

August 16, 2022

Mr. Kaishen Zhu

WIZARPOS International Co., Ltd.

Room 1001, SEARI Building, 509 Wuning Rd

Shanghai 200063

CHINA

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

EMV Application Kernel: EMVKernel Version 2.1.2

Approval Number(s):

- 2-05072-1-1C-BCTS-0822-4.3k
- 2-05072-1-2C-BCTS-0822-4.3k
- 2-05072-1-3C-BCTS-0822-4.3k
- 2-05072-1-4C-BCTS-0822-4.3k
- 2-05072-1-5C-BCTS-0822-4.3k
- 2-05072-1-6C-BCTS-0822-4.3k
- 2-05072-1-7C-BCTS-0822-4.3k
- 2-05072-1-10S-BCTS-0822-4.3k

The EMV Application Kernel has been tested on the following terminal

Terminal: WIZARPOS Q3
PinPad: n/a
Operating System: 10S = WIZAROS Version 1.0

Renewal Date: 20-Jul-2026

Report ID Session 1: TEMV2232J1T Version V1.0 - Beijing Unionpay Card Technology Co., Ltd.
Shenzhen Branch

Kernel Checksum:

BA8AB5D44D3C2D5D

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	CFG.001	22	F6BD9728E049166C
2C	CFG.002	22	F0DD0F4741EB21FC
3C	CFG.003	22	F7D1ACCBDB572AA8
4C	CFG.004	22	2BCBE7E0441F2C03
5C	CFG.005	22	C7368B08772128E4
6C	CFG.006	25	2E80494A41E7019F
7C	CFG.007	11	030EF32DEE7D158B

Dear Mr. Zhu:

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 4.3 of November 2011.

EMVCo hereby grants your Application EMVCo Type Approval for Terminal Level 2, based on the requirements stated in the EMV 4.3 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.

EMVCo, LLC, a Delaware limited liability company

By:

Name: Frédéric Fortin

Title: EMVCo Terminal Type Approval Chair

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			
Card Data Input Capability										
Terminal Type	22	22	22	22	22	25	11			
Manual Key Entry	Yes	Yes	Yes	Yes	Yes	Yes	No			
Magnetic Stripe	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
CVM Capability										
Plaintext PIN	Yes	Yes	Yes	No	Yes	Yes	No			
Online Enciphered PIN	Yes	No	No	Yes	Yes	Yes	Yes			
Signature (Paper)	No	No	No	No	No	No	No			
Offline Enciphered PIN	Yes	Yes	Yes	No	Yes	Yes	No			
No CVM	Yes	Yes	No	No	No	No	No			
SB185	No	No	No	No	No	No	No			
Offline Finger	No	No	No	No	No	No	No			
Online Finger	No	No	No	No	No	No	No			
Offline Facial	No	No	No	No	No	No	No			
Online Facial	No	No	No	No	No	No	No			
Offline Palm	No	No	No	No	No	No	No			
Online Palm	No	No	No	No	No	No	No			
Offline Iris	No	No	No	No	No	No	No			
Online Iris	No	No	No	No	No	No	No			
Offline Voice	No	No	No	No	No	No	No			
Online Voice	No	No	No	No	No	No	No			
Security Capability										
SDA & DDA	Yes	Yes	Yes	Yes	Yes	Yes	No			
Card Capture	No	No	No	No	No	No	No			
CDA	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	No			
Transaction Type Capability										
Tran Type - Cash	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Goods	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Tran Type - Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Tran Type - Cash Back	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Inquiry	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Transfer	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Payment	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Admin	Yes	Yes	Yes	Yes	Yes	No	Yes			
Tran Type - Cash Deposit	Yes	Yes	Yes	Yes	Yes	No	Yes			
Terminal Data Input Capability										
Keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Alpha and Special Character Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Function Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes			

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

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

Attachment 1

Specific Terms and Conditions to the Letter of Approval

Restriction:

None