

March 10, 2025

Harrison Lee

NEW POS TECHNOLOGY LIMITED

AB Unit, 14th Floor, Block A, Financial Technology Building

No. 11 Keyuan Rd, Nanshan District

Shenzhen 518057

China

Re: EMVCo Letter of Approval - Contact Terminal Level 2

EMV Application Kernel: EMV&PBOC Version 1.0.5

Approval Number(s):
2-05567-1-1C-BCTS-0325-4.4b
2-05567-1-2C-BCTS-0325-4.4b
2-05567-1-3C-BCTS-0325-4.4b
2-05567-1-4C-BCTS-0325-4.4b
2-05567-1-5C-BCTS-0325-4.4b
2-05567-1-6C-BCTS-0325-4.4b
2-05567-1-7C-BCTS-0325-4.4b
2-05567-1-8C-BCTS-0325-4.4b
2-05567-1-1P-BCTS-0325-4.4b
2-05567-1-1OS-BCTS-0325-4.4b

The EMV Application Kernel has been tested on the following terminal

Terminal: NEW9220

PinPad: 1P = NEW9220, ASmart 3.0 - PIN pad is valid for configuration(s): 1C, 2C, 3C, 5C, 6C, 7C, 8C

Operating System: 1OS = ASmart Version 3.0

Renewal Date: 20-Feb-2029

Report ID Session 1: TEMV246A61T Version V1.0 - Beijing Unionpay Card Technology Co., Ltd. Shenzhen Branch

Kernel Checksum:

6CEB53FA116CCD36

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	C1	22	4E00DED597EAA933
2C	C2	22	C025AF57137ECEF7
3C	C3	22	31333741DB800C9F
4C	C4	22	5B34C8EE710F9117
5C	C5	11	BB8FD7AFE9B89ADA
6C	SST1	25	E18A0C47EEDBA981
7C	SST2	25	288ED7C573B3C155
8C	SST3	25	740C06B87CB16186

PIN Pads Checksums:

PinPad	Checksum
1P	6CEB53FA116CCD36

Dear Harrison Lee:

EMVCo, LLC ("EMVCo"), a Delaware limited liability company, has received your request for Level 2 terminal type approval for the EMV Application Kernel identified above (hereafter referred to as the "Application"). In connection with your request, we have reviewed all test file number(s) listed above.

After assessing such file(s), EMVCo has found reasonable evidence that the submitted samples of the above referenced Application sufficiently conform to EMV Integrated Circuit Card Specifications for Payment Systems, Version 4.4 of October 2022.

EMVCo hereby grants your Application EMVCo Type Approval for Terminal Level 2, based on the requirements stated in the EMV 4.4 Specifications. Please note that EMVCo may publish this letter and publicly identify your Application as an approved Application, including in EMVCo's published list of approved Applications.

EMVCo's grant to your Application is subject to and specifically incorporates (i) the General Terms and Conditions to the Letter of Approval enclosed as Exhibit A, and (ii) the Specific Terms and Conditions to the Letter of Approval attached hereto as Attachment 1. Because EMVCo's grant is subject to such limitations, including certain events of termination, you and any third parties should confirm that such approval is current and has not been terminated by referring to the list of approved Applications published on the EMVCo website (www.emvco.com).

Please note that EMVCo makes certain logos available for use in connection with an Application that has received EMVCo approval. To obtain permission to use the "EMV Approved" certification mark, please contact EMVCo to request a license agreement.

This Letter of Approval is valid while the approval number is posted on the EMVCo website.

Authorised by Frédéric Fortin
Terminal Testing Group Chair
EMVCo, LLC

Terminal Capabilities	1C	2C	3C	4C	5C	6C	7C	8C		
Card Data Input Capability										
Terminal Type	22	22	22	22	11	25	25	25		
Manual Key Entry	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Magnetic Stripe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
CVM Capability										
Plaintext PIN	Yes	Yes	Yes	No	No	Yes	Yes	Yes		
Online Enciphered PIN	Yes	Yes	No	No	Yes	Yes	Yes	No		
Signature (Paper)	Yes	Yes	Yes	No	No	No	No	No		
Offline Enciphered PIN (RSA)	Yes	Yes	Yes	No	No	Yes	Yes	Yes		
No CVM	Yes	No	No	Yes	No	Yes	No	No		
Offline Enciphered PIN (ECC)	No	No	No	No	No	No	No	No		
Biometric	No	No	No	No	No	No	No	No		
Offline Finger	No	No	No	No	No	No	No	No		
Online Finger	No	No	No	No	No	No	No	No		
Offline Facial	No	No	No	No	No	No	No	No		
Online Facial	No	No	No	No	No	No	No	No		
Offline Palm	No	No	No	No	No	No	No	No		
Online Palm	No	No	No	No	No	No	No	No		
Offline Iris	No	No	No	No	No	No	No	No		
Online Iris	No	No	No	No	No	No	No	No		
Offline Voice	No	No	No	No	No	No	No	No		
Online Voice	No	No	No	No	No	No	No	No		
Security Capability										
SDA & DDA	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Card Capture	No	No	No	No	No	No	No	No		
CDA	Mode 1	Mode 1	Mode 1	Mode 1	No	Mode 1	Mode 1	Mode 1		
XDA	No	No	No	No	No	No	No	No		
Transaction Type Capability										
Tran Type - Cash	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Tran Type - Goods	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Tran Type - Services	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Tran Type - Cash Back	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Tran Type - Inquiry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Tran Type - Transfer	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Tran Type - Payment	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Tran Type - Admin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Tran Type - Cash Deposit	No	No	No	No	No	No	No	No		
Terminal Data Input Capability										
Keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Alpha and Special Character Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Function Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

(continued)	1C	2C	3C	4C	5C	6C	7C	8C		
Terminal Data Output Capability										
Print, Attendant	Yes	Yes	Yes	Yes	Yes	No	No	No		
Print, Cardholder	No	No	No	No	No	No	No	No		
Display, Attendant	Yes	Yes	Yes	Yes	Yes	No	No	No		
Display, Cardholder	No	No	No	No	No	Yes	Yes	Yes		
Code Table 10	No	No	No	No	No	No	No	No		
Code Table 9	No	No	No	No	No	No	No	No		
Code Table 8	No	No	No	No	No	No	No	No		
Code Table 7	No	No	No	No	No	No	No	No		
Code Table 6	No	No	No	No	No	No	No	No		
Code Table 5	No	No	No	No	No	No	No	No		
Code Table 4	No	No	No	No	No	No	No	No		
Code Table 3	No	No	No	No	No	No	No	No		
Code Table 2	No	No	No	No	No	No	No	No		
Code Table 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Application Selection										
PSE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Cardholder Confirmation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Preferred display order	No	No	No	No	No	No	No	No		
Partial AID Selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Multi language	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
EMV Language Selection method	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Common Character Set	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Data Authentication										
MAX CA Public key	248	248	248	248		248	248	248		
Exponents	3 and 2 ¹⁶ +1	3 and 2 ¹⁶ +1	3 and 2 ¹⁶ +1	3 and 2 ¹⁶ +1		3 and 2 ¹⁶ +1	3 and 2 ¹⁶ +1	3 and 2 ¹⁶ +1		
Revocation of Issuer PK Certificate	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Certificate Revocation List Format	RID+INDEX+CSN	RID+INDEX+CSN	RID+INDEX+CSN	RID+INDEX+CSN		RID+INDEX+CSN	RID+INDEX+CSN	RID+INDEX+CSN		
Default DDOL	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		
Cardholder Verification Method										
Bypass PIN Entry	Yes	Yes	Yes	No	Yes	Yes	Yes	No		
Subsequent Bypass PIN Entry	Yes	Yes	Yes	No	No	Yes	Yes	No		
Get Data for PIN Try Counter	Yes	Yes	Yes	No	No	Yes	Yes	Yes		
Fail CVM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Amount known before CVM proces.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Terminal Risk Management										
Floor Limit Checking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Random Transaction Selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Velocity Checking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Transaction Log	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Exception File	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
TRM irrespective of AIP setting (expected behavior)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

(continued)	1C	2C	3C	4C	5C	6C	7C	8C		
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
TAC can be deleted or disabled	No	No	No	No	No	No	No	No		
How does offline only Terminal process Default Action Codes?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
How does online only terminal process TAC/IAC-Default when unable to go online?	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		
Completion Processing										
Forced Online	Yes	Yes	Yes	Yes	Yes	No	No	No		
Forced Acceptance	Yes	Yes	Yes	Yes	Yes	No	No	No		
Voice Referrals Initiated by Issuer	Yes	Yes	Yes	Yes	Yes	No	No	No		
Default TDOL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Default TDOL not configured	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Exception Handling										
POS Entry Mode	80	80	80	80	80	80	80	80		
Miscellaneous										
Amount and PIN on same keypad	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes		
ICC/Magstripe Reader Combined	No	No	No	No	No	No	No	No		
Supports account type selection	Yes	Yes	Yes	Yes	Yes	No	No	No		
Supports 'on fly' script processing	No	No	No	No	No	No	No	No		
Issuer Script device limit > 128 bytes	No	No	No	No	No	No	No	No		
If limit > 128, value supported?										
Internal Date Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Does the terminal support Receipt?	Yes	Yes	Yes	Yes	Yes	No	No	No		

Attachment 1

Specific Terms and Conditions to the Letter of Approval

Restriction:

None

Conditions:

This product is not able to handle transaction date beyond the 31st of December 2037