

# SmartBox Toolset

## Develop & Test Tool Set for Smart Card and Terminal System

SmartBox offers you an extensive range of stand-alone, cost effective certification test packages based on the Smart platform with a **Super Script Engine** supporting EMV, PBOC, VSDC, qVSDC, qPBOC, E-Cash etc, suitable for terminal application functional Acceptance Validation.

### Hardware

SmartBox, SmartCard Probe, USB dongle  
Software Lock.

### Software

Script Engine Host (C, C++ style script), Smart Card OS support EMV, PBOC, VSDC, qPBOC, E-Cash applications, Test Set, Script Editor, USB driver.

**Easier, Faster, Stronger and happier.**

The SmartBox test tool set includes,

- **Develop Tools**

Used for the smartcard related terminal development, and works as a real smart card.

- **EMV level 2**

fully implement the EMV 4.2 version specification, and corrected by many terminals.

- **PBOC**

fully checked according to the test cases.

- **Visa ADVT**

confirmed by Visa test plan to ensure correct device configuration.

- **PBOC E-Cash**

Built with the PBOC E-Cash specification to test the terminal.

- **Visa ADVT qVSDC Device Module**

confirmed by Visa for qVSDC Intelligent Reader combination testing.

- **Visa Contactless (qVSDC and MSD)**

confirmed by Visa for contactless device application certification testing.

- **PBOC contactless**

qPBOC specification to give the terminal a full validation.



SmartBox equipped with a Script Engine can make the validation and development easy and quick.

It has the characteristics below,

#### **Script Engine:**

Dynamic and accurate parsing the test cases with a flexible, convenient, easy and visible scripts.

#### **Test manager:**

Easy operation, Automatic test, Clear processing, Full result analysis and log the test trace.

#### **Automatic testing:**

Test Manager can run the test scripts automatically one by one, and sum up all the test results in a reasonable interface.

#### **Script Editor:**

The IDE editing the test scripts provides the tooltip, syntax highlighting, Microsoft visual studio like editor.

#### **Smart Card Simulator:**

A real smart card operating system provides you with a maxim exchange between the terminal and smart card.

#### **Algorithm:**

DES, 3DES, RSA, SHA1, SDA, DDA, CDA etc.

#### **Syntax:**

A C/C++ style script language with a specific functions and processing for the Terminal validation and development.

#### **Test Script:**

Built with many library functions, gives a deep insight analysis, and faster modification.

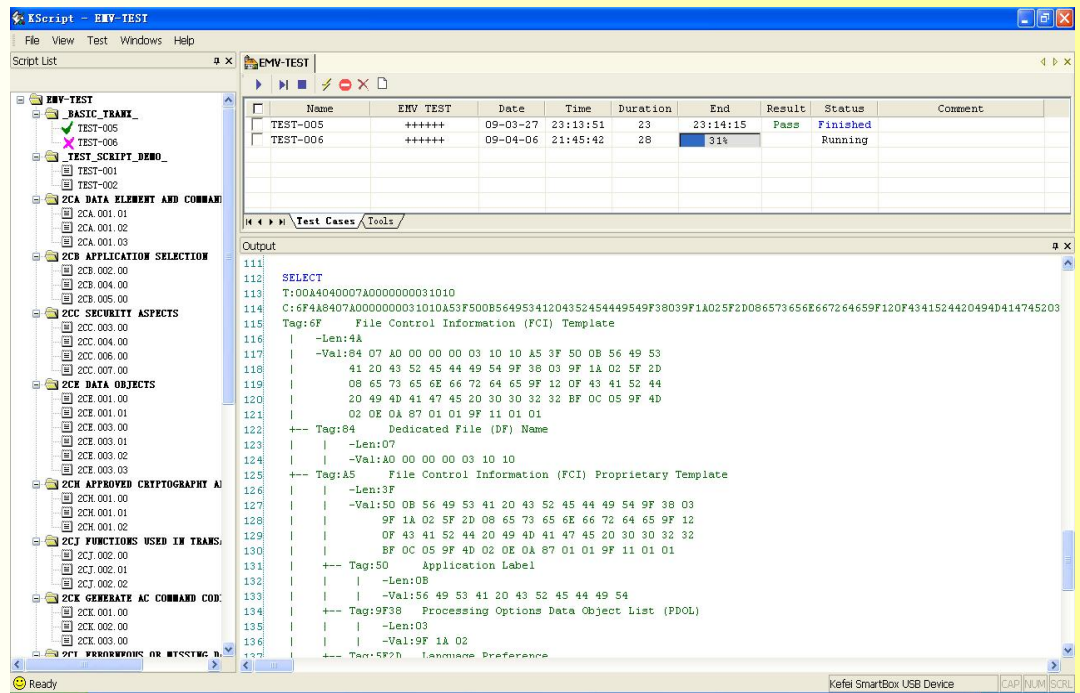


# Smart Box Toolset PC Application

Below gives the PC application explanation in brief. The test manager and script editor can work separately.

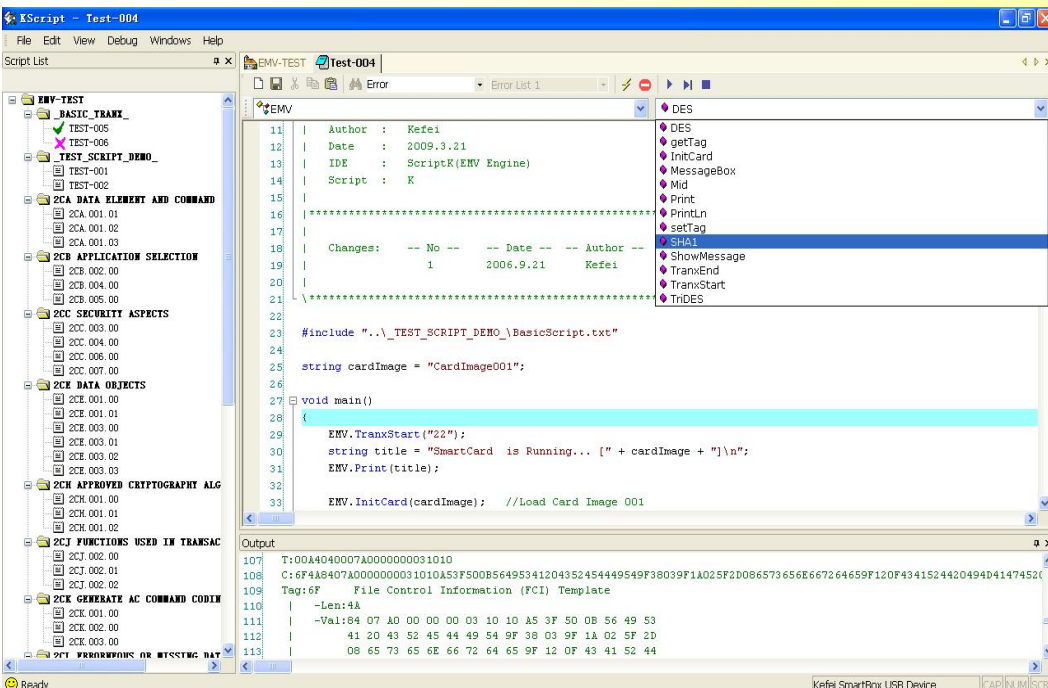
## Test Manager:

Automatic test can make you relax and freely control the test processing. Output view gives a detail interpretation of the EMV APDU commands and sub data information. Interaction with the whole test and bring out all the incorrect items. Pausing at any test point when you meet an unknown situation. Giving a clear description of the test cases according to the specification.



## Script Editor:

As a super script file editor, this component armed with a heavy syntax and tool tip facility functions. The Script Engine can process the specific EMV Engine and other test Engine, which facilitates the validation to the full specification acceptance. The test scripts utilizing the C and C++ syntax such as the for, if and so on, can process all the test situations according to the specification test plan. The syntax highlights and function tool tip can make you edit the script files easily and correctly, meanwhile, you can add the readable comments into the script files to clarify the aim of the test cases.



## Script Debugging:

VC style IDE with the debug output function.

After finishing a script file, we can debug it in the IDE, and check the output view to see if errors occurred.

Easy Go— Make it easy to develop the high quality test scripts.

Time saving— Save the developing and testing time.

Implement the algorithm via the script language freely.