UL Offers a Complete EMVCo Level 1 and Level 2 Device-Testing Portfolio

Meet payment scheme level 1 and level 2 approval requirements

EMVCo Contactless Level 1 Proximity Coupling Devices (PCDs) 3.0

EMVCo PCDs L1 Type Approval (TA) or debug

In accordance with EMVCo procedures, vendors are required to perform the following tests on the PCD samples. These tests confirm the compliance of the electrical characteristics of the power and data exchange between Proximity IC Card (PICC) and PCD and the compliance of the digital data exchange between PICC and PCD, respectively.

- **Digital**
  Digital testing is designed to test the terminal's contactless protocol frame exchange and ensure the PCD terminal communicates properly with reference TEST PICC, given their different responses. These tests also check command timings and error responses. The test tool used is from NI – National Instruments.

- **Analogue**
  Analogue testing is designed to test the terminal's contactless functionality in regard to its radio frequency capability. The main focus of these tests is to check the radio frequency, power transfer, waveform timing, load modulation responsiveness, etc. The test tool used is from NI – National Instruments.

- **Interoperability**
  Interoperability testing verifies the terminal product sufficiently operates with a representative set of EMVCo-approved PICC products for multiple test positions in its operating volume. PICC products currently consist of a range of mobile payment devices.

EMVCo Contact Level 1 4.3c
- Electrical
- Digital

EMVCo Contact Level 2 4.3.x
- Baseline
- Additional configuration
- Additional OS
- Additional PIN pads
- Use of Galitt, ICC Solutions test tools

Functional Contactless Level 2 – Payment Scheme Route

Visa® Contactless Device and SoftPOS Type Approval
- VCPS 2.2 – quick Visa Smart Debit/Credit (qVSDC only)
- VCPS 2.1.3 – qVSDC only or qVSDC and magnetic-stripe data (MSD)
- VCTKS – Transit
- VRTPKS – SoftPOS
- Cross-testing – currently mandatory for all testing except SofPOS

Mastercard® Contactless Device Type Approval
- Type approval compliance against MCL 3.1.x
- Functional testing using either Galitt test tools
- Using manual or test environment interface (TEI) automation
- Combination, integration and performance as an integral part of the type approval process or as part of a debug session in parallel with EMVCo Level PCD development

American Express® Contactless Device and SoftPOS Type Approval
- expresspay 4.0.x

Discover® Contactless Device Type and SoftPOS Type Approval
- D-PAS v1.x

UnionPay® Contactless Device Type Approval
- UnionPay (UPI) authentication overseas test cases V2.8

PURE Contactless Device and SoftPOS Type Approval
- PURE specification V2.1.x

Please note we use a range of accredited test tools. Contact your sales account manager for more details regarding the tools used for the service you require.

For more information on how to obtain EMVCo and payment scheme level 1 and level 2 approval, contact ul.cyber@ul.com.

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