

The process of obtaining *PayPass* approval

MasterCard *PayPass*[®] Terminal Vendor Testing Process



Purpose

A thorough test and approval process has been developed for MasterCard *PayPass*® products to promote worldwide interoperability at an acceptable time and cost to all parties.

The aim of the *PayPass* Vendor Testing Process is to increase confidence that each *PayPass* terminal should work:

- Smoothly
- Everywhere it is accepted
- Every time it is used

The tests are divided into three areas

- **Sample Tests:** Tests of the product characteristics (Does it work?)
- **Combination Tests:** Tests of the product interaction with other devices (Will it work everywhere?)
- **Audits:** Ensures the sample of the product tested is representative, repeatable, and reliable, and continues to be so (Will it work every time?)

Note: A *PayPass* terminal may either be a fully integrated terminal or the combination of a Contactless Card Reader, which integrates a Proximity Coupling Device (PCD), and a terminal implementing the *PayPass* application.

After completing this process, terminal vendors can obtain the *MasterCard PayPass Vendor Product–Letter of Approval*. The *PayPass* terminal can then be presented as a reliable off-the-shelf product for acquirers to integrate and deploy.

Note: *PayPass* terminals may also have a contact interface for EMV transactions. EMV approval is out-of-scope for this process.

Process overview

Vendors first need to register by signing a *PayPass Specifications License Agreement* to obtain relevant specifications and support.

During product development, vendors work with a choice of accredited test laboratories that provide expertise on testing tools and processes. In this way products are prevalidated before formal testing is started, saving the vendor cost and time.

At the earliest possible stage, the vendor must conduct a design review. This ensures that the proposed product meets MasterCard requirements for *PayPass* terminal implementations.

Formal testing begins with registration of the product.

MasterCard performs an assessment and informs the vendor of which tests need to be performed. Before registration, the PCD that the terminal will use must have EMV contactless Terminal Type Approval Level 1 (which is a process managed independently of MasterCard by EMVCo).

There are formal tests for each area where terminal requirements are defined by MasterCard—application interface, performance, quality management, and security assessment of the PIN Entry Device (PED) when the later is present. Additional tests may be requested by MasterCard to determine usability of the product. These tests are performed by accredited test laboratories.

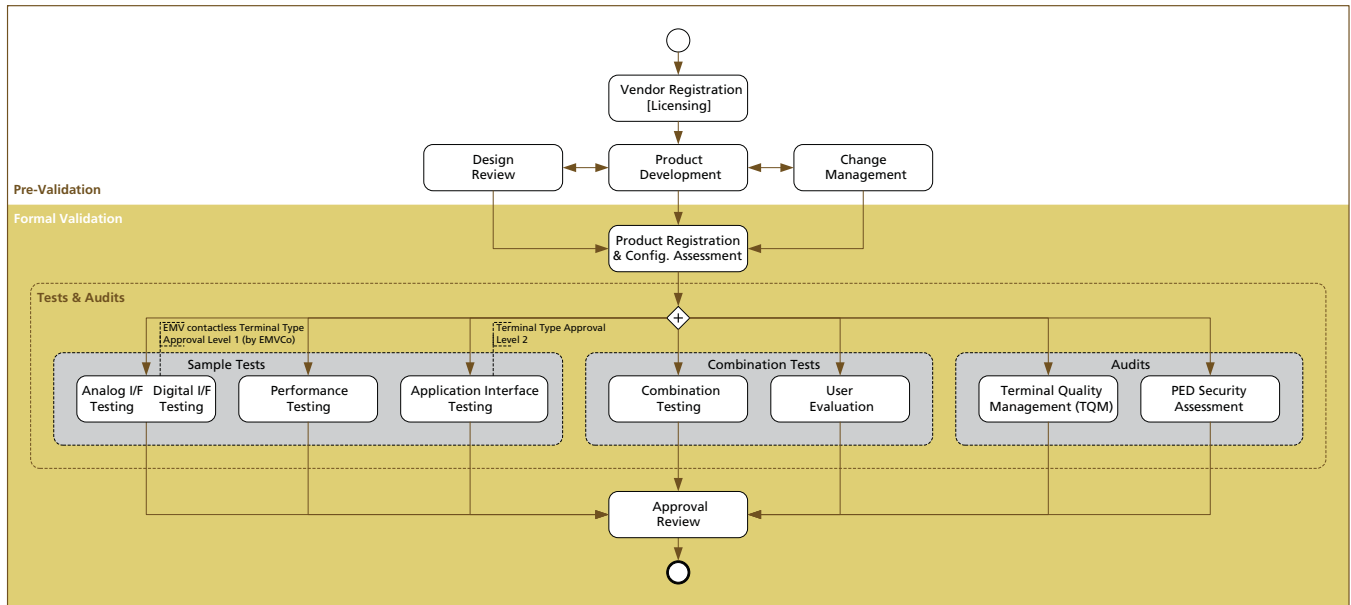
Successful completion of the tests within each test subprocess results in a Test Assessment from MasterCard. Components for a *PayPass* terminal are assembled with other tested components to form a complete *PayPass* terminal.

When all required testing is completed, the vendor submits the results for MasterCard approval.

Once the complete *PayPass* terminal is approved, the vendor receives a *MasterCard PayPass Vendor Product–Letter of Approval* and an entry in the *PayPass*-approved products on the *PayPass* Web site.

For further information, please contact testing@paypass.com or visit the *PayPass* Web site at www.paypass.com.

MasterCard *PayPass*® Card Vendor Test Process



Test & Audit Subprocess	Test Area	Requirement	Description
EMV contactless Terminal Type Approval Level 1 (by EMVCo) (an independent process managed by EMVCo)	Analog Interface Testing	Mandatory	Formal testing by EMVCo of the electromagnetic characteristics of the terminal against the EMV Contactless Communication Protocol Specifications
	Digital Interface Testing	Mandatory	Formal testing by EMVCo of the software communications protocol of the terminal against the EMV Contactless Communication Protocol Specifications
Performance Testing	Conformity	Optional	Formal testing of the terminal to generate in a correct and timely manner a specified range of commands to a <i>PayPass</i> cardholder product
Terminal Type Approval Level 2	Digital behavior	Mandatory	Formal testing of the characteristics of the terminal's application against the appropriate <i>PayPass</i> Application specification
Combination Testing	Behavior with merchant devices	Optional	Formal testing that a transaction is correctly performed within specified transaction times using a number of <i>PayPass</i> cardholder devices presented into the terminal landing zone from different angles and with different speeds
User Evaluation	Usability	Optional	Testing the user reaction to the terminal and recording their perception
Terminal Quality Management (TQM)	Product production and change management	Mandatory	Formal audit of vendor processes to ensure that samples received by the testing laboratory are representative of the final production terminal
PED Security Assessment	Security of the PED (PIN Entry Device)	Conditional	Formal assessment of the PED against the standards set by the Payment Card Industry Security Standards Council (PCI-SSC)

