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# INQ® End-to-End Level 1 Platform

## EMV 2000 Level 1 Terminal Test Suite

### Description

The EMV specifications indicate how a terminal needs to communicate with a smartcard (referred to as the level 1 interface) and access its application (level 2). In addition, Type Approval specifications have been issued by EMVCo, against which a terminal must be tested by one of the EMV test labs.

Integri's EMV 2000 L1 Terminal Test Suite contains the full set of tests required by EMVCo to obtain EMV 2000 Level 1. The test suite is referenced by MasterCard and is used by different EMV labs as type approval tool.

The tool is indispensable for the following reasons:

- The terminal manufacturer can use it to test and debug terminals before going into certification.
- As the same tool is used in the labs, the tool can reduce the number of test sessions considerably and therefore represent a major cost saving.

Integri's EMV L1 Terminal Test Suite runs on top of Integri's 'INQ Level 1 Platform – Contact Terminal Testing Configuration' and tests the compliance of any EMV terminal to the EMV 2000 Level 1 specifications (functional part only: no mechanical or electrical tests). The tool is easy to use and contains around 600 predefined scenarios based on MasterCard specifications.

The terminal runs a loop-back application while the STAR 3150 hardware adapter emulates a smartcard. Each time a test is run, the tool in the STAR 3150 loads a scenario that precisely defines the expected terminal commands and corresponding smartcard responses. Any significant discrepancy between the terminal's expected and actual behavior is automatically reported as a test error.

This product enables

- Simulation of various conformant and non-conformant behaviors at transport level
- Terminal debugging during implementation
- Improved terminal quality before official level 1 certification
- Detailed tracing and analysis of transactions between the terminal and smartcard


Automatic selection of tests according to the terminal parameters provided

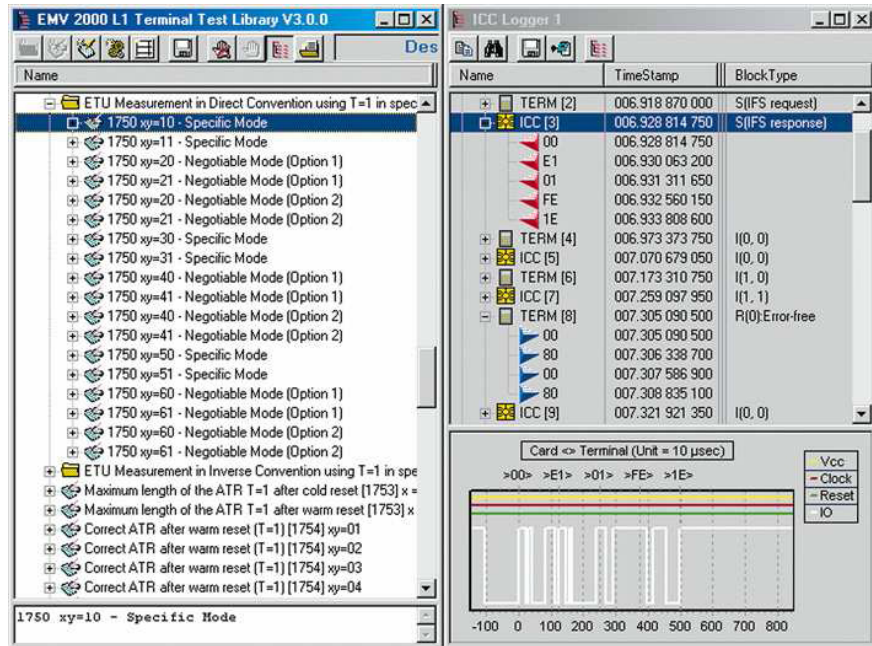
Test scripts can be modified with Integri's Level 1 Script Editor.

### Highlights

- Complete set of functional tests for ICC terminal level 1 approval – ATR and protocol tests only
- Enables full detail tracking of completed transactions from bit to packet level
- Can run tests in unattended mode using signals from the STAR 3150

Out of the box testing





## Technical Specifications

- EMV 2000 Integrated Circuit card (ICC) – specifications for payment systems, Version 4.1
- MasterCard specifications: ICC Terminal Type Approval: Test Bench Description, Executable Tests – TBD/EXE/T01, issue 3.2, erratum #1

## Product Family

Runs on the INQ Level 1 Platform - Contact Terminal Testing Configuration

Requires Micropross STAR 3150 hardware adapter

Particularly useful in combination with the Smartcard-Terminal Logger and the Level 1 Script Editor.

[www.integri.com](http://www.integri.com)



**Integri**

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Integri is a wholly owned, autonomous business unit of Clear2Pay, an international financial technology company focused on delivering globally applicable solutions for secure, timely electronic payments. Clear2Pay operates from 13 international offices and currently employs over 400 staff.

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