



quick Visa Smart Debit/Credit Intelligent Reader Testing Process

Version 3.1

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Welcome to quick Visa Smart Debit/Credit Intelligent Reader Testing Process

This document contains an overview of the testing process on intelligent quick Visa Smart Debit/Credit (qVSDC) readers for acquirers.

Effective: October 2008

qVSDC Intelligent Reader Testing Overview

quick Visa Smart Debit/Credit (qVSDC) was introduced in November 2005 as part of the Visa Contactless Payment Specification (VCPS) 2.0. The most current version of the specification is VCPS 2.0.2 with Additions and Clarifications version 3.0.

In order to achieve global interoperability, contactless readers must support either qVSDC or Magnetic Stripe Data (MSD) and cards must support both qVSDC and MSD. Some regions may wish to support both qVSDC and MSD on the same reader¹

This document addresses the testing processes for intelligent readers implementing qVSDC. MSD is out of scope.

Visa Approval Services has defined two types of qVSDC reader as described in the table below.

qVSDC Reader/Device Type	Description
Proximity Coupling Device with Application (PCDA)	A contactless reader that supports the contactless interface with a qVSDC and/or MSD application
Proximity Coupling Device Integrated (PCDI)	A device that supports a qVSDC and/or MSD application and is connected to or contains a contactless reader (PCDR) that supports the contactless interface

To date, Visa has required that device vendors submit the entire product capable of producing a complete transaction for Type Approval testing, regardless of the combination of reader/device and the functionality that resides on each part of the combination. Depending on the type of device or configuration, submission of the product may be simple or complex.

The following table provides examples.

Reader/Device Configuration	Testing Description
An integrated device, where the device contains contactless, contact chip and mag-stripe functionality encased in one unit	Must be submitted for testing. Would be submitted as a PCDI
A contactless reader containing no, some or a majority of the qVSDC functionality connected to a POS device	Combination must be submitted for testing. If combination changes, new combination must be submitted. Each combination would be submitted as a PCDI

¹ In order to support both qVSDC and MSD on the same device, it is strongly recommended that the reader/device be certified to VCPS 2.0.2 Additions and Clarifications version 3.0.

New Testing Process for Intelligent qVSDC Readers and Combination Testing

As of June 2008, Visa provides a new testing process for intelligent qVSDC readers. The new testing process addresses only the 'intelligent reader' PCDA model, which is described as 'A reader type device that supports almost all of the components for the contactless transaction, but needs to connect to another device (i.e. terminal, POS, EPOS) to carry out a complete transaction.'

Testing Process for Intelligent qVSDC Readers

This is an optional testing process that is meant to provide vendors developing an intelligent qVSDC reader greater flexibility in submitting and having their reader approved by Visa. Reader types that are eligible for this process must meet each of the following criteria:

- An intelligent reader (PCDA) that supports qVSDC with or without MSD support;
- Supports the majority of the transaction functionality within the reader as defined in the Visa Contactless Reader Implementation Notes; and
- Is dependant on another device (e.g. terminal, POS, EPOS) for such functionality as online support, receipt handling, cardholder verification functionality (PIN or Signature) and fallback to other interfaces (mag-stripe or contact)

Intelligent qVSDC readers that meet the above criteria will be tested and, to the extent such readers pass testing, approved, for the specific functionality they directly support and exclude those types of functions not implemented in the intelligent reader. These readers, upon receiving approval for VCPS 2.0.2 and the companion document, Visa Contactless Reader Implementation Notes, will be identified on the *Visa Approved Intelligent Reader with Implementation Notes (IRWIN or IRWIN-compliant)* List at www.visa.com/approvalservices.

IRWIN Reader and Device Combination Testing

Visa supports a new module of the Acquirer Device Validation Toolkit (ADVT), called ADVT qVSDC device module. Acquirers may select an approved IRWIN reader and connect it to another device (terminal, POS, EPOS etc.) that has been coded to support qVSDC as per VCPS 2.0.2, and carry out testing via the ADVT qVSDC device module specifically designed to test the ability of the connected reader and device to successfully complete a qVSDC transaction.

Each combination of reader and terminal that an acquirer intends to use must be tested and determined to be successfully able to complete a qVSDC transaction.

For each change to the combination, as defined in the Chip Card Acceptance Device Testing and Approval Requirements section 6, the ADVT qVSDC testing must be carried out.

Testing with the ADVT qVSDC module is mandatory for all acquirers wishing to deploy a qVSDC acceptance infrastructure.

The acquirer must report the results of the testing to the Visa Region per the normal ADVT process.

Once the combination has passed testing, the combination may be deployed by that acquirer.

If the combination does not pass testing, the acquirer must work with the vendor with the support of the Visa Region and ultimately, if required, Visa Approval Services to resolve the issues and successfully retest prior to deployment.

Other Requirements and Availability

Acquirers should work with their reader vendors to ensure that they are in compliance with the requirements set forth in the Visa Contactless Reader Implementation Notes and consequently have an IRWIN-compliant reader, if they intend to utilize the intelligent qVSDC testing process outlined above².

Intelligent qVSDC reader testing – available now

ADVT qVSDC Device Module – available now

² Any qVSDC reader that is not approved to the Visa Contactless Reader Implementation Notes or IRWIN-compliant will be required to carry out combination testing every time it is connected to a new device.

The ADVT qVSDC Device Module may be obtained from the following sources:

ICC Solutions

Contact: Derek Ross

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1. Existing ICCSimTM or ICCSimAT ADVT test tool users can obtain the soft test scripts only, available by internet download.
2. For those organizations that don't currently use ICC Solutions test tools:
 - a) A variant of ICCSimAT limited to execution of the ADVT – qVSDC Device Module test scripts
 - b) Physical cards pre-configured with the ADVT – qVSDC Device Module profiles / test scripts