

# Chip Card Acceptance Device Questionnaire and

# Implementation Conformance Statement (ICS) for Contactless Devices and Readers

This form will not be accepted unless all mandatory fields are correctly completed. Mandatory fields are marked (\*). You must provide a Chip Card Acceptance Device Questionnaire and Implementation Conformance Statement (ICS) for Contactless Devices and Readers for each product you are submitting for testing and approval. Information provided in this questionnaire will be used to determine whether the product is acceptable and the amount of testing.

For additional instructions, refer to attached *Instructions for Chip Card Acceptance Device Questionnaire and Implementation Conformance Statement (ICS) for Contactless Devices and Readers*.

Email completed questionnaire and product image to <u>ApprovalServices@visa.com</u>.

#### Section 1 Company Information

\*1.0 Company Name [Must exactly match Approval Services Testing Agreement]

\*1.1 Name of Authorized Representative

\*1.2 Email Address [Must be corporate email address]

\*1.3 Submission Date

#### Section 2 Product Identification

\*2.0 Visa Reference Number (VTF#)

\*2.1 Product/Model Name and Version

#### \*2.2 Submission Type

If you are changing an approved product or seeking to make a derivative, please provide additional details in Section 7.

2.3 If you are changing an approved product or seeking to make a derivative, please provide the Visa Reference Number (VTF#) of the approved product.

YES	NO	
YES	NO	
YES	NO	
	YES	YES NO

Note:

Device with contact and/or mag-stripe hardware that supports both VCPS and VCTKS shall not be implemented in the field as a VCTKS-only device.

Vendors shall resubmit without Contact and/or Mag-Stripe hardware for VCTKS-only device for a separate approval.

VOQOS is only applicable to derivatives of approved VOQOS products.

#### Section 3 Product Elements Information

#### \*3.0 Product Configuration

- If Visa Kernel resides on the terminal [only], complete Section 3A.
- If Visa Kernel resides on the reader [only], complete Section 3B.
- If Visa Kernel resides on multiple components, complete Sections 3A, 3B and/or 3C.

#### Section 3A Terminal

- 3.1 Operating System Name
- 3.2 Operating System Version

#### Section 3B Reader

- 3.3 Operating System Name
- 3.4 Operating System Version

#### Section 3C Server

3.3 Operating System Name

#### 3.4 Operating System Version

3.5 mPOS	YES	NO
3.5.1 mPOS Variant Please refer to the user instructions at the end of the form to determine if the mPOS meets the exemption criteria.		
3.6 Vending Device If approved, the Letter of Approval (LOA) will indicate the product can be deployed for use in Vending Machines only.	YES	NO
*3.7 Please provide a general description of the product.		

Section 4 Product Level 1 Information Please provide a copy of Level 1 Letter of Approval at the time of submission of the Chip Device Questionnaire and Implementation Conformance Statement.	) Card Acceptance	2
*4.0 EMVCo Contactless Level 1 Approval Number		
*4.1 EMVCo Contactless Level 1 Renewal Date		
*4.2 Restricted Approval Visa reserves the right to not honor an EMVCo restricted approval and may reject the produ	YES ct submission.	NO
4.3 Reason for Restriction		
*4.4 PCD Location		
*4.5 Analog Firmware Name and Version		
*4.6 Digital Firmware Name and Version		
*4.7 Antenna ID		
*4.8 Antenna Location		
*4.9 Antenna Material		

#### Section 5 Product Level 2 Information

#### Section 5A Visa Kernel Information

\*5.0 Visa Kernel Name

#### \*5.1 Visa Kernel Version

\*5.2 Visa Kernel Code Location

#### Section 5B Visa Kernel Checksum

#### \*5.3 Visa Kernel Checksum

Visa Kernel Checksum must include all its components or software modules that make up the functionalities for VCPS or any of the supported Visa specification identified in field Q2.4, in which case:

(1) The overall Visa Kernel Checksum must be specified in Q5.3.

(2) The individual checksum of each Visa Kernel component must be specific in Q5.5.

Please refer to the user instructions at the end of this form for more details.

# Section 5C Pre-processing/Application Selection \*5.4 The product supports an independent module for Pre-processing/Application Selection YES NO Please provide details below if it is answered as YES. If answered as NO, it is assumed that Pre-processing/Application Selection are part of Visa Kernel described in Section 5. NO Please refer to user instructions at the end of this form for more details. 5.4.1 Pre-processing/Application Selection Name 5.4.2 Pre-processing/Application Selection Version 5.4.3 Pre-processing/Application Selection Location 5.4.4 Pre-processing/Application Selection Checksum

#### Section 5D Visa Kernel Components (Distributed Kernel)

Please provide details below if Visa Kernel is split into multiple locations.

5.5 (A) Component Location (B) Component Name (C) Checksum Value

#### Section 5E Non-Visa Kernel Information

Please provide details below if the product contains a non-Visa Kernel that interacts with Visa Kernel. Otherwise leave as blank. Please refer to Section 5 of the Instructions below for more details.

(A) Application Name (B) Application Version (C) Application Location (D) Application Checksum (E) Details of the Interaction

#### Section 6 EMV and Visa Specifications Information

\*6.0 EMVCo Level 1 Contactless Interface Specification

- \*6.1 Visa Contactless Payment Specification Version
- 6.2 Visa Contactless Transit Kernel Specification Version
- 6.3 Visa ODA for qVSDC Online Specification Version

#### Section 7 Product Submission Based on an Approved Product

For each proposed product change:

In column (A), identify the product component. In column (B), select the appropriate change category. In column (C), describe the details of the proposed change to your product.

#### Section 7A Product Level 1 Changes

(A) Product Component

(B) Change Category

(C) Change Details

Section 7B Product Level 2 Changes

(A) Product Component

(B) Change Category

(C) Change Details

#### Section 8 Additional Information

8.0 Please provide any other relevant information not captured in previous sections.

#### **Test Laboratories**

Select the Laboratory/ies to test your product. For Contactless Level 1 testing and approval, contact EMVCo directly.

VCPS

VCTKS

VOQOS

Cross Testing

Please provide a picture of the device to Approval Services at the time of submission of the Chip Card Acceptance Device Questionnaire and Implementation Conformance Statement.

Actual image of the product to be submitted. Drawings or blueprints are not acceptable.

File naming convention: ProductImage\_Product/Model Name\_and\_Version

File type should be an image file format; must be clear and not pixelated.

Contact and Magstripe Physical Interfaces should be clearly labeled.



## Implementation Conformance Statement for Contactless Devices and Readers

*1.1 Is contact interface supported? If the Device has a contact reader or is connected to a contact reader, this must be answered YES.	YES	NO	
*1.2 Does the device support Magnetic Stripe transactions? If the Device has a Magnetic Stripe reader or is connected to a Magnetic Stripe reader, this must be answered YES.	YES	NO	
Section 2 - VCPS Options			
This section must be completed if device supports VCTKS, qVSDC and/or MSD			
Application Paths Supported *2.1 MSD Support	YES	NO	
If VCPS v2.2 or higher, select NO.			
*2.2 qVSDC Support	YES	NO	
If VCTKS-only is supported, select YES.			
*2.3 Does the device support MSD and qVSDC active together? To be answered NO for VCPS v2.2.	YES	NO	
qVSDC Options			
2.4 Preliminary Transaction Processing is supported? If 2.4 is checked, 2.5, 2.10, 2.11, 2.12, 2.13 and 2.22 must be checked			
2.4.1 Is Amount Authorized Zero Check compliant to EMV CL Book B (Ent Requirements for Amount Authorized Zero Check differ between Entry Point of			
2.5 Status Checking is supported?			
2.6 Key Revocation is supported?			
2.7 Exception File is supported?			
2.8 Signature is supported?			
2.9 Online PIN is supported?			
2.10 Contactless Floor Limit Check is supported?			
2.11 Contactless Transaction Limit Check is supported?			
2.12 Amount Authorized Zero Check is supported?			
2.13 CVM Required Limit Check is support?			
2.14 Terminal Floor Limit (Tag '9F1B') is supported?			

- 2.15 Variable Transaction Amount is supported? *If 2.15 is checked, 2.4 must be checked.*
- 2.16 Application Expiration Check is supported? If item 2.16 is checked, 2.24 shall NOT be checked.
- 2.17 Issuer Update Processing is supported?
- 2.18 Manual Cash is supported?
  - 2.18.1 Independent Reader Risk Parameters used for Manual Cash? If item 2.18.1 is checked, 2.18 must be checked
- 2.19 Cashback is supported?
  - 2.19.1 Independent Reader Risk Parameters used for Cashback? If item 2.19.1 is checked, 2.19 must be checked
- 2.20 Refund is supported?
- 2.21 Dynamic Reader Limits is supported?
  - 2.21.1 Max Dynamic Reader Limit sets supported? If maximum number is not defined or greater than 10, enter a value of 10.
- 2.22 Contactless Floor Limit data element is supported?
- 2.23 The device supports offline only?
- 2.24 The device supports online only?

2.25 Does the reader leave the contactless interface powered on when the contactless application not allowed indicator (or an equivalent indicator) is '1' for all reader supported applications?

If EMV Entry Point Amount Authorized Zero Check is implemented (i.e 2.4.1 is checked), 2.25 shall be left unchecked (i.e N/A)

Checking this option indicates that the Reader powers on the contactless interface at the end of pre-processing when the Contactless Application Not Allowed Indicator (or equivalent indicator) is 1 for all Reader supported applications. Please refer to Req 5.37 in VCPS for details of the requirements related to this option.

2.26 The device supports both online capable and offline capable? For a VCPS v2.1 device, only one of 2.23, 2.24 or 2.26 must be checked. For a VCPS v2.2 device, at least one of 2.23, 2.24 or 2.26 must be checked. If more than one is checked, the implementation must allow switching between these features.

- 2.27 Is DF Name (tag 84) in SELECT PPSE response considered as Mandatory Data Element?
- 2.28 Is DF Name (tag 84) in SELECT ADF response considered as Mandatory Data Element?

#### MSD Options

Section not applicable for VCPS v2.2.

- 2.30 Track 1 formatting to the host is supported?
- 2.31 Track 2 formatting to the host is supported?
- 2.32 Terminal Transaction Qualifiers are sent in online messages?
- 2.33 Zero Amount Authorized is supported?

#### Section 3 VCTKS Options

This section must be completed if VCTKS is supported.

3.1 Does the device power down the RF field in between transactions or when certain Status Words are returned (e.g. 6986 to GPO command)?

- 3.2 Is Key Revocation supported?
- 3.3 Exception File Check supported?
- 3.4 Additional IDs in POI information supported?

To be left unchecked for VCTKS v1.0.2

#### Section 4 VOQOS Options

This section must be completed if VOQOS is supported.

If 4.1 is checked, at least one of 4.1.1 or 4.1.2 must be answered. If both are checked, implementation must allow switching of these two transaction outcomes.

- 4.1 fDDA for online authorizations implemented?
  - 4.1.1 Transaction gets declined offline when fDDA fails?
  - 4.1.2 Transaction gets forwarded online when fDDA fails?

If 4.2 is checked, at least one of 4.2.1 or 4.2.2 must be answered. If both are checked, implementation must allow switching of these two transaction outcomes.

4.2 SDA for online authorizations implemented?

4.2.1 Transaction gets declined offline when SDA fails?

4.2.2 Transaction gets forwarded online when SDA fails?

#### Section 5 General Reader Options

This section must be completed if display/printer or printing is supported.

- 5.1 The device supports a display?
  - 5.1.1 The Amount Authorized is displayed when prompting for card presentation?
  - 5.1.2 The Available Offline Spending Amount can be displayed?

If item 5.2 is checked, 5.2.2 and/or 5.2.3 must be checked. If item 5.2.1 is checked, 5.2.2 and/or 5.2.3 must be checked.

- 5.2 The device supports printer or printing?
  - 5.2.1 The Available Offline Spending Amount can be printed?
  - 5.2.2 Printing of a receipt for declined transactions supported?
  - 5.2.3 Printing of a receipt for approved transactions supported?
- 5.3 The device recognizes dates ending 50 to 99 as 2050 to 2099?

I confirm that the product details stated in the Questionnaire and ICS forms are accurate and that all ICS options supported by the Visa Kernel ("kernel") in the product have been identified.

#### Terms and Conditions

I am authorized to act on behalf of and legally bind the entity indicated in the Company Name field (" the Company") for whom I am submitting this form.

The Company and Visa are party to a Visa Approval Services Testing Agreement ("ASTA") and such ASTA is currently in effect. This submission is made pursuant to the ASTA and the Testing Requirements in effect as of the date of this submission.

To the extent that no ASTA is currently in effect, I acknowledge and agree on behalf of the Company that all information included in this form is disclosed to Visa and/or its employees, officers, directors, agents, representatives and/or separately incorporated regions or subsidiaries ("Visa Representatives") on a NON-CONFIDENTIAL BASIS and that Visa and the Visa Representatives shall have no obligation, express or implied, to maintain the secrecy, confidentiality or non-public nature of any such information.

Notwithstanding any provision of any agreement or other obligation to which the laboratories chosen in this form for testing of this product ("Test House") may be subject, the Company hereby consents to:

The disclosure by the Test House to Visa of a copy of pertinent documents pertaining to testing (i.e. technical specifications, required submission forms, etc.) and test reports, generated following testing of the Company's product.
 The presence of a representative of Visa, whose name will be provided to the Test House, during testing of the Company's product.

iii. The confirmation or denial by the Test House of the content and accuracy of any test report submitted to Visa for product approval.

iv. The disclosure by the Test House to Visa of scheduling information regarding test dates with the laboratory and timeframes of completion of testing.

v. Granting Visa and its designees permission to test, copy, reverse engineer, by-pass intellectual property protection mechanisms, or perform any other action or process that Visa deems necessary in its sole discretion in order to determine if approval will be granted.

vi. If any problems occur during functional or security testing that would not allow the chip product to successfully complete testing, I understand that:

- 1. All official testing will stop.
- 2. My company is responsible for all costs incurred with the Test House.
- 3. The problem found in testing must be corrected if the product is going to be resubmitted for testing.

I acknowledge and accept the terms and conditions specified above.



# Instructions for Chip Card Acceptance Device Questionnaire and Implementation Conformance Statement (ICS) for Contactless Devices and Readers

### Chip Card Acceptance Device Questionnaire

#### Section 2 Product Identification

#### Q2.0 Visa Reference Number (VTF#)

Upon submission of the questionnaire, Approval Services will provide a Visa Reference Number.

# Q2.2 Submission Type. If you are changing an approved product or seeking to make a derivative, please provide additional details in Section 7.

- (A) New Product: The product has never been submitted to Visa Approval Services.
- (B) Derivative: The product is based on a previously approved product. Once approved, a secondary product

is created, which will not replace the previously approved product.

#### EXAMPLE OF DERIVATIVE:

A new reader/terminal using the same Visa kernel approved in another product.

(C) Changing an Approved Product: The product is based on a previously approved product.

Once approved, it will replace the previously approved product.

#### Section 3 Product Elements Information

#### Q3.0 Product Configuration

- (A) PCDA (External Reader) / S-ICR
- (B) PCDI (Internal Reader ) / FIT
- (C) PCDI (External Reader) / [Combination Reader or M-ICR]

Visa and EMVCo use several equivalent terms. Tables 1-3 below define the terms used in the answer selections for Q3.0:

Visa / EMVCo	Acronym	Description
Visa	PCDA	PCDA (Proximity Coupling Device with Application) is a contactless reader that supports the contactless interface and MSD and/or qVSDC application.
EMVCo	S-ICR	Single Component Intelligent Card Reader

#### Table 1 PCDA / S-ICR

#### Table 2 PCDI (Internal Reader) / FIT

Visa / EMVCo	Acronym	Description
Visa	PCDI (Internal Reader)	PCDI (Proximity Coupling Device Integrated - Internal Reader) is a device
		that supports VSDC, and/or MSD, and/or qVSDC application. It contains
		a contactless reader that supports the contactless interface.
EMVCo	FIT	Fully Integrated Terminal

#### Table 3 PCDI (External Reader) / [Combination Reader or M-ICR]

Visa / EMVCo	Acronym	Description
Visa	PCDI (External Reader)	PCDI (Proximity Coupling Device Integrated - External Reader) is a terminal with an external contactless reader. The device supports VSDC, and/or MSD, and/or qVSDC application.
EMVCo	[Combination Reader <i>or</i> M-ICR]	<ul> <li>EMVCo divides these devices into two different types:</li> <li>(1) Combination Reader. The Visa Application resides on the terminal; the connected reader supports the Level 1 communications interface.</li> <li>(2) M-ICR (Multiple Component Intelligent Card Reader.) The Visa Application resides on both the terminal and the reader.</li> </ul>

#### Definitions

The following Device Types are defined as:

#### Q3.5.1 Mobile Point-of-Sale Devices (mPOS)

A chip acceptance device that is physically connected to, or is itself, a mobile handset.

#### Variants

The following mPOS type qualifies for Req 5.8 exemption based on Approval Services Announcement ASA20180730:

1. Dongle-type Contactless payment reader that is directly connected to a mobile handset without any cables or attachments. *Example: A Contactless reader plugged into a headset's audio jack.* 

The following mPOS types are required to conform to **Req 5.8** like other terminal types:

- 2. Portable Contactless payment reader with a small footprint. Example: Tiny reader that can be integrated into a custom casing or user interface hardware like a tablet to create a mobile POS system.
- 3. Visa Mobile Contactless payment application or software on a mobile handset. *Example: A handset component like SD Card, SIM, etc.*

#### Q3.6 Vending Devices

A chip acceptance device that is to be mounted on a Vending Machine. The device conforms to the physical dimensions prescribed by a national or international standards body.

Please refer to *Chip Card Acceptance Device Testing and Approval Requirements* available on Visa Digital Partner Services portal Library section, for additional information regarding submission requirements and procedures.



#### Section 5 Product Level 2 Information

#### Q5.0 and Q5.1 Visa Kernel:

The Visa Kernel ("kernel") is made up of all software components that provide for VCPS functionality (i.e. all requirements as defined in the VCPS specifications). This includes any modules that perform kernel functionality (i.e. crypto libraries for RSA/ fDDA functions, etc.).

Pre-processing/Application Selection may be included in the Visa Kernel or outside the Visa Kernel as a separate module, but is still regarded as part of the overall kernel as such functionality is defined by VCPS.

#### Q5.3 Visa Kernel Checksum:

The Visa Kernel Checksum ("checksum") must include at a minimum the Visa Kernel ("kernel") and all external libraries supporting kernel functionality. Pre-processing/Application Selection may be included in the checksum of the kernel or may have an independent checksum. If separate, the vendor is required to provide the checksum for the kernel and the checksum for the Pre-processing/Application Selection module. If only one checksum is provided, it is assumed Pre-processing/Application Selection is included in the Visa Kernel Checksum.

If the Visa Kernel is split into multiple locations (i.e. part on the reader, part on a server), each portion should have an independent checksum but the Kernel Checksum shall include all sub-portions of the kernel into the final checksum.

#### Q5.4 Non-Visa Kernels:

A non-Visa Kernel is defined as another kernel that is independent of the Visa Kernel. This may be another Payment System Kernel or proprietary kernel. The vendor only needs to declare a non-Visa Kernel in the CDQ if that kernel interacts with the Visa Kernel. Otherwise, such applications need not be declared.

# Implementation Conformance Statement (ICS) for Contactless Devices and Readers

When completing the Implementation Conformance Statement (ICS) for Contactless Devices and Readers, please adhere to the following guidelines:

- 1. Your implementation shall always comply with a valid non-sunset Visa specification(s) (VCPS, VCTKS and/or VOQOS).
- 2. You must select ICS options that represent the features that were developed in the submitted product.
- 3. You are responsible to ensure that you accurately submit test samples with the same features/configuration as indicated in the ICS options.
- 4. Products should always be developed to the specification and not the test plans.
- 5. Approval Services has the right to reject any ICS changes while in testing and require a new test cycle.