August 29, 2025

Tibi Zhang

FEITIAN Technologies Co., Ltd.

F/17 Tower B Huizhi Mansion No. 9 Xueqing road

Haidian District

Beijing 100085

China

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

EMV Application Kernel:	**libemv Version V4.3k_2.0.1**
Approval Number(s):	**2-05665-1-1C-BCTC-0825-4.4c**
	2-05665-1-2C-BCTC-0825-4.4c
	2-05665-1-1P-BCTC-0825-4.4c
	2-05665-1-1OS-BCTC-0825-4.4c

The EMV Application Kernel has been tested on the following terminal

Terminal:	**F55**
PinPad:	**1P = F55, libemv_PP V4.3k_2.0.1 - PIN pad is valid for configuration(s): 1C, 2C**
Operating System:	**1OS = FT_POS_OS Version 2.1.1**

Renewal Date:	**27-Aug-2029**

Report ID   Session 1: **TEMV2548U1T Version V1.0 - Beijing Unionpay Card Technology Co., Ltd.**

Kernel Checksum:

1BDCF3C4

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	C1	22	D214917F
2C	C2	22	FB2C34A0

PIN Pads Checksums:

PinPad	Checksum
1P	7B0C41B1

Dear Tibi Zhang:

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 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

Note:

The Random Number Generator and the Cryptographic Functions are part of the EMV specifications. This Contact Level 2 Kernel utilizes a specific Hardware component in the tested terminal to generate random numbers and/or Cryptographic Functions. 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								
Card Data Input Capability										
Terminal Type	22	22								
Manual Key Entry	Yes	Yes								
Magnetic Stripe	No	No								
IC with Contacts	Yes	Yes								
CVM Capability										
Plaintext PIN	Yes	Yes								
Online Enciphered PIN	Yes	No								
Signature (Paper)	Yes	Yes								
Offline Enciphered PIN (RSA)	Yes	Yes								
No CVM	Yes	Yes								
Offline Enciphered PIN (ECC)	No	No								
Biometric	No	No								
Offline Finger	No	No								
Online Finger	No	No								
Offline Facial	No	No								
Online Facial	No	No								
Offline Palm	No	No								
Online Palm	No	No								
Offline Iris	No	No								
Online Iris	No	No								
Offline Voice	No	No								
Online Voice	No	No								
Security Capability										
SDA & DDA	Yes	Yes								
Card Capture	No	No								
CDA	Mode 1	Mode 1								
XDA	No	No								
Transaction Type Capability										
Tran Type - Cash	Yes	Yes								
Tran Type - Goods	Yes	Yes								
Tran Type - Services	Yes	Yes								
Tran Type - Cash Back	Yes	Yes								
Tran Type - Inquiry	No	No								
Tran Type - Transfer	No	No								
Tran Type - Payment	No	No								
Tran Type - Admin	No	No								
Tran Type - Cash Deposit	No	No								
Terminal Data Input Capability										
Keypad	Yes	Yes								
Numeric Keys	Yes	Yes								
Alpha and Special Character Keys	Yes	Yes								
Command Keys	Yes	Yes								
Function Keys	Yes	Yes								

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

(continued)	1C	2C								
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes								
TAC can be deleted or disabled	Yes	Yes								
How does offline only Terminal process Default Action Codes?	N/A	N/A								
How does online only terminal process TAC/IAC-Default when unable to go online?	N/A	N/A								
Completion Processing										
Forced Online	Yes	Yes								
Forced Acceptance	Yes	Yes								
Voice Referrals Initiated by Issuer	Yes	Yes								
Default TDOL	Yes	Yes								
Default TDOL not configured	Yes	Yes								
Exception Handling										
POS Entry Mode	80	80								
Miscellaneous										
Amount and PIN on same keypad	Yes	Yes								
ICC/Magstripe Reader Combined	No	No								
Supports account type selection	Yes	Yes								
Supports 'on fly' script processing	No	No								
Issuer Script device limit > 128 bytes	Yes	Yes								
If limit > 128, value supported?	0	0								
Internal Date Management	Yes	Yes								
Does the terminal support Receipt?	Yes	Yes								

Attachment 1
Specific Terms and Conditions to the Letter of Approval

Restriction:

None