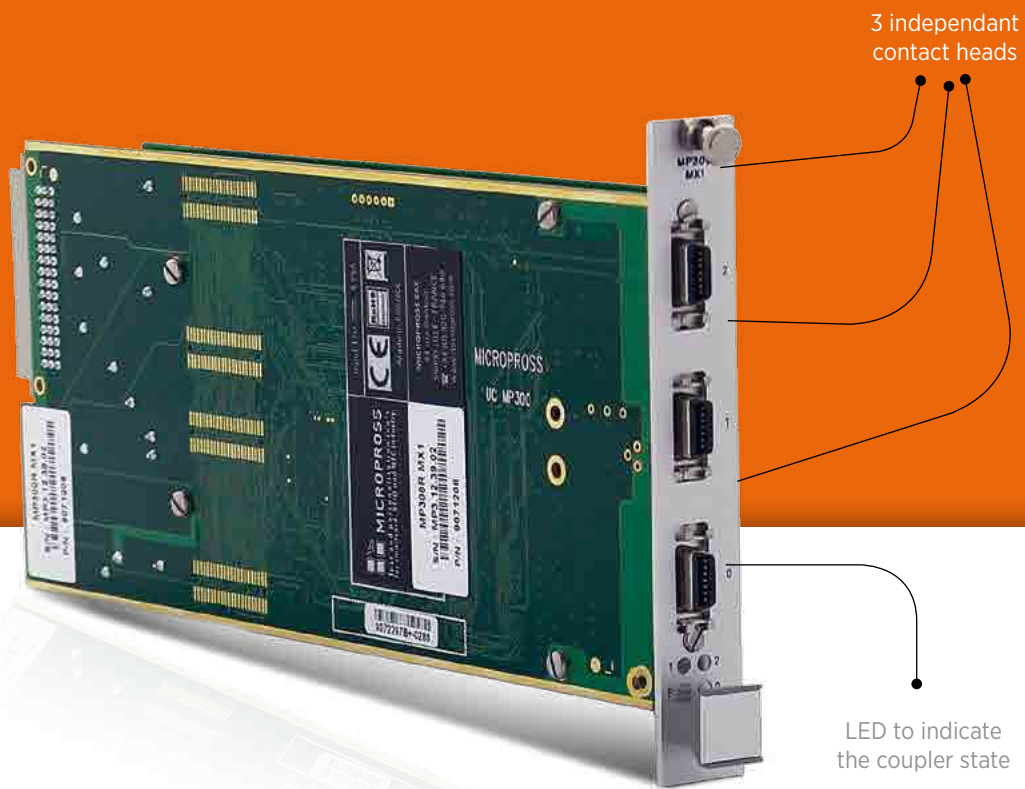


MP300 MX1

A MULTIPROTOCOL CONTACT COUPLER



SUPPORTED PROTOCOLS:

- ▶ ISO 7816
- ▶ SWP
- ▶ USB 2.0
- ▶ SD/MMC

APPLICATION FIELDS:

- ▶ Personalization
- ▶ Pre-personalization
- ▶ OS loading

Business areas



Telecom



Banking



E-health



M2M



USB sticks



NFC enabled U-SIM



SD cards

KEY POINTS

- ▶ Access to 3 smartcards simultaneously (all communication parameters are independant)
- ▶ Support of the ISO/IEC 7816-3 and -4, SWP, MMC/SD, microSD, USB 2.0 protocols
- ▶ SWP, MMC/SD, microSD and USB 2.0 can be unlocked separately
- ▶ Support of a multitude of memory chips
- ▶ Fully compatible with ETSI TS 102 613 and ETSI TS 102 622 specification
- ▶ Open for implementation of custom protocols
- ▶ Support of the fastest smartcards
- ▶ Compatible with micro-modules, smartcards, M2M components
- ▶ Fast hardware assisted data transmission mechanism, ensuring the maximum throughput

SUPPORTED PROTOCOLS

▶ ISO/IEC 7816-3	
T=0 and T=1 protocols	100% implemented, managed by firmware and FPGA, accelerated by hardware
▶ USB 2.0 (OPTIONNAL)	
Available speeds	Low speed, full speed
Classes	ISO/IEC 7816-12, mass storage, custom protocols
▶ SWP (ETSI TS 102 613 AND TS 102 622) (OPTIONNAL)	
SWP transmission	Assisted by hardware
LLC layers support	ACT, CLT and SHDLC realised by firmware
▶ MMC 4.1 / SD (OPTIONNAL)	
Data bits	1 and 4 data bits
▶ RAW MODE: IMPLEMENTATION OF CUSTOM PROTOCOLS AND SUPPORT OF OUT OF STANDARD CHIPS	

PROGRAMMABLE PARAMETERS

PHYSICAL PARAMETERS	
▶ VOLTAGES	
Vcc, Voh adjustables	
▶ FREQUENCY	
ISO 7816 and MMC/SD clock frequency	MMC: 100Hz to 26 MHz ISO: 100Hz to 20 MHz
▶ PIN STATES: ALL PINS ARE MANAGED SEPARATELY	
ISO 7816 COMMUNICATION PARAMETERS	
Adjustable parameters	All normative timings (WWT, BGT, ...), parity, pull-up resistor, ...
SWP COMMUNICATION PARAMETERS	
Available baudrates	212 kbps, 424 kbps, 848 kbps, 1696 kbps, 1724 kbps
Adjustable parameters	Activation time, P2, P3

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