

March 15, 2024

Markus Gagliardi  
PayTec AG  
Vogelsangstrasse 15  
Effretikon CH-8307  
SWITZERLAND

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

**EMV Application Kernel:** PayTec EMV Kernel Version 2.6.0

**Approval Number(s):**  
**2-05354-1-1C-CETI-0324-4.4a**  
**2-05354-1-2C-CETI-0324-4.4a**  
**2-05354-1-3C-CETI-0324-4.4a**  
**2-05354-1-4C-CETI-0324-4.4a**  
**2-05354-1-5C-CETI-0324-4.4a**  
**2-05354-1-6C-CETI-0324-4.4a**  
**2-05354-1-7C-CETI-0324-4.4a**  
**2-05354-1-10S-CETI-0324-4.4a**

The EMV Application Kernel has been tested on the following terminal

**Terminal:** PT-D103  
**PinPad:** n/a  
**Operating System:** 10S = Linux Version 4.14

**Renewal Date:** 26-Feb-2028

**Report ID** Session 1: 2PAYT\_1-6968-1-2-23\_CETI Version Initial - CTC advanced GmbH

**Kernel Checksum:**

1DDC861650C8B72C

**Configurations Checksums:**

Config	Vendor Config ID	Terminal	Checksum
1C	BASE	22	BCB962E395A4C5F3
2C	VEND	25	2B57C2FD06E8FF39
3C	AT_DEFAULT	22	AA17591BA55D76F4
4C	AT_OFFPIN	22	B2FF6782126808C5
5C	UAT_DEFAULT	25	5C42B6BF76AACCD8
6C	UAT_OFFPIN	25	5BB75A8DDD8219B4
7C	UAT_NoCVM	25	D7CA48243A3DFF43

Dear Markus Gagliardi:

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 4.4 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](http://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 Testing Group Chair

Terminal Capabilities	1C	2C	3C	4C	5C	6C	7C			
<b>Card Data Input Capability</b>										
Terminal Type	22	25	22	22	25	25	25			
Manual Key Entry	Yes	No	Yes	Yes	No	No	No			
Magnetic Stripe	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
IC with Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
<b>CVM Capability</b>										
Plaintext PIN	Yes	Yes	Yes	Yes	Yes	Yes	No			
Online Enciphered PIN	Yes	Yes	Yes	No	Yes	No	No			
Signature (Paper)	Yes	No	Yes	Yes	No	No	No			
Offline Enciphered PIN (RSA)	Yes	Yes	Yes	Yes	Yes	Yes	No			
No CVM	Yes	Yes	No	No	No	No	Yes			
Biometric	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			
<b>Security Capability</b>										
SDA & DDA	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Card Capture	No	No	No	No	No	No	No			
CDA	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1	Mode 1			
<b>Transaction Type Capability</b>										
Tran Type - Cash	Yes	Yes	Yes	Yes	No	No	No			
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	No	Yes	Yes	No	No	No			
Tran Type - Inquiry	No	No	No	No	No	No	No			
Tran Type - Transfer	No	No	No	No	No	No	No			
Tran Type - Payment	No	No	No	No	No	No	No			
Tran Type - Admin	No	No	No	No	No	No	No			
Tran Type - Cash Deposit	No	No	No	No	No	No	No			
<b>Terminal Data Input Capability</b>										
Keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Numeric Keys	Yes	Yes	Yes	Yes	Yes	Yes	No			
Alpha and Special Character Keys	No	No	No	No	No	No	No			
Command Keys	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Function Keys	Yes	Yes	Yes	Yes	Yes	Yes	No			

(continued)	1C	2C	3C	4C	5C	6C	7C			
<b>Terminal Data Output Capability</b>										
Print, Attendant	Yes	No	Yes	Yes	No	No	No			
Print, Cardholder	No	Yes	No	No	Yes	Yes	Yes			
Display, Attendant	Yes	No	Yes	Yes	No	No	No			
Display, Cardholder	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 10	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 9	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 8	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 7	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 6	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 5	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Code Table 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
<b>Application Selection</b>										
PSE	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Cardholder Confirmation	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Preferred display order	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Partial AID Selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Multi language	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
EMV Language Selection method	Yes	Yes	Yes	No	Yes	Yes	Yes			
Common Character Set	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
<b>Data Authentication</b>										
MAX CA Public key	248	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 $2^{16}+1$	3 and $2^{16}+1$			
Revocation of Issuer PK Certificate	No	No	No	No	No	No	No			
Certificate Revocation List Format										
Default DDOL	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Manual act. when CA PK loading fails	No	No	No	No	No	No	No			
CA PK verified with check sum	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
<b>Cardholder Verification Method</b>										
Bypass PIN Entry	Yes	No	No	No	No	No	No			
Subsequent Bypass PIN Entry	Yes	No	No	No	No	No	No			
Get Data for PIN Try Counter	Yes	Yes	Yes	Yes	Yes	Yes	No			
Fail CVM	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Amount known before CVM proces.	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
<b>Terminal Risk Management</b>										
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	No	No	No	No	No	No	No			
Exception File	No	No	No	No	No	No	No			
TRM irrespective of AIP setting (expected behavior)	Yes	Yes	Yes	Yes	Yes	Yes	Yes			

(continued)	1C	2C	3C	4C	5C	6C	7C			
<b>Terminal Action Analysis</b>										
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?	N/A	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	N/A			
<b>Completion Processing</b>										
Forced Online	Yes	No	No	No	No	No	No			
Forced Acceptance	Yes	No	No	No	No	No	No			
Advices	Yes	Yes	No	No	No	No	Yes			
Voice Referrals Initiated by Issuer	Yes	No	Yes	Yes	No	No	No			
Batch Data Capture	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Online Data Capture	No	No	Yes	Yes	Yes	Yes	No			
Default TDOL	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Default TDOL not configured	No	No	No	No	No	No	No			
<b>Exception Handling</b>										
POS Entry Mode	92	92	80	80	80	80	92			
<b>Miscellaneous</b>										
Amount and PIN on same keypad	Yes	Yes	Yes	Yes	Yes	Yes	No			
ICC/Magstripe Reader Combined	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
If Combined, is Magstripe read first?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Supports account type selection	No	No	No	No	No	No	No			
Supports 'on fly' script processing	No	No	No	No	No	No	No			
Issuer Script device limit > 128 bytes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
If limit > 128, value supported?	746	746	746	746	746	746	746			
Internal Date Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Does the terminal support Receipt?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			

# **Attachment 1**

## **Specific Terms and Conditions to the Letter of Approval**

Restriction:

**None**