March 27, 2025

Bo Zhang

UROVO TECHNOLOGY CO.,LTD.

36F, High-Tech Zone Union Tower, No.63 Xuefu Road

Nanshan District, Shenzhen, Guangdong

Shenzhen 518057

China

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

EMV Application Kernel:	**EMVL2-LIB Version V3.5**
Approval Number(s):	**2-05566-1-1C-BCTS-0325-4.4b**
	2-05566-1-2C-BCTS-0325-4.4b
	2-05566-1-3C-BCTS-0325-4.4b
	2-05566-1-4C-BCTS-0325-4.4b
	2-05566-1-1P-BCTS-0325-4.4b
	2-05566-1-1OS-BCTS-0325-4.4b

The EMV Application Kernel has been tested on the following terminal

Terminal:	**i9200**
PinPad:	**1P = i9200, Android 13 - PIN pad is valid for configuration(s): 1C, 2C, 3C, 4C**
Operating System:	**1OS = Android Version 13**

Renewal Date:	**24-Feb-2029**

Report ID	Session 1:	**TEMV2508T1T Version V1.0 - Beijing Unionpay Card Technology Co., Ltd. Shenzhen Branch**

Kernel Checksum:

9A 24 22 BC

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	EMV-C1	22	61 9B 5E B1
2C	EMV-C2	22	B2 0D DA 9D
3C	EMV-C3	22	27 FD CB 1C
4C	EMV-C4	22	C7 D8 FF 97

PIN Pads Checksums:

PinPad	Checksum
1P	9A 24 22 BC

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

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

(continued)	1C	2C	3C	4C						
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes	Yes	Yes						
TAC can be deleted or disabled	Yes	Yes	Yes	Yes						
How does offline only Terminal process Default Action Codes?	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						
Completion Processing										
Forced Online	Yes	Yes	Yes	Yes						
Forced Acceptance	Yes	Yes	Yes	Yes						
Voice Referrals Initiated by Issuer	Yes	Yes	Yes	Yes						
Default TDOL	Yes	Yes	Yes	Yes						
Default TDOL not configured	No	No	No	No						
Exception Handling										
POS Entry Mode	80	80	80	80						
Miscellaneous										
Amount and PIN on same keypad	Yes	Yes	Yes	Yes						
ICC/Magstripe Reader Combined	No	No	No	No						
Supports account type selection	Yes	Yes	Yes	Yes						
Supports 'on fly' script processing	No	No	No	No						
Issuer Script device limit > 128 bytes	Yes	Yes	Yes	Yes						
If limit > 128, value supported?	256	256	256	256						
Internal Date Management	Yes	Yes	Yes	Yes						
Does the terminal support Receipt?	Yes	Yes	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 31st of December 2037