

The process of obtaining *PayPass* approval

# MasterCard *PayPass*<sup>®</sup> Card Vendor Testing Process



## Purpose

A thorough test and approval process has been developed for MasterCard *PayPass*<sup>®</sup> 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* cardholder product 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?)

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

## 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 cardholder product implementations.

Formal testing begins with registration of the product.

MasterCard performs an assessment and informs the vendor of which tests need to be performed.

There are formal tests for each area where cardholder product requirements are defined by MasterCard— analog and digital interfaces, application interface, performance, quality management, and security. Additional tests may be requested by MasterCard to determine usability of the cardholder 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 cardholder product are assembled with other tested components to form a complete cardholder product.

Additional tests may be requested by MasterCard to determine usability of the cardholder product. MasterCard produces test reports based on these test results.

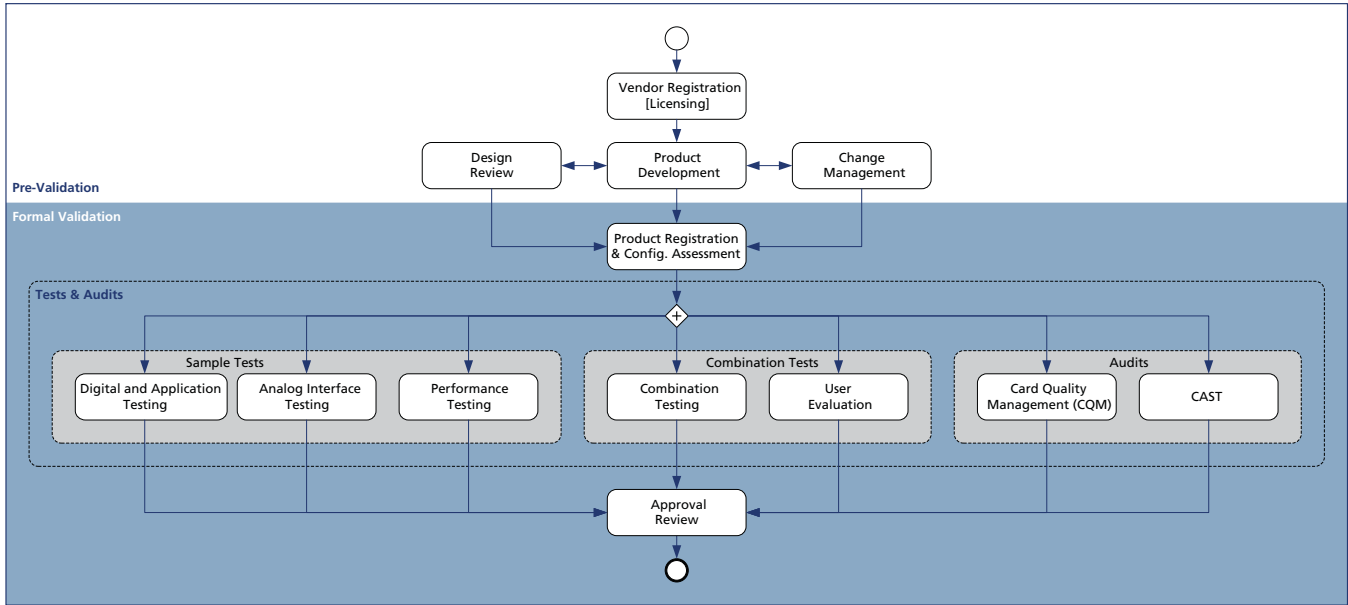
Formal statements of conformity can also be obtained separately for cardholder product components. These components can then be assembled with other tested components to form a complete cardholder product.

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

Once the complete cardholder product 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](mailto:testing@paypass.com) or visit the *PayPass* Web site at [www.paypass.com](http://www.paypass.com).

# MasterCard *PayPass*® Card Vendor Test Process



Test & Audit Subprocess	Test Area	Requirement	Description
Digital and Application Testing	Digital behavior	Mandatory	Formal testing of the software communications protocol of the cardholder product against the EMV Contactless Communication Protocol Specifications and the appropriate <i>PayPass</i> Application specification(s)
	Application behavior	Mandatory	Formal testing of the application's characteristics against the <i>PayPass</i> requirements
Analog Interface Testing	Analog behavior	Mandatory	Formal testing of the electromagnetic characteristics of the cardholder product against the EMV Contactless Communication Protocol Specifications
Performance Testing	Conformity	Mandatory	Formal testing of the <i>PayPass</i> cardholder product to respond in a correct and timely manner to a specified range of commands sent by a <i>PayPass</i> terminal by checking the conformity of the sample
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> terminal devices presenting the cardholder product under test into the terminal landing zone from different angles and with different speeds
User Evaluation	Usability	Optional	Testing the user reaction to the cardholder product and recording their perception
Card Quality Management (CQM)	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 cardholder product
Compliance Assessment and Security Testing (CAST)	Security of silicon and application design	Mandatory	Formal assessment of the security of the chip hardware design and the operating software design

