

EMV Personalisation Validation Tool

Mastercard CPV 13.1 Test Module

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

**SUPPORTED
MASTERCARD CPV 13.1
SPECIFICATIONS**

M/Chip Requirements for Contact and Contactless, 17 December 2019

M/Chip Personalization Data Specifications for Contact and Contactless 10 January 2019

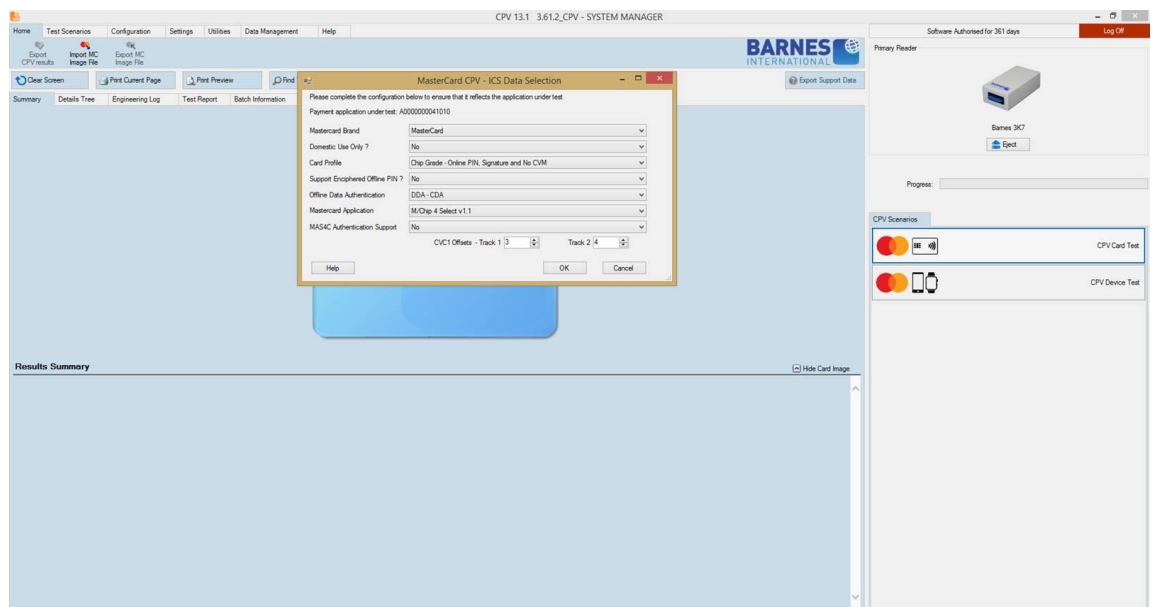
M/Chip Card Personalization Standard Profiles 24 January 2019

CPV – list of hot checks – InterOP v2.25

To achieve Mastercard Worldwide certification Banks, Card Manufacturers, Personalisation Bureaus and Test Laboratories must ensure their cards comply with Mastercard Worldwide's latest Personalization Validation Tool Release 2019 Requirements v13.1 February 2020. Obtaining Mastercard Worldwide qualification for *M/Chip*, *M/Chip* Advance and Contactless cards and *Mobile Payment* applications prior to certification can be a timely and costly process. To reduce the risks of failure, cards can be pre-validated prior to submission to Mastercard Worldwide using the Mastercard CPV 13.1 Test Module from Barnes. Approved by Mastercard Worldwide. It contains the same detailed and rigorous tests as are used by Mastercard's certification labs globally to perform certification of cards, devices and mobiles.

Solution Overview

The Mastercard CPV 13.1 Test Module complements Barnes existing Card Validation Test Tools, the CAT3000v3 and CPT3000v3. The module runs as integrated scenarios on the CPT3000v3 and CAT3000v3 platforms and may co-exist with other modules such as Host Simulation.



ICS Selection using clear drop-down options is followed by a rapid card test generating a Results Summary.

Instant Result Summary showing a PASS, or in the case of FAIL, the Error or Observation Codes and Comments on the Mastercard CPV Tests which caused the failure. Test ID file name is created.



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

Here are some reasons why:

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 of 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

Our clients have every 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.

Engineering Log

```
ENGINEER'S TEST LOG
CPV 13.1 3.61.2/EMV47.1 - New
Test Carried Out: 4:35 PM 2020-05-03 by SYSTEM MANAGER
Card id : 552102xxxxxx976 D2C1
Scenario Auto Select - CPV Card testing

<atr> (012) 3B 68 00 00 00 73 C8 40 11 00 90 00

First Selection A000000004
<end> (011) 00 A4 04 00 05 A0 00 00 00 04 00
<rcv> (038) 6F 22 84 07 A0 00 00 00 04 10 10 A5 17 50 0A 4D
          41 53 54 45 52 43 41 52 44 87 01 01 BF 0C 05 9F
          4D 02 0B 0A 90 00
          84 - DF Name - A0 00 00 00 04 10 10
          A5 - FCI Proprietary Template
          50 - Application Label - MASTERCARD
          87 - Application Priority Indicator - 01
          BF0C - FCI Issuer Discretionary Data
          9F4D - Log Entry - 0B 0A

Next Selection
<end> (011) 00 A4 04 02 05 A0 00 00 00 04 00
<rcv> (002) 6A 82

First Selection A000000010
<end> (011) 00 A4 04 00 05 A0 00 00 00 10 00
<rcv> (002) 6A 82
```

Details Tree

A full **Test Report** detailing the tests carried out and more in-depth detail on the errors and observations, plus the ICS selection used and a list of all the tests performed.



CPV 13.1 Card Personalisation Validation Test Report

| Test Information | |
|---------------------|--|
| Card Identity | 552102xxxxxx976 D2C1 |
| Application Tested | A0000000041010 MasterCard |
| Result | FAIL |
| Date | 03 May 2020 16:36 |
| Test Profile | C:\Barnes\CPV13_update\LocalScenarios\CPV Card Testing.xls 1 A0000000041010 CPV Contact 2 A0000000041010 CPV Contact |
| Test Specifications | PVT Requirements version 13.1 |
| Offline PIN Test | Test not performed |
| Test Performed By | |
| Equipment | CPV 13.1 - 3.61.2 SIN 00014007 |
| Card Reader(s) | CPV Scripts - Contact Interface : Barnes 3K7 |
| Location | New |
| Operator | SYSTEM MANAGER |