

# MP65

A CONTACT SMART CARD TESTER,  
IDEAL FOR APPLICATIVE TESTS



SIM format slot

ID1 slot for contact smart card

### SUPPORTED PROTOCOLS

- ▶ ISO 7816
- ▶ SWP
- ▶ USB 2.0
- ▶ USB-IC

### APPLICATION FIELDS

- ▶ Personalization
- ▶ Pre-personalization
- ▶ OS loading
- ▶ Electrical testing

### ELECTRICAL TESTS COVERED

- ▶ Adjustment of Vcc/Voh
- ▶ Adjustment of clock frequency
- ▶ SWP baudrate
- ▶ Shmoo plots

### Business areas



Telecom



Banking



E-health



M2M



USB sticks



NFC enabled U-SIM



Contact micro-module

## KEY POINTS

- ▶ Emulation of a contact smart card reader, or a CLF
- ▶ Compatible with smart cards, micro-modules, M2M components
- ▶ Support of the ISO/IEC 7816-3 and -4, USB 2.0, SWP/SHDLC/HCI protocols
- ▶ Support of the USB-IC protocol available as an option
- ▶ Completely supports the ETSI TS 102 613 and TS 102 622 specifications
- ▶ Possibility to adjust the Vcc, clock frequency, SWP baudrates
- ▶ Open platform: integrate the MP 65 inside your own test platform

## SUPPORTED PROTOCOLS

<b>▶ ISO/IEC 7816-3</b>	
T=0 and T=1 protocols	100% implemented, managed by firmware and FPGA, accelerated by hardware
<b>▶ USB 2.0</b>	
Available speeds	Low speed, full speed
Classes	ISO/IEC 7816-12, mass storage, custom protocols
<b>▶ USB-IC (optional)</b>	
<b>▶ SWP (ETSI TS 102 613 and TS 102 622)</b>	
SWP transmission	Assisted by hardware
LLC layers support	ACT, CLT and S-HDLC realised by firmware
<b>▶ Raw mode : implementation of custom protocols and support of out of standard chips</b>	

## PROGRAMMABLE PARAMETERS

<b>PHYSICAL PARAMETERS</b>	
<b>▶ Voltages</b>	
Vcc adjustable	
<b>▶ Frequency</b>	
ISO 7816	500kHz to 10MHz (duty cycle @ 50%)
<b>▶ Pin states : all pins are managed separately</b>	
<b>ISO 7816 COMMUNICATION PARAMETERS</b>	
Adjustable parameters	All normative timings (WWT, BGT, ...), parity, pull-up resistor, ...
<b>SWP COMMUNICATION PARAMETERS</b>	
Available baudrates	106, 212, 424, 848 kbps, 1.6Mbps
Adjustable parameters	Activation time, P2, P3
<b>USB-IC PARAMETERS</b>	
Voltage classes supported	1.8V and 3.0V