

October 22, 2020



Hans-Henning Kochsmeier
Wincor Nixdorf International GmbH
Heinz-Nixdorf-Ring 1
Paderborn 33106
GERMANY

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

EMV Application Kernel: ProChip/EMV Version 4.0

Approval Number(s):
2-04744-1-1C-CETI-1020-4.3i
2-04744-1-2C-CETI-1020-4.3i
2-04744-1-3C-CETI-1020-4.3i
2-04744-1-4C-CETI-1020-4.3i
2-04744-1-1P-CETI-1020-4.3i
2-04744-1-1OS-CETI-1020-4.3i
2-04744-1-2OS-CETI-1020-4.3i

The EMV Application Kernel has been tested on the following terminal

Terminal: CS 2060
PinPad: 1P = EPP V6, XFS 3 - PIN pad is valid for configuration(s): 1C, 2C, 3C, 4C
Operating System: 1OS = Microsoft Windows 10 Version 10.0
2OS = Microsoft Windows 7 Version 6.1

Renewal Date: 02-Oct-2024

Report ID Session 1: 2WIN2_1-0813-1-2-20_CETI Version Initial - CTC advanced GmbH

Kernel Checksum:

2c8b8a77c91df07207d30615782e192bef1da272
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Configurations Checksums:

Config	Vendor Config ID	Terminal	Checksum
1C	K4	14	d3e75e41f58152d4e5ff7f9e6f628f308f259860
2C	K1	14	f25bd96ae32da3ed977804541b3e860c0b013165
3C	K2	24	2759d750956feda81df8127da155b2d7c1e01121
4C	K3	24	80afc363635af2303a50554488ad4434e4ce3147

PIN Pads Checksums:

PinPad	Checksum
1P	not applicable

Dear Hans-Henning Kochsmeier:

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

Terminal Capabilities	1C	2C	3C	4C						
Card Data Input Capability										
Terminal Type	14	14	24	24						
Manual Key Entry	No	No	No	No						
Magnetic Stripe	Yes	Yes	Yes	Yes						
IC with Contacts	Yes	Yes	Yes	Yes						
CVM Capability										
Plaintext PIN	Yes	No	No	No						
Online Enciphered PIN	Yes	Yes	Yes	No						
Signature (Paper)	No	No	No	No						
Offline Enciphered PIN	Yes	No	No	No						
No CVM	No	No	Yes	Yes						
SB185	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	No	No	No						
Card Capture	Yes	Yes	Yes	Yes						
CDA	Mode 2	No	No	No						
Transaction Type Capability										
Tran Type - Cash	Yes	Yes	No	No						
Tran Type - Goods	Yes	Yes	Yes	Yes						
Tran Type - Services	Yes	Yes	Yes	Yes						
Tran Type - Cash Back	No	No	No	No						
Tran Type - Inquiry	Yes	Yes	No	No						
Tran Type - Transfer	Yes	Yes	No	No						
Tran Type - Payment	Yes	Yes	No	No						
Tran Type - Admin	Yes	Yes	No	No						
Tran Type - Cash Deposit	Yes	Yes	No	No						
Terminal Data Input Capability										
Keypad	Yes	Yes	Yes	Yes						
Numeric Keys	Yes	Yes	Yes	Yes						
Alpha and Special Character Keys	No	No	No	No						
Command Keys	Yes	Yes	Yes	Yes						
Function Keys	Yes	Yes	Yes	Yes						

(continued)	1C	2C	3C	4C						
Terminal Data Output Capability										
Print, Attendant	No	No	No	No						
Print, Cardholder	Yes	Yes	Yes	Yes						
Display, Attendant	No	No	No	No						
Display, Cardholder	Yes	Yes	Yes	Yes						
Code Table 10	Yes	Yes	Yes	Yes						
Code Table 9	Yes	Yes	Yes	Yes						
Code Table 8	Yes	Yes	Yes	Yes						
Code Table 7	Yes	Yes	Yes	Yes						
Code Table 6	Yes	Yes	Yes	Yes						
Code Table 5	Yes	Yes	Yes	Yes						
Code Table 4	Yes	Yes	Yes	Yes						
Code Table 3	Yes	Yes	Yes	Yes						
Code Table 2	Yes	Yes	Yes	Yes						
Code Table 1	Yes	Yes	Yes	Yes						
Application Selection										
PSE	Yes	Yes	Yes	Yes						
Cardholder Confirmation	Yes	Yes	Yes	Yes						
Preferred display order	Yes	Yes	Yes	Yes						
Partial AID Selection	Yes	Yes	Yes	Yes						
Multi language	Yes	Yes	Yes	Yes						
EMV Language Selection method	No	No	No	No						
Common Character Set	Yes	Yes	Yes	Yes						
Data Authentication										
MAX CA Public key	248	248	248	248						
Exponents	3 and $2^{16}+1$	3 and $2^{16}+1$	3 and $2^{16}+1$	3 and $2^{16}+1$						
Revocation of Issuer PK Certificate	No	No	No	No						
Certificate Revocation List Format										
Default DDOL	Yes	No	No	No						
Manual act. when CA PK loading fails	No	No	No	No						
CA PK verified with check sum	Yes	No	No	No						
Cardholder Verification Method										
Bypass PIN Entry	No	No	No	No						
Subsequent Bypass PIN Entry	n/a	n/a	n/a	n/a						
Get Data for PIN Try Counter	Yes	No	No	No						
Fail CVM	Yes	Yes	Yes	Yes						
Amount known before CVM proces.	No	No	No	No						
Terminal Risk Management										
Floor Limit Checking	Yes	No	No	No						
Random Transaction Selection	No	No	No	No						
Velocity Checking	No	No	No	No						
Transaction Log	No	No	No	No						
Exception File	No	No	No	No						
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?	Skipped	Skipped	Skipped	Skipped						
Completion Processing										
Forced Online	No	No	No	No						
Forced Acceptance	No	No	No	No						
Advices	No	No	No	No						
Voice Referrals Initiated by Issuer	No	No	No	No						
Batch Data Capture	No	No	No	No						
Online Data Capture	Yes	Yes	Yes	Yes						
Default TDOL	Yes	Yes	Yes	Yes						
Exception Handling										
POS Entry Mode	80	80	80	80						
Miscellaneous										
Amount and PIN on same keypad	Yes	Yes	Yes	Yes						
ICC/Magstripe Reader Combined	Yes	Yes	Yes	Yes						
If Combined, is Magstripe read first?	Yes	Yes	Yes	Yes						
Supports account type selection	No	No	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?	16000	16000	16000	16000						
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