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

Version 10.00

June 2019

Powered by B2»

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Revision History

Version	Date	Updated By	Revisions
5.00	May 02, 2016	B2PS	Initial document release
5.01	May 24, 2016	B2PS	• Cards that have multiple AIDs now show CVMs for each • Transaction Values added • Various consistency, typographical, format corrections. • Card 03 profile description corrected
5.02	June 09, 2016	B2PS	• Updated the Visa Debit card to reflect the new PAN ******0135.
5.03	June 17, 2016	B2PS	• TC 21 - Changed "Debit" to 'Credit' in card profile section
5.04	June 20, 2016	B2PS	• TC 18 - Corrected AID in the profiles table
5.05	June 21, 2016	B2PS	• TC 21 - Corrected AID and expiry date in the profiles table • TC 19 - Corrected expiry date
5.06	June 23, 2016	B2PS	• TC 19 - Corrected IIN in profiles table • TC 20 - In the profiles table - corrected IIN, reversed order of AIDs to reflect description
5.10	July 20, 2016	B2PS	• TC 06, TC 07 - Interface in profiles table corrected • TC 18 - Version change to v5.1 with CVM change in card. Expiry date corrected • TC 19 - Card Expiry date change in card from 18/12 to 19/12. IIN in profiles table corrected • TC 20 - IIN in profiles table adjusted. Reversed order of AIDs to reflect descriptions
5.20	August 30, 2016	B2PS	• Duplex-print ready: Header, Margins, tables adjusted
5.30	October 5, 2016	B2PS	• TC 12 - PAN masking corrected • TC 17 - PAN corrected in profile table.
5.40	Sept. 20, 2017	B2PS	• TC15, TC16: Cards v6.0 have 2-byte Kernel ID
6.00	Dec. 20, 2017	B2PS	• TC05 - New version v6.0: Discretionary data updated (CVV) • TC15, TC16 - Cards updated with increased contactless facility, 'Approval Amount' updated • TC 17 - 'Approval Amount' updated • CVM list (contactless) now shown for all DI cards

Version	Date	Updated By	Revisions
6.01	Jan 12, 2018	B2PS	• TC05 notes updated test concerning host management of CVV
6.02	Mar 11, 2018	B2PS	• TC03 PAN corrected in Profile table
7.00	Sep 24, 2018	B2PS	• Amex cards (TC12, TC13, TC14) - Expiry date changed to 24/12 • Discover cards (TC15, TC16, TC17) - Expiry date changed to 23/12 • DNA card TC18 - PAN changed, Expiry date changed to 25/12 • Visa Card TC19 - Expiry date changed to 22/12
7.10	November 1, 2018	B2PS	• TC21 - corrected expiry date in profile table
8.00	February 6, 2019	B2PS	• TC15 - Tag corrected in D-PAS MS mode • TC16 - Tag 57 corrected in EMV Contact and D-PAS MS mode
9.00	February 25, 2019	B2PS	• TC12, TC13, TC18 - Contactless Tag 57 expiry date corrected
10.00	June 25, 2019	B2PS	• TC06 - Tag D1 currency conversion rates updated • Set renamed to "UAT USA EMV Test Card Set". Other than change listed this date, there are no other changes to cards

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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 ***   │
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Chapter 1 -   User Acceptance Test USA Test Card Set Profiles

This User Acceptance Test (UAT) USA Test Card Set contains 21 cards with at least one card from each of the following card brands.

	Test Card 01	Test Card 02	Test Card 03
Brand	Visa	Visa	Visa
Type	Credit	Credit	Credit
Description	DI, Online Only	DI, Offline Capable	Signature, Online Only
IIN	-	-	-
AID	A0000000031010	A0000000031010	A0000000031010
PAN	476173 ****** 0119	476173 ****** 0119	4761739 ****** 0119
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, Contactless, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$10.00	$10.00	$10.00
Issuer Country Code	840 - USA	840 - USA	840 - USA
Application Currency Code	840 - USD	840 - USD	840 - USD
Language	'en' - English	'en' - English	'en' - English
Card Version	v5.x	v5.x	v5.x

	Test Card 04	Test Card 05	Test Card 06
Brand	Visa	Visa	Mastercard
Type	Credit	Credit	Credit
Description	NO CVM	Fallback	DI, Online Only
IIN	-	-	-
AID	A0000000031010	-	A0000000041010
PAN	476173 ****** 0010	476173 ****** 0267	541333 ******4111
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contact, MSR	MSR	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$10.00	$10.00	$20.00
Issuer Country Code	840 - USA	-	840 - USA
Application Currency Code	840 - USD	-	840 - USD
Language	'en' - English	-	'en' - English
Card Version	v5.x	v6.x	v6.x

	Test Card 07	Test Card 08	Test Card 09
Brand	Mastercard	Mastercard	Mastercard
Type	Credit	Credit	Credit
Description	DI, Offline Capable	ARPC Failure	Fallback
IIN	-	-	-
AID	A0000000041010	A0000000041010	-
PAN	541333 ****** 4111	541333 ****** 0011	541333 ****** 0029
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	220	201
Interface	Contact, Contactless, MSR	Contact, MSR	MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$20.00	$120.00	$20.00
Issuer Country Code	840 - USA	840 - USA	-
Application Currency Code	840 - USD	840 - USD	-
Language	'en' - English	'en' - English	
Card Version	v5.x	v5.x	v5.x

	Test Card 10	Test Card 11	Test Card 12
Brand	Mastercard	Interac	American Express
Type	Credit	Debit	Credit
Description	Empty Candidate List	Canadian Debit	DI, Online Only
IIN	-	-	-
AID	-	A0000002771010	A000000025010402
PAN	541333 ****** 0011	450644 ****** 1933	374245 ****** 1006
Expiry Date	12/2022	12/2022	12/2024
Service Code	201	201	201
Interface	Contact, MSR	Contact, MSR	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$20.00	$10.00	$68.00
Issuer Country Code		124 - Canada	840 - USA
Application Currency Code		124 - CAD	840 - USD
Language		'en' - English	'en' - English
Card Version	v5.x	v5.x	v7.x

	Test Card 13	Test Card 14	Test Card 15
Brand	American Express	American Express	Discover
Type	Credit	Credit	Credit
Description	DI, Online Only	Fallback	DI, Online Only
IIN	-	-	-
AID	A000000025010402	-	A0000001523010
PAN	374245 *****1003	374245 ***** 1006	651000 ****** 0133
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	$1.03	$36.00	$79.00
Issuer Country Code	840 - USA	-	840 - USA
Application Currency Code	840 - USD	-	840 - USD
Language	'en' - English	-	'en' - English
Card Version	v7.x	v6.x	v9.x

	Test Card 16	Test Card 17	Test Card 18
Brand	Discover	Discover	DNA
Type	Credit	Credit	Debit
Description.	DI, Online Only	Fallback	Debit Network Alliance
IIN	-		
AID	A0000001523010	-	A0000006200620
PAN	651000 ****** 0216	651000 ****** 0331	400000 ****** 0028
Expiry Date	12/2023	12/2023	12/2025
Service Code	201	201	201
Interface	Contact, Contactless, MSR	MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$79.00	$79.00	$10.00
Issuer Country Code	840 - USA	-	840 - USA
Application Currency Code	840 - USD	-	840 - USD
Language	'en' - English	-	'en' - English
Card Version	v9.x	v6.x	v7.x

	Test Card 19	Test Card 20	Test Card 21
Brand	Visa	Mastercard	Mastercard
Type	Debit	Debit	Credit
Description.	Visa Debit: • U.S. Common Debit • Global Debit	Mastercard Debit: • U.S. Common Debit • Global Debit	222360 BIN
IIN	476173	541333	-
AID	A00000980840, A00000031010	A00000042203, A00000041010	A0000000041010
PAN	476173 ****** 0135	541333 ****** 9130	222360 ****** 0329
Expiry Date	12/2022	12/2022	12/2022
Service Code	201	201	201
Interface	Contact, MSR	Contact, MSR	Contact, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	$10.00	$20.00	$20
Issuer Country Code	840 - USA	840 - USA	840 - USA
Application Currency Code	840 - USD	840 - USD	840 - USD
Language	'en' - English	'en' - English	'en' - English
Card Version	v6.x	v5.x	v5.x

1.1   Test Card 01 - Visa, DI, Credit, English, USA, USD

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

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

1.1.1   Cardholder Verification Method List

Cardholder Verification Method List ('4203 5E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Next CVM
3	No CVM required	Always	Fail

1.2   Test Card 02 - Visa, DI, Credit, English, USA, USD

A Dual Interface (Contact / Contactless) Visa card with 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

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

1.3   Test Card 03 - Visa, Credit, English, USA, USD

A Visa credit card with 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 ('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

1.4   Test Card 04 - 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.

1.4.1   Cardholder Verification Method List

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

1.5   Test Card 05 - 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.

1.6   Test Card 06 - Mastercard, DI, Credit, English, USA, USD

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

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

1.6.1   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

1.7 Test Card 07 - Mastercard International, DI, Credit, English, USA, USD

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

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

1.7.1 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 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

1.8 Test Card 08 - Mastercard, ARPC Failure, Credit, English, USA, USD

A Mastercard credit card that fails Authorization Response Cryptogram (ARPC) validation. This card has an 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 2nd Generate AC.

1.8.1 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

1.9 Test Card 09 - 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.

1.10 Test Card 10 - 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.

1.11 Test Card 11 - Interac, Debit, English, CAN, 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 ('0100')			
CVM	**Verification Method**	**Conditions**	**If unsuccessful**
1	Offline Plaintext PIN	Always	Fail

1.12 Test Card 12 - American Express, DI, Credit, English, USA, USD

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

The recommended transaction amount to generate a host approval is $68.00.

1.12.1 Cardholder Verification Method List

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, USA, USD

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

The recommended transaction amount to generate a host approval is $1.03.

1.13.1 Cardholder Verification Method List

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

1.14 Test Card 14 - Amex, 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, Credit, English, USA, USD

A 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 ('4203 5E03 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Next CVM
3	No CVM required	Terminal supports CVM type	Fail

1.16   Test Card 16 - Discover, Credit, English, USA, USD

A 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.

1.16.1 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

1.17   Test Card 17 - 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 $79.00.

1.18   Test Card 18 - DNA, Debit, English, USA, USD

A Debit Network Alliance debit card with Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

1.18.1 Cardholder Verification Method List

Cardholder Verification Method List ('0201 0204 0203 1F03')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Unattended Cash	Fail
2	Online PIN	Manual Cash	Fail
3	Online PIN	Terminal supports CVM type	Fail
4	No CVM required	Always	Fail

1.19   Test Card 19 - Visa, Dual AID, Debit, English, USA, USD

A Visa debit card with two AIDs both referencing a single funding account, Issuer Country Code of 'USA' and Currency Code of 'USD'. Both AIDs reference a single funding account.

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

1.19.1 Cardholder Verification Method List - AID (A0000000031010)

Cardholder Verification Method List ('0201 4204 1E04 0205 5E00 4200 1F00')			
CVM	**Verification Method**	**Conditions**	**If unsuccessful**
1	Online PIN	Unattended Cash	Fail
2	Online PIN	Manual Cash	Next CVM
3	Signature (paper)	Manual Cash	Fail
4	Online PIN	Purchase with Cashback	Fail
5	Signature (paper)	Always	Next CVM
6	Online PIN	Always	Next CVM
7	No CVM required	Always	Fail

1.19.2 Cardholder Verification Method List - AID (A0000000980840)

Cardholder Verification Method List ('0201 0004 0205 4200 1F00')			
CVM	**Verification Method**	**Conditions**	**If unsuccessful**
1	Online PIN	Unattended Cash	Fail
2	Fail CVM Processing	Manual Cash	Fail
3	Online PIN	Purchase with Cashback	Fail
4	Online PIN	Always	Next CVM
5	No CVM Required	Always	Fail

1.20   Test Card 20 - Mastercard, Dual AID, Debit, English, USA, USD

A Mastercard debit card with two AIDs both referencing a single funding account, Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

1.20.1 Cardholder Verification Method List - AID (A0000000041010)

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

1.20.2 Cardholder Verification Method List - AID (A0000000042203)

Cardholder Verificration Method List ('0205 4203 1F03')			
CVM	**Verification Method**	**Conditions**	**If unsuccessful**
1	Online PIN	Purchase with Cashback	Fail
2	Online PIN	Terminal supports CVM type	Next CVM
3	No CVM required	Terminal supports CVM type	Fail

1.21   Test Card 21 - Mastercard, BIN '2', Credit, English, USA, USD

A Mastercard ('2' BIN) credit card with BIN range '222360', Issuer Country Code of 'USA' and Currency Code of 'USD'.

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

1.21.1 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 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