20 5E E5 C2 59 A4 BA 1D 8C 5E 68 62 EF 56 7B FA 98 5F 52 34 EE CA F7 73 B1 E4 DF 83 CD DE 2B 6C BF 2B 73 05 6B AD D6 26 87 CF 9A A1 09 E9 72 38 D5 84 66 79 DA 8F A4 10 B9 C0 70 E8 13 93 69 EB 05 E0 74 90 12 ED 3B EF 83 C7 15 EC 1C 0D 1F E6 6D 66 CE C3 9C 8F 4B AD 65 8F 8E 14 66 85 70 A7 E4 3D 13 78 7B 1D 94 83 99 75 36 84 C9 D3 05 7C 93 CF 38 AF BD 66 13 A4 68 72 02 E7 53 33	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	91 F7 46 28 23 D8 BC AA 2A DC F3 7E 56 25 AE 86 70 49 11 33 E1 1C 0E E0 4B B3	
9F 4A	Static Data Authentication Tag List	82	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 95 05 9C 01 8A 02	
9F 4F	Transaction Log Format	9F 02 06 5F 2A 02 9A 03 9F 36 02 9F 1A 02 95 05 9C 01 8A 02	
9F 52	Merchant Type Indicator Limits 01	00 00 00 02 50 01 99 99 99 99 99 99	
9F 54	Merchant Type Indicator Limits 02	00 00 00 02 50 01 99 99 99 99 99 99	
9F 55	Merchant Type Indicator Limits 03	00 00 00 02 50 01 99 99 99 99 99 99	
9F 56	Merchant Type Indicator Limits 04	00 00 00 02 50 01 99 99 99 99 99 99	
9F 57	Merchant Type Indicator Limits 05	00 00 00 02 50 01 99 99 99 99 99 99	
9F 62	Card Product Code [InteracFlash]	00 01	
9F 63	Card Transaction Information [InteracFlash]	00 10 00 00	
9F 70	Form Factor Indicator [InteracFlash]	00	
DF 62	Application Selection Flag [Canada]	80 80	

* Tag value changes with card usage

Chapter 2 - ASCII Character Conversion Chart

Dec	Bin	Hex	Char	Dec	Bin	Hex	Char	Dec	Bin	Hex	Char
00	00000000	00	NUL	44	00101100	2C	,	88	01011000	58	X
01	00000001	01	SOH	45	00101101	2D	-	89	01011001	59	Y
02	00000010	02	STX	46	00101110	2E	.	90	01011010	5A	Z
03	00000011	03	ETX	47	00101111	2F	/	91	01011011	5B	[
04	00000100	04	EOT	48	00110000	30	0	92	01011100	5C	\
05	00000101	05	ENQ	49	00110001	31	1	93	01011101	5D]
06	00000110	06	ACK	50	00110010	32	2	94	01011110	5E	^
07	00000111	07	BEL	51	00110011	33	3	95	01011111	5F	_
08	00001000	08	BS	52	00110100	34	4	96	01100000	60	`
09	00001001	09	HT	53	00110101	35	5	97	01100001	61	a
10	00001010	0A	LF	54	00110110	36	6	98	01100010	62	b
11	00001011	0B	VT	55	00110111	37	7	99	01100011	63	c
12	00001100	0C	FF	56	00111000	38	8	100	01100100	64	d
13	00001101	0D	CR	57	00111001	39	9	101	01100101	65	e
14	00001110	0E	SO	58	00111010	3A	:	102	01100110	66	f
15	00001111	0F	SI	59	00111011	3B	;	103	01100111	67	g
16	00010000	10	DLE	60	00111100	3C	<	104	01101000	68	h
17	00010001	11	DC1	61	00111101	3D	=	105	01101001	69	i
18	00010010	12	DC2	62	00111110	3E	>	106	01101010	6A	j
19	00010011	13	DC3	63	00111111	3F	?	107	01101011	6B	k
20	00010100	14	DC4	64	01000000	40	@	108	01101100	6C	l
21	00010101	15	NAK	65	01000001	41	A	109	01101101	6D	m
22	00010110	16	SYM	66	01000010	42	B	110	01101110	6E	n
23	00010111	17	ETB	67	01000011	43	C	111	01101111	6F	o
24	00011000	18	CAN	68	01000100	44	D	112	01110000	70	p
25	00011001	19	EM	69	01000101	45	E	113	01110001	71	q
26	00011010	1A	SUB	70	01000110	46	F	114	01110010	72	r
27	00011011	1B	ESC	71	01000111	47	G	115	01110011	73	s
28	00011100	1C	FS	72	01001000	48	H	116	01110100	74	t
29	00011101	1D	GS	73	01001001	49	I	117	01110101	75	u
30	00011110	1E	RS	74	01001010	4A	J	118	01110110	76	v
31	00011111	1F	US	75	01001011	4B	K	119	01110111	77	w
32	00100000	20	SP	76	01001100	4C	L	120	01111000	78	x
33	00100001	21	!	77	01001101	4D	M	121	01111001	79	y
34	00100010	22	"	78	01001110	4E	N	122	01111010	7A	z
35	00100011	23	#	79	01001111	4F	O	123	01111011	7B	{
36	00100100	24	\$	80	01010000	50	P	124	01111100	7C	
37	00100101	25	%	81	01010001	51	Q	125	01111101	7D	}
38	00100110	26	&	82	01010010	52	R	126	01111110	7E	~
39	00100111	27	'	83	01010011	53	S	127	01111111	7F	DEL
40	00101000	28	(84	01010100	54	T				
41	00101001	29)	85	01010101	55	U				
42	00101010	2A	*	86	01010110	56	V				
43	00101011	2B	+	87	01010111	57	W				