July 10, 2025

Mr. James  Tsai

Castles Technology Co., Ltd.

6F., No. 207-5, Sec. 3, Beixin Rd., Xindian District

New Taipei City 23143

TAIWAN, PROVINCE OF CHINA

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

| | |
|---|---|
| *EMV Application Kernel:* | **CBM-EMV Version v1.0.6** |
| *Approval Number(s):* | **2-04782-1-1C-ICTK-1220-4.3i** |
| | **2-04782-1-2C-ICTK-1220-4.3i** |
| | **2-04782-1-5C-ICTK-1220-4.3i** |
| | **2-04782-2-14C-ICTK-1220-4.3i** |
| | **2-05616-1-1P-ICTK-0725-4.4c** |
| | **2-04782-1-1OS-ICTK-1220-4.3i** |

The EMV Application Kernel has been tested on the following terminal

| | |
|---|---|
| *Terminal:* | **SATURN1000** |
| *PinPad:* | **1P = SATURN1000, CTOS v1.0.0 - PIN pad is valid for configuration(s): 1C, 2C, 5C** |
| *Operating System:* | **1OS = CTOS, 32-bit Version v1.0.0** |

| | |
|---|---|
| *Expiry Date:* | **29-Dec-2028** |

*Report ID*          Session 1: **EDT25036 Version 1.0 - Bureau Veritas ICTK Co., Ltd.**

*Kernel Checksum:*

| |
|---|
| 67AF3ECF0E65839EAEB09BF8987CDC3534BFE223 |

*Configurations Checksums:*

| Config | Vendor Config ID | Terminal | Checksum |
|---|---|---|---|
| 1C | Cfg12F8-1 | 12 | 8466CB934A4BA19E49FF69136D97F0CF39141A94 |
| 2C | Cfg22B8-3 | 22 | AE5672BD6772B623CC201581574D896862402CF6 |
| 3C | Cfg22F8-1 | 22 | 89E8685CFC6243F2F8B2C295B84968A366CAF1A4 |
| 4C | Cfg2228-1 | 22 | 1CC598C09EE4980F5F72FCF029007F03F0735659 |

*PIN Pads Checksums:*

| PinPad | Checksum |
|---|---|
| 1P | |

Dear Mr. Tsai:

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 Restricted Renewal, 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. According to EMVCo Restricted Renewal policy the extension to the original Type Approval is granted until the Expiry Date mentioned in this letter. At the end of that additional validity period the Application Kernel will expire and cannot be submitted for another renewal.

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 | 3C | 4C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Card Data Input Capability** | | | | | | | | | | |
| Terminal Type | 12 | 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 | No | | | | | | |
| Online Enciphered PIN | Yes | No | Yes | No | | | | | | |
| Signature (Paper) | Yes | Yes | Yes | Yes | | | | | | |
| Offline Enciphered PIN (RSA) | Yes | Yes | Yes | No | | | | | | |
| No CVM | Yes | Yes | Yes | Yes | | | | | | |
| 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 3 | 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 | Yes | No | No | No | | | | | | |
| Tran Type - Transfer | Yes | No | No | No | | | | | | |
| Tran Type - Payment | Yes | No | No | No | | | | | | |
| Tran Type - Admin | Yes | No | No | No | | | | | | |
| Tran Type - Cash Deposit | Yes | 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 | Yes | Yes | Yes | Yes | | | | | | |
| Display | Yes | Yes | Yes | Yes | | | | | | |
| 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 | Yes | No | No | No | | | | | | |
| Partial AID Selection | Yes | Yes | Yes | Yes | | | | | | |
| Multi language | Yes | Yes | Yes | Yes | | | | | | |
| EMV Language Selection method | Yes | Yes | Yes | Yes | | | | | | |
| Common Character Set | Yes | Yes | Yes | Yes | | | | | | |
| **Data Authentication** | | | | | | | | | | |
| Revocation of Issuer PK Certificate | Yes | Yes | Yes | Yes | | | | | | |
| Certificate Revocation List Format | RID(5B)+CA PKI(1B)+CS N(3B) | RID(5B)+CA PKI(1B)+CS N(3B) | RID(5B)+CA PKI(1B)+CS N(3B) | RID(5B)+CA PKI(1B)+CS N(3B) | | | | | | |
| Default DDOL | Yes | Yes | Yes | Yes | | | | | | |
| **Cardholder Verification Method** | | | | | | | | | | |
| Bypass PIN Entry | Yes | Yes | Yes | No | | | | | | |
| Subsequent Bypass PIN Entry | No | Yes | No | No | | | | | | |
| Get Data for PIN Try Counter | Yes | Yes | Yes | No | | | | | | |
| 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? | N/A | N/A | N/A | N/A | | | | | | |
| **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 | Yes | Yes | Yes | Yes | | | | | | |
| **Exception Handling** | | | | | | | | | | |
| POS Entry Mode | 8x | 8x | 8x | 8x | | | | | | |
| **Miscellaneous** | | | | | | | | | | |
| Amount and PIN on same keypad | Yes | Yes | Yes | Yes | | | | | | |
| ICC/Magstripe Reader Combined | No | No | No | No | | | | | | |
| Supports account type selection | No | Yes | No | No | | | | | | |
| Supports 'on fly' script processing | No | No | No | No | | | | | | |
| Issuer Script device limit > 128 bytes | Yes | Yes | Yes | Yes | | | | | | |
| If limit > 128, value supported? | 1024 | 1024 | 1024 | 1024 | | | | | | |
| 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:

SB272 is not supported. Kernel treats year 'YY' associated with Application Expiration and Certificate Expiration dates in the range of 50-99 as 1950-1999. Contact Vendor for more information.