Date: November 3, 2026

Justin Ning

ID TECH
10721 Walker Street
Cypress 90630-4720
United States

Re: ***EMVCo Letter of Approval - Contact Terminal Level 2***

EMV Application Kernel: **EMV Common Gen 4 L2 Version V1.40.001**

Approval Number(s):

2-07006-1-1C-1126-4.4d
2-07006-1-2C-1126-4.4d
2-07006-1-3C-1126-4.4d
2-07006-1-4C-1126-4.4d
2-07006-1-5C-1126-4.4d
2-07006-1-6C-1126-4.4d
2-07006-1-7C-1126-4.4d
2-07006-1-8C-1126-4.4d
2-07006-1-9C-1126-4.4d
2-07006-1-10C-1126-4.4d
2-07006-1-1P-1126-4.4d
2-07006-1-1OS-1126-4.4d
2-07006-2-11C-1126-4.4d
2-07006-2-12C-1126-4.4d
2-07006-2-13C-1126-4.4d
2-07006-2-14C-1126-4.4d
2-07006-2-15C-1126-4.4d
2-07006-2-16C-1126-4.4d
2-07006-2-17C-1126-4.4d
2-07006-2-18C-1126-4.4d
2-07006-2-19C-1126-4.4d

The EMV Application Kernel has been tested on the following terminal

Terminal: **AP6885**

PIN Pad: **1P = AP6885 Version EMV Common Gen 4 L2 V1.40.001 - PIN Pad is valid for configuration(s): 1C, 5C, 11C, 12C, 15C, 16C, 17C, 18C, 19C**

Operating System: **1OS = Nuttx-32bits Version v10.2.0**

Renewal Date: **November 3, 2030**

Report ID **Session 1: TEMV264U21T Version V1.2 - Beijing Unionpay Card Technology Co.,Ltd.**
Session 2: TEMV265I21T Version V1.1 - Beijing Unionpay Card Technology Co.,Ltd.

Kernel Checksum:

2FF16417780142D1B8F3A014504BCCF4CD5EE603

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	1C	22	6C0D8AB1BB49770AA1E5EFA018BFE24997F23A19
2C	2C	21	1D250EE7474B0F7DC29D740A9A454BD1D51E9B10
3C	4C	25	62F18471DA0D6B0CAA9057CE1B7A95B206E973DA

4C	5C	21	9379573C4E67C94C466EA7A19E0D389768366452
5C	6C	22	3EEFE8674B9451F5826DD691BF21C5C3F8970B57
6C	8C	22	CECDA1AFDA6267C3DC13808C53890A0EDAA3E3F3
7C	9C	21	3F63054791DF1032BED43A4CC73B2060A83D4B95
8C	10C	25	776660B284E1A3DBA0496D597A5D29FA11A0B9B3
9C	11C	21	FA648BF9FB9A6E6DE6597FD1E88828567B6F7ED9
10C	12C	22	72180B3955F3DB6FA35FEC8556A49A001BA63742
11C	13C	25	3B9224C2B10BBADCA0FFC41CFD2B254DD19ABC4B
12C	14C	25	34CD294936D96E3895A79499E256C4402D89CE0B
13C	17C	21	AD4EE84A64C60F1DEAB62C905D8617F4F4A0D049
14C	18C	21	14ECAA0900EDA7B53DAF5661D5C90016C15B1DAA
15C	21C	21	D2821C236A52D29C25ABC79041882329FE313F77
16C	22C	21	0D732F915849DFACEA7CD2ACFC2A2E905BEEF24F
17C	23C	25	D711CC888EE884095F6E19CBC5D012556A09921B
18C	24C	22	41D01D41326B9CAD64FCE6F3A8DC322EEDD9DD36
19C	25C	25	D347D257ACFE95C2116E3B52D3B74ED33E1407E2

PIN Pads Checksums:

PIN Pad	Checksum
1P	2FF16417780142D1B8F3A014504BCCF4CD5EE603

Dear Justin Ning,

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 refered 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 interface module 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

Note:

The Random Number Generator is part of the EMV specifications. This Contact Level 2 Kernel utilizes a specific Hardware component in the tested terminal to generate random numbers. To be EMV compliant, this Contact Level 2 Kernel shall be used in conjunction with terminals having this specific hardware component.

Terminal Capabilities	1C	2C	3C	4C	5C	6C	7C	8C	9C	10C
Card Data Input Capability										
Terminal Type	22	21	25	21	22	22	21	25	21	22
Manual Key Entry	No	No	No	No	No	No	No	No	No	No
Magnetic Stripe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CVM Capability										
Plaintext PIN	Yes	No	No	No	Yes	No	No	No	No	No
Online Enciphered PIN	Yes	No	No	No	Yes	No	No	No	No	No
Signature (Paper)	Yes	Yes	No	Yes	Yes	No	No	No	No	No
Offline Enciphered PIN (RSA)	Yes	No	No	No	Yes	No	No	No	No	No
No CVM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Offline Enciphered PIN (ECC)	No	No	No	No	No	No	No	No	No	No
Biometric	No	No	No	No	No	No	No	No	No	No
Offline Finger	No	No	No	No	No	No	No	No	No	No
Online Finger	No	No	No	No	No	No	No	No	No	No
Offline Facial	No	No	No	No	No	No	No	No	No	No
Online Facial	No	No	No	No	No	No	No	No	No	No
Offline Palm	No	No	No	No	No	No	No	No	No	No
Online Palm	No	No	No	No	No	No	No	No	No	No
Offline Iris	No	No	No	No	No	No	No	No	No	No
Online Iris	No	No	No	No	No	No	No	No	No	No
Offline Voice	No	No	No	No	No	No	No	No	No	No
Online Voice	No	No	No	No	No	No	No	No	No	No
Security Capability										
SDA & DDA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Card Capture	No	No	No	No	No	No	No	No	No	No
CDA	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1
XDA	No	No	No	No	No	No	No	No	No	No
Transaction Type Capability										
Tran Type - Cash	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Tran Type - Goods	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tran Type - Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tran Type - Cash Back	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Tran Type - Inquiry	No	No	No	No	No	No	No	No	No	No
Tran Type - Transfer	No	No	No	No	No	No	No	No	No	No
Tran Type - Payment	No	No	No	No	No	No	No	No	No	No
Tran Type - Admin	No	No	No	No	No	No	No	No	No	No
Tran Type - Cash Deposit	No	No	No	No	No	No	No	No	No	No
Terminal Data Input Capability										
Keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Alpha and Special Character Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

(continued)	1C	2C	3C	4C	5C	6C	7C	8C	9C	10C
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAC can be deleted or disabled	No	No	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	N/A	N/A
How does online only terminal process TAC/IAC-Default when unable to go online?	Normal	Skipped	Normal	Skipped	Normal	Normal	Skipped	Normal	Skipped	Normal
Completion Processing										
Forced Online	Yes	No	No	No	Yes	Yes	No	No	No	Yes
Forced Acceptance	No	No	No	No	No	No	No	No	No	No
Voice Referrals Initiated by Issuer	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Exception Handling										
POS Entry Mode	0x80	0x80	0x80	0x80	0x80	0x80	0x80	0x80	0x80	0x80
Miscellaneous										
PIN Pad	Yes	No	No	No	Yes	No	No	No	No	No
Amount and PIN on same keypad	No	No	No	No	No	No	No	No	No	No
ICC/Magstripe Reader Combined	No	No	No	No	No	No	No	No	No	No
Supports account type selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supports 'on fly' script processing	No	No	No	No	No	No	No	No	No	No
Issuer Script device limit > 128 bytes	No	No	No	No	No	No	No	No	No	No
If limit > 128, value supported?										
Internal Date Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Does the terminal support Receipt?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

(continued)	11C	12C	13C	14C	15C	16C	17C	18C	19C	
Card Data Input Capability										
Terminal Type	25	25	21	21	21	21	25	22	25	
Manual Key Entry	No	No	No	No	No	No	No	No	No	
Magnetic Stripe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
CVM Capability										
Plaintext PIN	Yes	No	No	No	Yes	Yes	No	No	No	
Online Enciphered PIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	
Signature (Paper)	No	No	Yes	No	Yes	Yes	No	Yes	No	
Offline Enciphered PIN (RSA)	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
No CVM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Offline Enciphered PIN (ECC)	No	No	No	No	No	No	No	No	No	
Biometric	No	No	No	No	No	No	No	No	No	
Offline Finger	No	No	No	No	No	No	No	No	No	
Online Finger	No	No	No	No	No	No	No	No	No	
Offline Facial	No	No	No	No	No	No	No	No	No	
Online Facial	No	No	No	No	No	No	No	No	No	
Offline Palm	No	No	No	No	No	No	No	No	No	
Online Palm	No	No	No	No	No	No	No	No	No	
Offline Iris	No	No	No	No	No	No	No	No	No	
Online Iris	No	No	No	No	No	No	No	No	No	
Offline Voice	No	No	No	No	No	No	No	No	No	
Online Voice	No	No	No	No	No	No	No	No	No	
Security Capability										
SDA & DDA	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Card Capture	No	No	No	No	No	No	No	No	No	
CDA	Mode 1	Mode 1	No	No	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	
XDA	No	No	No	No	No	No	No	No	No	
Transaction Type Capability										
Tran Type - Cash	No	No	Yes	Yes	Yes	Yes	No	Yes	No	
Tran Type - Goods	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Tran Type - Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Tran Type - Cash Back	No	No	Yes	Yes	Yes	Yes	No	Yes	No	
Tran Type - Inquiry	No	No	No	No	No	No	No	No	No	
Tran Type - Transfer	No	No	No	No	No	No	No	No	No	
Tran Type - Payment	No	No	No	No	No	No	No	No	No	
Tran Type - Admin	No	No	No	No	No	No	No	No	No	
Tran Type - Cash Deposit	No	No	No	No	No	No	No	No	No	
Terminal Data Input Capability										
Keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Alpha and Special Character Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Function Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

(continued)	11C	12C	13C	14C	15C	16C	17C	18C	19C	
Terminal Data Output Capability										
Print	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Display	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Code Table 10	No	No	No	No	No	No	No	No	No	
Code Table 9	No	No	No	No	No	No	No	No	No	
Code Table 8	No	No	No	No	No	No	No	No	No	
Code Table 7	No	No	No	No	No	No	No	No	No	
Code Table 6	No	No	No	No	No	No	No	No	No	
Code Table 5	No	No	No	No	No	No	No	No	No	
Code Table 4	No	No	No	No	No	No	No	No	No	
Code Table 3	No	No	No	No	No	No	No	No	No	
Code Table 2	No	No	No	No	No	No	No	No	No	
Code Table 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Application Selection										
PSE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Cardholder Confirmation	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	
Preferred display order	No	No	No	No	No	No	No	No	No	
Partial AID Selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Multi language	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
EMV Language Selection method	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common Character Set	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Data Authentication										
Revocation of Issuer PK Certificate	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Default DDOL	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Cardholder Verification Method										
Bypass PIN Entry	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Subsequent Bypass PIN Entry	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Get Data for PIN Try Counter	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Fail CVM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Amount known before CVM proces.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Terminal Risk Management										
Floor Limit Checking	Yes	Yes	No	No	No	No	Yes	Yes	Yes	
Random Transaction Selection	Yes	Yes	No	No	No	No	Yes	Yes	Yes	
Velocity Checking	Yes	Yes	No	No	No	No	Yes	Yes	Yes	
Transaction Log	Yes	Yes	No	No	No	No	Yes	Yes	Yes	
Exception File	No	No	No	No	No	No	No	No	No	
TRM irrespective of AIP setting (expected behavior)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

(continued)	11C	12C	13C	14C	15C	16C	17C	18C	19C	
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
TAC can be deleted or disabled	No	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	N/A	
How does online only terminal process TAC/IAC-Default when unable to go online?	Normal	Normal	Skipped	Skipped	Skipped	Skipped	Normal	Normal	Normal	
Completion Processing										
Forced Online	No	No	No	No	No	No	No	Yes	No	
Forced Acceptance	No	No	No	No	No	No	No	No	No	
Voice Referrals Initiated by Issuer	No	No	Yes	Yes	Yes	Yes	No	Yes	No	
Exception Handling										
POS Entry Mode	0x80	0x80	0x80	0x80	0x80	0x80	0x80	0x80	0x80	
Miscellaneous										
PIN Pad	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
Amount and PIN on same keypad	No	No	No	No	No	No	No	No	No	
ICC/Magstripe Reader Combined	No	No	No	No	No	No	No	No	No	
Supports account type selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Supports 'on fly' script processing	No	No	No	No	No	No	No	No	No	
Issuer Script device limit > 128 bytes	No	No	No	No	No	No	No	No	No	
If limit > 128, value supported?										
Internal Date Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Does the terminal support Receipt?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Attachment A
Specific Terms and Conditions to the Letter of Approval

Restriction:

Conditions: