January 22, 2025

Dr. Zilu Liu

Shanghai Xiangcheng Communication Technology Co., Ltd.

6th Floor, Building 10, No.3000 Longdong Avenue, Pudong New
District, Shanghai

Shanghai 201203
China

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

EMV Application Kernel:	**EMV-L2 Version V1.2.3**
Approval Number(s):	**2-05536-1-1C-BCTS-0125-4.4b**
	2-05536-1-2C-BCTS-0125-4.4b
	2-05536-1-1P-BCTS-0125-4.4b
	2-05536-1-1OS-BCTS-0125-4.4b

The EMV Application Kernel has been tested on the following terminal
Terminal: **Z600**
PinPad: **1P = Z600, XC OS V2.0 - PIN pad is valid for configuration(s): 1C**
Operating System: **1OS = XC OS Version V2.0**

Renewal Date: **19-Dec-2028**

Report ID   Session 1:   **TEMV246731T Version V1.0 - Beijing Unionpay Card Technology Co., Ltd. Shenzhen Branch**

Kernel Checksum:

E3CAD1A6

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	CFG_ALL	22	E10B7677
2C	CFG_NO_PIN	21	F8D81EF6

PIN Pads Checksums:

PinPad	Checksum
1P	E3CAD1A6

Dear Dr. Liu:

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 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							
Card Data Input Capability									
Terminal Type	22	21							
Manual Key Entry	Yes	Yes							
Magnetic Stripe	Yes	Yes							
IC with Contacts	Yes	Yes							
CVM Capability									
Plaintext PIN	Yes	No							
Online Enciphered PIN	Yes	No							
Signature (Paper)	Yes	Yes							
Offline Enciphered PIN (RSA)	Yes	No							
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	No							
Tran Type - Goods	Yes	Yes							
Tran Type - Services	Yes	Yes							
Tran Type - Cash Back	Yes	No							
Tran Type - Inquiry	Yes	No							
Tran Type - Transfer	Yes	No							
Tran Type - Payment	Yes	No							
Tran Type - Admin	Yes	No							
Tran Type - Cash Deposit	No	No							
Terminal Data Input Capability									
Keypad	Yes	No							
Numeric Keys	Yes	No							
Alpha and Special Character Keys	Yes	No							
Command Keys	Yes	No							
Function Keys	Yes	No							

(continued)	1C	2C								
Terminal Data Output Capability										
Print, Attendant	Yes	Yes								
Print, Cardholder	No	No								
Display, Attendant	Yes	Yes								
Display, Cardholder	No	No								
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	No								
Preferred display order	No	No								
Partial AID Selection	Yes	Yes								
Multi language	No	No								
EMV Language Selection method	No	No								
Common Character Set	Yes	Yes								
Data Authentication										
MAX CA Public key	248	248								
Exponents	3 and $2^{16}+1$	3 and $2^{16}+1$								
Revocation of Issuer PK Certificate	Yes	Yes								
Certificate Revocation List Format	RID+CAPK INDEX+SN	RID+CAPK INDEX+SN								
Default DDOL	Yes	Yes								
Cardholder Verification Method										
Bypass PIN Entry	Yes	No								
Subsequent Bypass PIN Entry	Yes	No								
Get Data for PIN Try Counter	Yes	No								
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	No								
Exception File	Yes	No								
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	No								
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?	Normal	Normal								
Completion Processing										
Forced Online	Yes	No								
Forced Acceptance	Yes	No								
Voice Referrals Initiated by Issuer	Yes	Yes								
Default TDOL	Yes	Yes								
Default TDOL not configured	Yes	Yes								
Exception Handling										
POS Entry Mode	52	52								
Miscellaneous										
Amount and PIN on same keypad	Yes	No								
ICC/Magstripe Reader Combined	No	No								
Supports account type selection	No	No								
Supports 'on fly' script processing	No	No								
Issuer Script device limit > 128 bytes	No	No								
If limit > 128, value supported?										
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

Conditions:

This product is not able to handle transaction date beyond the 19th of January 2038