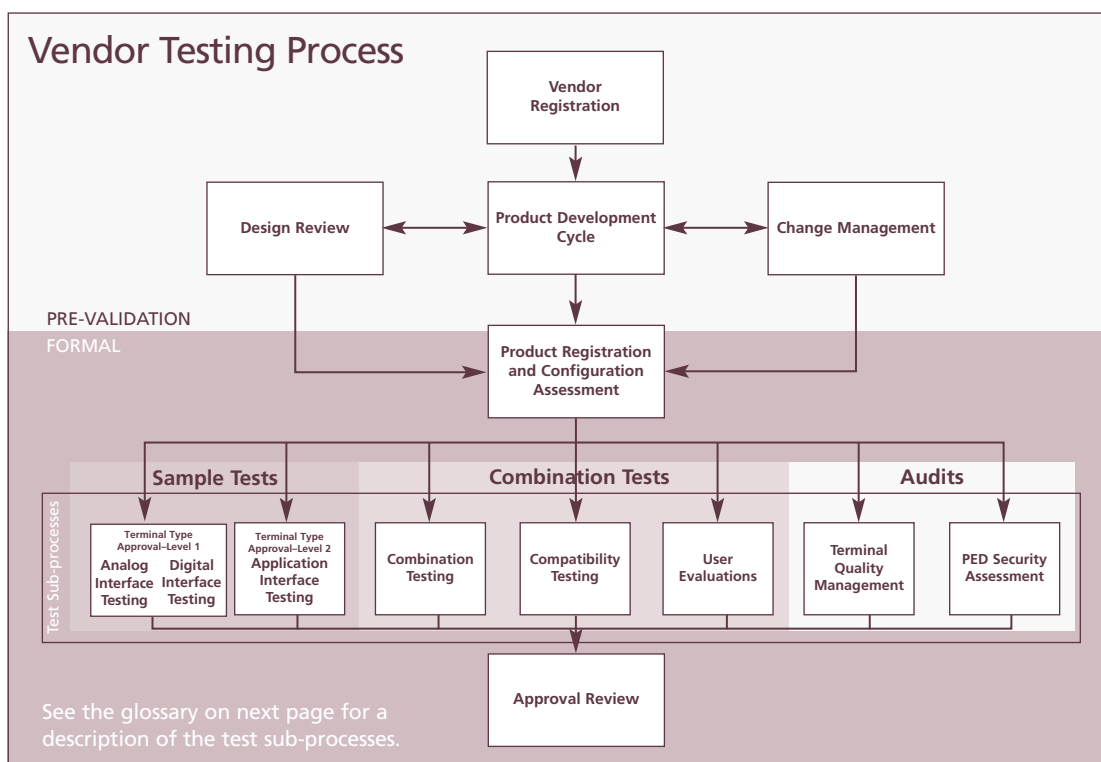


# MasterCard® *PayPass*™ Terminal Vendor Testing Process

The process of obtaining *PayPass* approval



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 goal of the testing process is to increase confidence that each *PayPass* terminal will:

- **Work** smoothly
- **Everywhere** it is accepted
- **Every time** it is used

Upon completion of this process, terminal vendors can obtain the **MasterCard *PayPass* Vendor Product–Letter of Approval**. The terminal can then be represented 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. The EMV approval is out of scope of 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 ad hoc expertise on testing tools and processes. In this way products are pre-validated

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 the MasterCard requirements for *PayPass* terminal implementations.

The 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 terminal requirements are defined by MasterCard: analog and digital interfaces, application interface, quality management, and PIN entry device security. These tests are performed by accredited test laboratories.

Successful completion of these tests results in formal statements of conformity from MasterCard.

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

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

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

## Testing program

The *PayPass* Terminal Vendor Testing process relates directly to MasterCard testing goals:

- **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?)

## Contact information

For further information, please contact:

**Testing and support services e-mail:**

**testing@paypass.com**

*PayPass* Web site: **www.paypass.com**

## Terminal Vendor Test Sub-processes Glossary

Test Sub-process	Test Area	R	Description
Terminal Type Approval Level 1	Analog behavior	M	Formal testing of the electromagnetic characteristics of the product against <i>PayPass</i> ISO/IEC 14443 requirements.
	Digital behavior	M	Formal testing of the software communications protocol of the product against <i>PayPass</i> ISO/IEC 14443 requirements.
Terminal Type Approval Level 2	Application interface	M	Formal testing of the characteristics of the application against <i>PayPass</i> requirements.
Combination Testing	Behavior with cardholder devices	O	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 with different speeds.
Compatibility Testing	Implementation and usage	O	Testing that a range of <i>PayPass</i> -M/Chip and <i>PayPass</i> -Mag Stripe cardholder devices can be used with the terminal, in a consistent and effective manner.
User Evaluations	Usability	O	Testing of the user reaction to the terminal and recording their perception.
Terminal Quality Management	Product production and change management	M	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 PIN Entry Device (PED)	C	Formal assessment of the PED against Payment Card Industry (PCI) standards.

**R=Requirement level:** M=Mandatory, C=Conditional, O=Optional (if requested by MasterCard)