POS Terminal
Approval Certificate No. #TV043

mada

مركز التصاريح
Certification Center

Ge-idea Solutions
P. O. Box 246868
Riyadh 11312
Kingdom of Saudi Arabia

19 June, 2016

Equipment Details
Type: **POS**
Model: **Verifone VX520**

This letter is to confirmthat the POS terminal specified above has successfully passed the testing required to approve its usage within mada, details of the approved configuration are mentioned in the sections below.

SAMA reserves the right to modify the certification procedures from time to time and Vendors may be required to repeat some or all testing already undertaken and in addition any new tests deemed necessary by SAMA.

SAMA as scheme regulator reserves the right to withdraw approval for a POS device should it be unable to demonstrate the ability to pass the tests specified in the current release of the certification procedures.

SAMA maintains a list of approved device on its website, potential customers for the POS terminal referred to in this letter should ensure that the device is on this list.

SAMA accepts no responsibility for any operational or interoperability problem not highlighted by the testing performed to gain this certificate and reserves the right to update the procedures and testing regime at any time in the future at its sole discretion. No Member of the mada scheme or Vendor supplying equipment for use by the scheme or its members should refer to their product, service or facility as either mada "approved" or imply that the mada scheme or SAMA endorses their products.

Signed on behalf of SAMA:

Abdullah Al-Rasheed
Head of Quality Assurance

Saudi Arabian Monetary Agency

HEAD OFFICE

General Department of Payment Systems

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Equipment Appearance

External reader(s)

N/A

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Pre-Requisites

EMV L1/L2 Registration Number	**C12RAP12-21-3 - FIME Europe Test Centre**
IFM (Level 1) Approval Reference	**12646 0312 400 21 FIM**
EMV Kernel (Level 2) Approval Reference	**2-02441-1-6C-FIM-0213-4.3.b**
EMV Specification Date and Version	**EMV 4.2 2008**
MasterCard Terminal Quality Management (TQM) Label	**TQM0055/03**
PCI PED Approval Number	**4-30052**
Pay Pass Kernel Approval Number	**TLOA-VERI150801-150910(a)**
Pay Wave Kernel Approval Number	**CDVERI0708**

Testing baseline

Version of this document used	**mada EFTPOS v6.0**

Functionality approved for use with mada Switch

Integrated Chip Card (ICC)	**mada, MasterCard, Visa and AMEX**
Magnetic Stripe	**MasterCard, Visa and AMEX**
Contactless	**mada, MasterCard, Visa**

Equipment Details (Hardware)

Manufacturer	**VeriFone**
Model Designation	**VX 520**
If the Manufacturer is different from the Vendor, please describe the commercial arrangement between Manufacturer and Vendor and give detail of how the equipment will be supported	**Saudi Arabia –Exclusive Distributor**
Input Devices Supported	**One Ethernet | one telco | one RS-232 port | one USB 2.0 Host port | one USB Client port**
Display Devices supported	**128x64 pixel graphical | white backlit LCD**
Printing Devices	**24 lps | Standard: 49mm paper roll | Contactless: 40mm paper roll**

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Communication method used by device	**GPRS ,TCP/IP**
PIN Pad	**Integrated PINPAD**
Contactless Reader	**Internal Reader**
Languages supported	**Arabic, English**
Is there a language switch key?	**Yes**

Equipment Details (Software)

Kernel Software Version	**Vx EMV Module 6.2.0**
Visa Pay Wave Kernel Version	**3/9/2017**
MasterCard Pay Pass Kernel Version	**CLMC 03.04.00**
Operating system	**1OS = Vx Version QA0012A3**

Payment Applications supported

mada ☒   Visa ☒   MasterCard ☒   Maestro ☒   American Express ☒   China Union Pay ☐
Other (when applicable) ☐

Non-Payment Applications supported

Application Type	**N/A**
Application Name	**N/A**
Application Version	**N/A**

Development Details

Version Control software used	**Vericenter 3.0**
How is version control managed for the components of your product? Supporting documents may be required	**Terminal Remote System Engine.**
Is QA system used ISO 9000 accredited?	**No**

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EMV Level 2 Kernel Configuration Details

EMV Level 2 Kernel Configuration Number Used for mada Certification	**6C**
EMV Terminal Type	**22**
POS Entry Mode	**80**

Card Data Input Capabilities

Manual Key Entry ☒　　　Magnetic Stripe ☒　　　ICC ☒　　　Contactless ☒

Cardholder Validation Method Capability

Plaintext PIN for ICC Verification ☒　　　Enciphered PIN for online Verification ☐

Signature(Paper) ☒　　　Enciphered PIN for offline Verification ☒

No CVM ☐

Security Capabilities

Static Data Authentication (SDA) ☒　　　Dynamic Data Authentication (DDA) ☒

Combined Data Authentication (CDA) ☒　　　Fast Data Authentication(FDDA) ☒

Card Capture ☐

Transaction Type Capability

Cash ☒　　　Goods ☒　　　Services ☒　　　naqd(Cash Back) ☒　　　Inquiry ☐　　　Transfer ☐

Payment ☐　　　Administrative ☐　　　Cash Deposit ☐

Terminal Data Input Capability

Keypad ☒　　　Numeric Keys ☒　　　Alphabetic and Special Character Keys ☒　　　Command Keys ☒

Function Keys ☒

Terminal Data Output Capability

Print, Attendant ☒　　　Print, Cardholder Name☐　　　Display Attendant ☒　　　Display Cardholder ☐

Code Table 10 ☐　　　Code Table 9 ☐　　　Code Table 8 ☐　　　Code Table 7 ☐　　　Code Table 6 ☐

Code Table 5 ☐　　　Code Table 4 ☐　　　Code Table 3 ☐　　　Code Table 2 ☐　　　Code Table 1 ☒

Application Selection

Supporting PSE selection Method ☒　　　Supporting Cardholder Confirmation ☒

Having a preferred order of displaying applications ☐　　　Performing partial AID ☒

Having multi language support ☒　　　Having Common Character Set ☒

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Data Authentication

What is the maximum supported Certificate Authority Public Key Size?	**248**
What exponents does the terminal support?	**3 and $2^{16}+1$**
Certificate Revocation List Format	**RID,CA Index and Serial No**

Checking the validity of revocation of Issuer Public Key Certificate ☒   Terminal contains DDOL ☒

Manual Key Load When CA Public Key Load Fails ☐   CA Public Key Verified With Checksum ☒

Cardholder Verification Method

Supporting bypass PIN Entry ☒   Supporting Get Data for PIN Try Counter ☒

Supporting Fail CVM ☒   Supporting Amount Unknown before CVM ☒

Supporting No CVM for Contactless ☒

Terminal Risk Management

Floor Limit Checking ☒   Random Transaction Selection ☒   Velocity Checking ☒

Transaction Log ☒   Exception File ☒

Terminal Risk Management Based on AIP ☒   Contactless Limits Checking ☒

Terminal Action Analysis

Terminal Action Codes ☒   Default process prior to AC ☐   Default process after AC ☐

Skip processing TAC/IAC ☐   Default as normal ☐   CDA fail detected prior TAA ☒

CDA always requested at GENAC1 ☐   CDA never requested at GENAC1 ☒

CDA always requested at GENAC2 ☐   CDA never requested at GENAC2 ☒

Completion Processing

Terminal Forced Online Capability ☒   Transaction Forced Acceptance Capability ☐

Supporting Advices ☒   Supporting Batch Data Capture ☒

Supporting Online Data Capture ☐   Supporting Issuer Referrals ☒

Supporting Default TDOL ☒

Miscellaneous

Pin Pad ☐   Amount and PIN same keypad ☒   ICC / Mag Stripe Combined ☐

Mag Stripe read first ☐   Supports Account Type Selection ☒   Issuer script device limit > 128 ☐

Physical LED Light Indicators for contactless ☒   Software Light Indicators for contactless ☐

Sound indicators ☒   ATEX Compliance Terminal and can be used in explosive environments ☐

External Reader

External Reader Model	**N/A**
External Reader Input Capability	**N/A**