

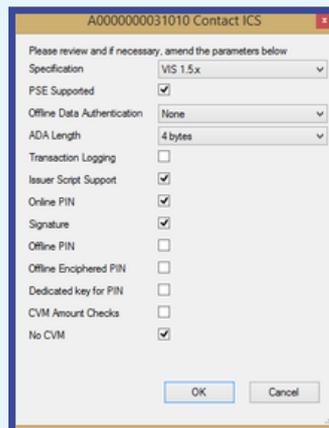


# Visa GPR PVT Module for Self-Testing EMV® Personalisation Validation Tool

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

To achieve Visa certification Banks, Card Manufacturers, Personalisation Bureaus and Test Laboratories must ensure their cards comply with Visa's latest Global Personalisation Requirement (GPR) specifications. Obtaining Visa qualification can be a timely and costly process. To reduce the risks of failure, cards can be validated using the Visa GPR PVT Module from Barnes. Approved by Visa, it uses the same detailed and rigorous tests they use to perform qualification tests on cards. The Visa GPR PVT Module is valid for all regions except Europe to test White Plastic Cards, which are to be submitted to Visa laboratory.

We have also developed the Self-Certification modules for Visa Global and Visa Europe. Self Certification means that once a "Pass" has been achieved, the test report (Visa CCRT report) is submitted to Visa as evidence that the card is compliant with the Visa Rules and matches the associated Visa Personalization Assistant (VPA) profile. This Visa GPR PVT Module is the base module for the Visa Global PVT (Including Self-Service) and Visa Europe Self-Service PVT modules.

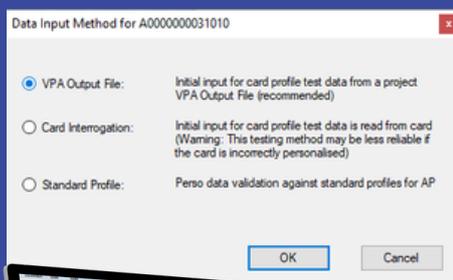


## APPLICABILITY

**Product:**  
 Visa Debit/Credit  
 Electron  
 PLUS  
 DPA  
 Interlink  
 VPAY  
 Prepaid  
 Charge  
 Visa Fleet  
 IDS (India NCMC)  
 Multi-application

**Programs:**  
 VSDC  
 qVSDC  
 MSD

**Test Cases:**  
 Additions and Clarifications  
 Document Version 4.3 June  
 2022  
 Visa GPR 3.0.x A&Cs v4.3  
 Visa EU Addendum v1.6  
 Visa India (NCMC) IDS v1.0  
 Visa US Addendum 2.1  
 Visa AP/CEMEA Addendum to  
 Global Personalization  
 Requirements v1.5 March 2024  
 Visa Canada Addendum to  
 Global Personalization  
 Requirements (GPR) v3.0 v 1.1  
 February 2022



## Solution Overview



The Visa GPR PVT Module complements the CPT3000v3CL Card Validation Test Tool. The module runs as integrated scenarios on the CPT3000v3 platform and may co-exist with other modules such as Host Simulation (including HSM interface), which is required in order to carry out the script processing tests which form part of Visa Certification for Visa Global regions. The overall PVT test result outcome (PASS or FAIL) is dependent on the outcome of the Template Checking (VPA), the Execution of GPR Test Cases, Execution of Visa Europe Addendum Test Cases and Execution of IDS Test Cases.

**Specifications:**  
 Visa Integrated Circuit Card  
 Specification (VIS)  
 VIS 1.4.1, VIS 1.5.x, VIS 1.6.x  
 Visa Contactless Payment  
 Specification (VCPS)  
 VCPS 1.4.2, VCPS 2.0.1,  
 VCPS 2.0.2, VCPS 2.1.x  
 VCPS 2.2.x

Visa Mobile Contactless  
 Payment Specifications  
 (VMCPS)  
 VMCPS 1.4.x

Visa Applet Versions:  
 VSDC 2.7.1, 2.8.x & 2.9.x  
 Visa Mobile Payment  
 Application - VMPA 1.4.x



## 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 of issuing invalid EMV cards to end customers is reduced.

### FUTURE PROOFED

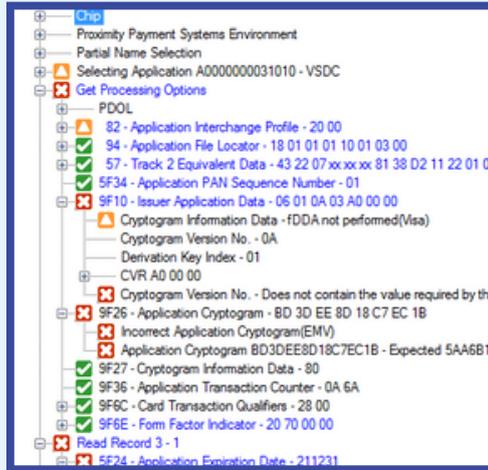
Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly makes updated test script packs available to customers via the Barnes website.

### SERVICE EXCELLENCE

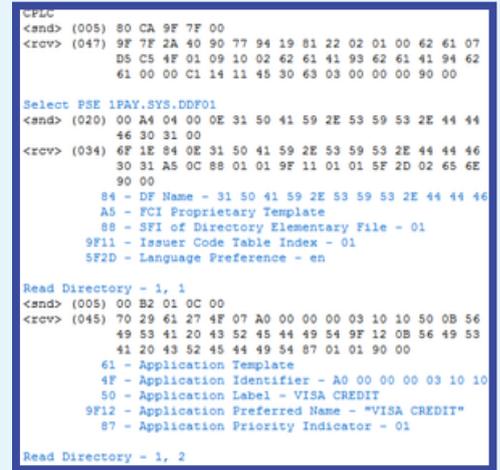
Our clients have every confidence that, whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.

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.

## 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 the ICS selection used and a list of all the tests performed.



Contact A000000031010 : Errors	
Please see below the errors identified during testing. These errors will need to be resolved before the card can be issued.	
DE.12.001.00	5F20 Cardholder Name - To ensure if Cardholder Name is present, its length is correct
DE.42.001.00	9F1F Track 1 Discretionary Data - To ensure that, if present, Track 1 Discretionary Data is formatted correctly
MS.1.001.00	To ensure the Track 1 is present and formatted correctly
Contact A000000031010 : Warnings	
The following items are not actually errors but are likely to cause problems in the future.	
DE.54.002.00	9F56 Issuer Authentication Indicator - To ensure that the Issuer Authentication Indicator (9F56) is not personalized if card is online-only.
SH.3.002.00	9F52 Application Default Action - To ensure Application Default Action (tag '9F52') is set to the recommended value
Contact A000000031010 : Observations	
This section outlines observations made on the card personalisation settings. These observations are for information only and do not affect the card's functionality. Risk teams, to evaluate whether changes should be made to the card.	
DE.2.003.00	9F42 Application Currency Code - To check that the Application Currency Code (9F42) is present when it is not required (if Cardholder Verification Method List condition is set to 'amount checks')

Tests Performed			
Contact A000000031010 GPR			
Listed below are the test cases allocated for this brand. For details of errors, warnings and observations, see a Test Report. Test cases marked "N/A" were not performed because they were not applicable in this instance.			
CV.2.001.00	Pass	CV.2.002.00	Pass
CV.2.004.00	Pass	CV.3.001.00	Pass
CV.7.001.00	N/A	CV.8.001.00	N/A
DA.1.001.00	Pass	DA.2.001.00	Pass
DA.4.001.00	N/A	DA.5.001.00	Pass
DA.7.001.00	N/A	DA.9.001.00	N/A
DA.11.001.00	N/A	DE.1.001.00	Pass
DE.2.003.00	Observation	DE.2.004.00	Pass
DE.3.001.00	Pass	DE.3.002.00	Pass
DE.4.002.00	Pass	DE.5.001.00	Pass
DE.6.001.00	Pass	DE.6.002.00	Pass
DE.6.002.02	N/A	DE.6.002.03	Pass
DE.6.003.01	N/A	DE.7.001.00	N/A
DE.8.001.00	N/A	DE.8.002.01	Pass
DE.9.002.01	Pass	DE.9.002.02	N/A
DE.11.002.00	Pass	DE.11.002.01	N/A
DE.11.002.03	N/A	DE.12.001.00	Pass
DE.13.002.00	N/A	DE.14.001.00	Pass
DE.17.001.00	Pass	DE.17.002.00	Pass
DE.17.004.00	Pass	DE.20.001.00	N/A
DE.20.003.00	N/A	DE.20.004.00	N/A

## VPA Data Comparison

Tag	Description	Personalized Value	Expected Value	Validation Result
9F52	Application Default Action	C3380000	82081000*	Fail
82	Application Interchange Profile	1C00	1800	Fail
50	Application Label	VISA CREDIT	VISA CREDIT	Pass
87	Application Priority Indicator	01	01	Pass
9F07	Application Usage Control	FF00	FF00	Pass
9F5D	Available Offline Spending Amount	not personalized	01	Fail
8C	CDOL 1	9F02069F03069F1A0295055F2A029A039C019F3704	9F02069F03069F1A0295055F2A029A039C019F3704	Pass
8D	CDOL 2	8A029F02069F03069F1A0295055F2A029A039C019F3704	8A029F02069F03069F1A0295055F2A029A039C019F3704910A	Fail
8E	CVM List	000000000000000020142031E031F00	0000000000000000201031E031F02	Fail
9F319F66	Transaction Counter Limit 1	not personalized	05	Fail

