

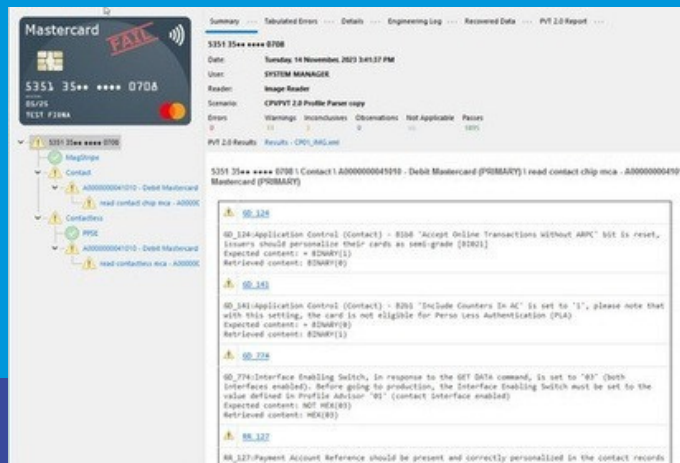


# Mastercard CPV PVT2.0 Test Module EMV® Personalisation Validation Tool

Speeds up Mastercard Worldwide certification and reduces the process cost and delay associated with qualification failure

To achieve Mastercard Worldwide certification Banks, Card Manufacturers, Personalisation Bureaus and Test Laboratories must ensure their cards comply with Mastercard Worldwide's latest Mastercard Profile Advisor v1.3.17 onwards and Rule Set v320 onwards. Obtaining Mastercard Worldwide qualification for M/Chip Advance card and devices and Mobile Payment applications prior to certification can be a timely costly process.

To reduce the risks of failure, cards can be pre-validated prior to submission to Mastercard Worldwide using the Mastercard CPV PVT2.0 Test Module from Barnes. Approved by Mastercard Worldwide. It runs the Mastercard defined test plans transmitted to the tool via the profile file, thereby achieving the same detailed and accurate testing as done in Mastercard labs.



## Mastercard CPV Specifications

MC/Chip Advance Card Application Specification v1.1, 1.2.1, 1.2.2, 1.2.3  
M/Chip Requirements for Contact and Contactless May 2024  
M/Chip Personalization Data Specifications for Contact and Contactless - July 2024  
M/Chip Advance 1.2.3 Biometric Card Application Specification August 2022  
Ecos Contactless Application Specifications, Version 2.2 - February 2024  
Ecos Contact Application Specification, Version 1.1 February 2024  
Ecos Common Personalization Specification, Version 1.1 February 2024  
Ecos Multi-application Specification, Version 1.1 February 2024



## Solution Overview

The Mastercard CPV PVT2.0 Test Module complements Barnes Card Validation Test Tools, the CPTv4. The module runs as integrated scenarios on the new CPTv4 platform and may co-exist with other modules such as Host Simulation.



## THE BARNES ADVANTAGE

Barnes is the chosen test tool of Banks & Issuers, Card Manufacturers, Personalisation Bureaus and Test Laboratories worldwide.

## BUSINESS AGILITY

Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

## COST ELIMINATION

The high business costs and wasted resources of producing and issuing invalid cards are eliminated.

## RISK REDUCTION

The reputational risk issuing invalid EMV cards to end customers is reduced.

## FUTURE PROOFED

Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly makes updated test script packs available to customers via the Barnes website.

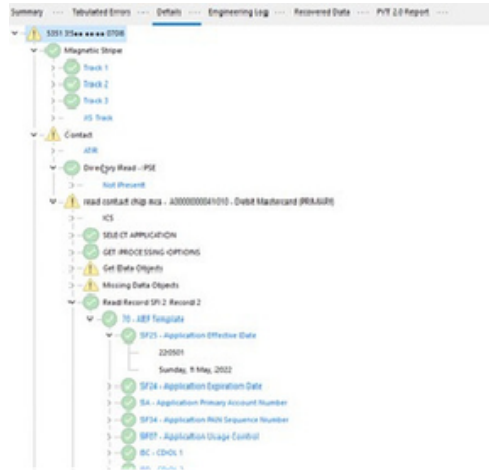
## SERVICE EXCELLENCE

Every client has confidence that, whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.

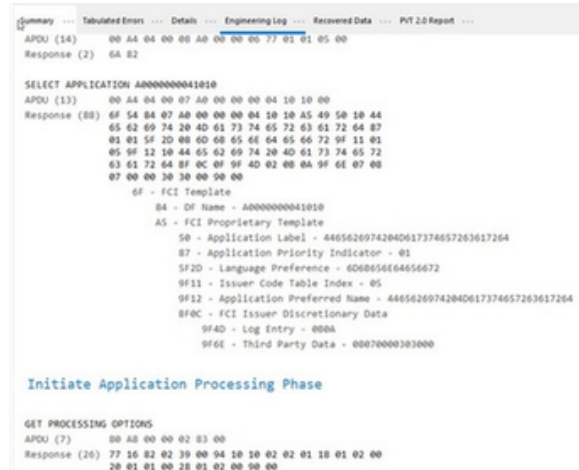


Tabs provide access to [Details Tree](#), [Engineering Log](#) and [Test Report](#). The detailed Results Tree and Engineering Log enable analysis and clear guidance for all levels of user.

## Details Tree



## Engineering Log



A full [Test Report](#) detailing the tests carried out and more in-depth detail on the errors, observations and warnings, plus automatic ICS detection used and a list of all the tests performed.

### Pass/Fail

Overall - **FAIL**

Transaction	Execution Status	Errors	Warnings	Inconclusive	Not Applicable	Passes
debit mastercard (primary)	Executed	0	11	3	66	1095

### ICS

Name	Value
OFFSETVCV1TRACK1	0
OFFSETVCV1TRACK2	0
PIN	1234

### Test Results

Application: **debit mastercard (primary)**

Test Name: **profile.validate\_track\_presence**

Test ID: TR\_001 - Status: **Pass**

Mag Stripe

TR\_001 Track 1 must be present in the physical magnetic stripe for (Debit) Mastercard cards

Test ID: TR\_006 - Status: **Pass**

Mag Stripe

TR\_006 Cardholder Name must be defined in the Track 1 of the physical magnetic stripe

Data item: TRACK1 NAME BYTE 0-26  
 Data item name: TRACK1.CHNAME\_BYTES  
 Expected format: ans2-26  
 Expected content: N/A  
 Retrieved content: FIONA/TEST

Test ID: TR\_007 - Status: **Pass**

Mag Stripe

TR\_007 Expiry Date must be defined in the Track 1 of the physical magnetic stripe

Data item: TRACK1 EXPIRY BYTE 0-2  
 Data item name: TRACK1.EXPIRY\_BYTES  
 Expected format: yymm  
 Expected content: N/A  
 Retrieved content: 2505

## Instant Result Summary

Experience prompt insights with our Instant Result Summary - a clear indication of PASS or, in the event of a failure, access detailed Error or Observation Codes along with insightful Comments.