

Mr. Gavin Demonte

Block, Inc.

1955 Broadway

Suite 600

Oakland 94612

**United States** 

Re: EMVCo Letter of Approval - Contact Terminal Level 2

EMV Application Kernel: Square EMVCO Kernel Version 4.23.0

*Approval Number(s):* **2-05523-1-1C-FIME-0125-4.4b** 

2-05523-1-2C-FIME-0125-4.4b 2-05523-1-3C-FIME-0125-4.4b 2-05523-1-4C-FIME-0125-4.4b 2-05523-1-5C-FIME-0125-4.4b 2-05523-2-6C-FIME-0425-4.4b 2-05523-1-1P-FIME-0125-4.4b 2-05523-1-1OS-FIME-0125-4.4b

The EMV Application Kernel has been tested on the following terminal

Terminal: Square Terminal SPD3-01

PinPad: 1P = Square Terminal SPD3-01, Square OS - PIN pad is valid for

configuration(s): 1C, 4C, 5C, 6C

*Operating System:* **10S = Square OS Version 3.0** 

*Renewal Date:* 17-Dec-2028

Report ID Session 1: C24REP01-707 Version 1.0 - FIME EMEA

Session 2: C25REP00-206 Version 1.0 - FIME EMEA

# Kernel Checksum:

b9a7e649

# Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	4C	22	0xd3231732
2C	5C	22	0x78e01477
3C	6C	22	0x5a049bd0
4C	7C	22	0x1f3e88b9
5C	8C	22	0xe0cc5955
6C	9C	22	0x9728624b

## PIN Pads Checksums:

PinPad	Checksum
1P	b9a7e649

#### Dear Mr. Demonte:

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.

<b>Terminal Capabilities</b>	1C	2C	3C	4C	5C	6C		
Card Data Input Capability								
Terminal Type	22	22	22	22	22	22		
Manual Key Entry	Yes	Yes	Yes	Yes	Yes	Yes		
Magnetic Stripe	No	No	No	No	No	No		
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes		
CVM Capability	1		I .	I .		I.		
Plaintext PIN	Yes	No	No	No	Yes	Yes		
Online Enciphered PIN	Yes	No	No	No	Yes	No		
Signature (Paper)	Yes	Yes	No	Yes	Yes	Yes		
Offline Enciphered PIN (RSA)	Yes	No	No	Yes	Yes	Yes		
No CVM	Yes	Yes	Yes	Yes	No	Yes		
Offline Enciphered PIN (ECC)	No	No	No	No	No	No		
Biometric	No	No	No	No	No	No		
Offline Finger	No	No	No	No	No	No		
Online Finger	No	No	No	No	No	No		
Offline Facial	No	No	No	No	No	No		
Online Facial	No	No	No	No	No	No		
Offline Palm	No	No	No	No	No	No		
Online Palm	No	No	No	No	No	No		
Offline Iris	No	No	No	No	No	No		
Online Iris	No	No	No	No	No	No		
Offline Voice	No	No	No	No	No	No		
Online Voice	No	No	No	No	No	No		
Security Capability	1	l	l	l	l		1	
SDA & DDA	Yes	Yes	Yes	Yes	Yes	Yes		
Card Capture	No	No	No	No	No	No		
CDA	Mode 1							
XDA	No	No	No	No	No	No		
Transaction Type Capability	1	l	l	l	l	l	-1	
Tran Type - Cash	No	No	No	No	No	No		
Tran Type - Goods	Yes	Yes	Yes	Yes	Yes	Yes		
Tran Type - Services	Yes	Yes	Yes	Yes	Yes	Yes		
Tran Type - Cash Back	No	No	No	No	No	No		
Tran Type - Inquiry	No	No	No	No	No	No		
Tran Type - Transfer	No	No	No	No	No	No		
Tran Type - Payment	No	No	No	No	No	No		
Tran Type - Admin	No	No	No	No	No	No		
Tran Type - Cash Deposit	No	No	No	No	No	No		
Terminal Data Input Capability	'	1	1	1	1	1	1	 1
Keypad	Yes	Yes	Yes	Yes	Yes	Yes		
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes		
Alpha and Special Character Keys	No	No	No	No	No	No		
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes		
Function Keys	No	No	No	No	No	No		1

(continued)	1C	2C	3C	4C	5C	6C		
Terminal Data Output Capabil	ity							
Print, Attendant	Yes	Yes	Yes	Yes	Yes	Yes		
Print, Cardholder	No	No	No	No	No	No		
Display, Attendant	Yes	Yes	Yes	Yes	Yes	Yes		
Display, Cardholder	No	No	No	No	No	No		
Code Table 10	No	No	No	No	No	No		
Code Table 9	No	No	No	No	No	No		
Code Table 8	No	No	No	No	No	No		
Code Table 7	No	No	No	No	No	No		
Code Table 6	No	No	No	No	No	No		
Code Table 5	No	No	No	No	No	No		
Code Table 4	No	No	No	No	No	No		
Code Table 3	No	No	No	No	No	No		
Code Table 2	No	No	No	No	No	No		
Code Table 1	Yes	Yes	Yes	Yes	Yes	Yes		
Application Selection								
PSE	Yes	Yes	Yes	Yes	Yes	Yes		
Cardholder Confirmation	Yes	Yes	Yes	Yes	Yes	Yes		
Preferred display order	No	No	No	No	No	No		
Partial AID Selection	Yes	Yes	Yes	Yes	Yes	Yes		
Multi language	Yes	Yes	Yes	Yes	Yes	Yes		
EMV Language Selection method	Yes	Yes	Yes	Yes	Yes	Yes		
Common Character Set	Yes	Yes	Yes	Yes	Yes	Yes		
Data Authentication								
MAX CA Public key	248	248	248	248	248	248		
Exponents	3 and							
Revocation of Issuer PK Certificate	2^16+1 Yes	2^16+1 Yes	2^16+1 Yes	2^16+1 Yes	2^16+1 Yes	2^16+1 Yes		
Certificate Revocation List Format	RID, CAPK,							
Default DDOL	Index, CSN		Index, CSN	,	Index, CSN			
Cardholder Verification Metho	Yes	Yes	Yes	Yes	Yes	Yes		
Bypass PIN Entry	Yes	No	No	Yes	Yes	No		
Subsequent Bypass PIN Entry	Yes	No	No	Yes	Yes	No		
Get Data for PIN Try Counter	Yes	Yes	Yes	Yes	Yes	Yes		
Fail CVM	Yes	Yes	Yes	Yes	Yes	Yes		
Amount known before CVM proces.	Yes	Yes	Yes	Yes	Yes	Yes		
Terminal Risk Management	163	163	163	163	163	163		
Floor Limit Checking	Yes	Yes	Yes	Yes	Yes	Yes		
Random Transaction Selection	Yes	Yes	Yes	Yes	Yes	Yes		1
Velocity Checking	Yes	Yes	Yes	Yes	Yes	Yes		1
Transaction Log	No	No	No	No	No	No		1
Exception File	No	No	No	No	No	No		1
TRM irrespective of AIP setting	Yes	Yes	Yes	Yes	Yes	Yes		1
(expected behavior)	res	168	res	res	res	res		

(continued)	1C	2C	3C	4C	5C	6C			
Terminal Action Analysis									
Terminal Action Codes supported	Yes	Yes	Yes	Yes	Yes	Yes			
TAC can be deleted or disabled	No	No	No	No	No	No			
How does offline only Terminal process Default Action Codes?	N/A	N/A	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	N/A	N/A			
Completion Processing	I.					1	<u>'</u>	1	
Forced Online	No	No	No	No	No	No			
Forced Acceptance	No	No	No	No	No	No			
Voice Referrals Initiated by Issuer	Yes	Yes	Yes	Yes	Yes	Yes			
Default TDOL	Yes	Yes	Yes	Yes	Yes	Yes			
Default TDOL not configured	No	No	No	No	No	No			
Exception Handling							'		'
POS Entry Mode	80	80	80	80	80	80			
Miscellaneous							'		'
Amount and PIN on same keypad	Yes	No	No	Yes	Yes	Yes			
ICC/Magstripe Reader Combined	No	No	No	No	No	No			
Supports account type selection	Yes	Yes	Yes	Yes	Yes	Yes			
Supports 'on fly' script processing	No	No	No	No	No	No			
Issuer Script device limit > 128 bytes	Yes	Yes	Yes	Yes	Yes	Yes			
If limit > 128, value supported?	200	200	200	200	200	200			
Internal Date Management	Yes	Yes	Yes	Yes	Yes	Yes			
Does the terminal support Receipt?	Yes	Yes	Yes	Yes	Yes	Yes			

# Attachment 1 Specific Terms and Conditions to the Letter of Approval

Restriction:		
None		