



May 21, 2018

Samuel Parr
MagTek, Inc.
1710 Apollo Court

Seal Beach CA 90740
UNITED STATES OF AMERICA

Re: EMVCo Letter of Approval - Contact Terminal Level 2

EMV Application Kernel: JIBE EMV L2 Version A
Approval Number(s): 2-04232-1-1C-CETI-0518-4.3g
2-04232-1-2C-CETI-0518-4.3g
2-04232-1-1P-CETI-0518-4.3g
2-04232-1-1OS-CETI-0518-4.3g

The EMV Application Kernel has been tested on the following terminal

Terminal: oDynamo
PinPad: 1P = Simulated PIN PAD, - PIN pad is valid for configuration(s): 1C
Operating System: IOS = Linux Version Version 3.10

Renewal Date: 14-May-2022

Report ID Session 1: 2MAGT_1-5511-1-4-17_CETI Version initial - CTC advanced GmbH

Kernel Checksum:

22726791259AB8630CAA588E91D19B7755C6FA29

Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	oDynamo-PIN	24	96F59F3538AC19DC7FC85C5CEE4025EC3E45CF79
2C	oDynamo-No-PIN	24	2E06BFF29B6C6F4393AA5E7C6DF90CA2378DE7C3

PIN Pads Checksums:

PinPad	Checksum
1P	N/A, no EMV function supported

Dear Samuel Parr:

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 and the Real Time Clock (RTC) are part of the EMV specifications. This Contact Level 2 Kernel utilizes specific Hardware device in the tested terminal to generate random numbers and/or Real Time Clock (RTC). To be EMV compliant, this Contact Level 2 Kernel shall be used in conjunction with Terminal Type having this specific Hardware.

Terminal Capabilities	1C	2C								
Card Data Input Capability										
Terminal Type	24	24								
Manual Key Entry	No	No								
Magnetic Stripe	No	No								
IC with Contacts	Yes	Yes								
CVM Capability										
Plaintext PIN	No	No								
Online Enciphered PIN	Yes	No								
Signature (Paper)	No	No								
Offline Enciphered PIN	No	No								
No CVM	Yes	Yes								
Security Capability										
SDA & DDA	No	No								
Card Capture	No	No								
CDA	No	No								
Transaction Type Capability										
Tran Type - Cash	No	No								
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	Yes	Yes								
Tran Type - Admin	No	No								
Tran Type - Cash Deposit	No	No								
Terminal Data Input Capability										
Keypad	No	No								
Numeric Keys	No	No								
Alpha and Special Character Keys	No	No								
Command Keys	No	No								
Function Keys	No	No								
Terminal Data Output Capability										
Print, Attendant	No	No								
Print, Cardholder	Yes	Yes								
Display, Attendant	Yes	Yes								
Display, Cardholder	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								

(continued)	1C	2C								
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										
MAX CA Public key										
Exponents										
Revocation of Issuer PK Certificate	No	No								
Certificate Revocation List Format	N/A	N/A								
Default DDOL	No	No								
Manual act. when CA PK loading fails	No	No								
CA PK verified with check sum	No	No								
Cardholder Verification Method										
Bypass PIN Entry	No	No								
Subsequent Bypass PIN Entry	n/a	n/a								
Get Data for PIN Try Counter	No	No								
Fail CVM	Yes	Yes								
Amount known before CVM proces.	Yes	Yes								
Terminal Risk Management										
Floor Limit Checking	Yes	Yes								
Random Transaction Selection	No	No								
Velocity Checking	No	No								
Transaction Log	No	No								
Exception File	No	No								
TRM irrespective of AIP setting (expected behavior)	Yes	Yes								
Terminal Action Analysis										
Terminal Action Codes supported	Yes	Yes								
TAC can be deleted or disabled	No	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								

(continued)	1C	2C								
Completion Processing										
Forced Online	No	No								
Forced Acceptance	No	No								
Advices	No	No								
Voice Referrals Initiated by Issuer	No	No								
Batch Data Capture	No	No								
Online Data Capture	Yes	Yes								
Default TDOL	Yes	Yes								
Exception Handling										
POS Entry Mode	pt Applicat	pt Applicat								
Miscellaneous										
Amount and PIN on same keypad	No	No								
ICC/Magstripe Reader Combined	Yes	Yes								
If Combined, is Magstripe read first?	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?	No	No								

Attachment 1

Specific Terms and Conditions to the Letter of Approval

Restriction:

None