To achieve payment scheme certification, card issuers must ensure their cards comply with their chosen payment scheme's personalisation requirements. To prevent the costly production of invalid EMV cards and delays in the formal card personalisation process required by the payment schemes, the Barnes EMV Personalisation Validation Tool enables issuers to validate and pre-certify their cards against the latest payment scheme requirements, as well as their own business requirements.

The new Barnes 60H Motorised Triple Interface Reader working with Barnes CPT Batch software allows you to gain efficiency when testing batches of cards. You can stack up to 60 embossed cards for testing and free up staff to perform other work while the tests are performed without further user intervention.

**EMV Personalisation Validation Tool**

**CPT Batch**

Speeds up development and payment scheme certification. Enables batch testing and QC for issuing valid EMV cards

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**Solution Highlights**

- Quickly tests that data on the chip and magnetic stripe are correct and valid according to issuer profiles and all major payment scheme specifications.
- Supports all payment devices: contact and contactless cards, mobile phones, tokens.
- Software developed in collaboration with Visa and Mastercard, and also used by American Express, Discover, JCB, major banks and card bureaus globally.
- Essential in all EMV chip card issuing, personalisation, implementation and support operations.
Multiple Application Tests
In a single card insertion, the tool confirms the data on the chip and magnetic stripe is correct and valid according to the issuer profile. The card account number and issue / expiry dates are displayed for visual verification of the card embossing indent print. Optionally, the card livery can be displayed to verify the correct card stock has been used.

Multi-level User Interface
The tool is designed to be easy to use for both the non-technical operator and at the same time provides detailed technical information for IT and engineering staff. Production control features include User Access Control, Batch Test and Event Logging, which are supplemented with intuitive data element displays for problem solving and data analysis.

Powerful Diagnostic Tools
Data displays include Card Test Result Summary; Detailed Test Result Tree and Full Engineering Log. Hyperlinks between the various levels of displays and directly to the EMV and payment scheme specification references allow the user to quickly identify and diagnose problems.

PCI Security
PCI compliant masking, log-out and user controls enable full control of personal cardholder data on screen and in reports.

Adaptable Test Scenarios and Scripts
Users can easily define "QuickTest" profiles to test their own chip data requirements, in line with, or in place of, payment scheme requirements. Test scripts are not restricted to EMV; other types of smart card application can also be tested, for example payment, security and loyalty applications.

Cryptographic Authentication
Static (SDA), Dynamic (DDA) and Combined (CDA) data authentication is fully supported by the tool. RSA algorithms are also supported.

Key Management
Complete with a comprehensive set of Visa, Mastercard, JCB and Discover public keys. Additional keys can be imported through a key management system.

Network Capability
The tool can be used in a networked environment with individualised user access levels and settings. All test scripts, scenarios, standard profiles, public keys and reporting for multiple tools can be managed centrally, ensuring consistency across all units.

Remote Testing
Issuers and scheme authorities can securely evaluate and approve cards remotely, eliminating the costs and delays of sending sample cards around the world.

Optional Solutions

Host Simulation Module
Adds the ability to verify secret keys either in software or with the optional Hardware Security Module connectivity.

Payment Scheme Certification Test Modules
Allow certification tests to be performed to accelerate payment scheme approval. The Barnes 3K7 reader is required for certification testing.
- Mastercard CPV
- Visa GPR
- eftpos CPC
- JCB
- Discover D-PAS CPV
- RuPay
- GIE CB

Technical Specification

Software:
- OS: Windows 7 & 10 (32-bit & 64-bit)

Card Readers:
- For Batch Testing: Barnes 60H Triple Interface reader with hopper for batch testing
- For Single Card Testing: Barnes 3K7 Triple Interface reader (Magnetic Stripe, Contact and Contactless chip)
- Barnes 3R1 reader for metal/titanium cards
- PC/SC reader compatible