MARKLAND MCR0110v5

13.56 MHz Contactless Smart Card Reader/Writer with SAM



Secure identification with contactless, NFC, and optional SAM in a single device.

MCR0110v5 is the ideal combination of contactless and near field communication (NFC) technologies protected by an optional Secure Access Module (SAM). This PC-linked dual interface reader works in end user environments where virtually all types of credentials are used, even in mixed populations.

With its all-in-one concept, MCR0110v5 enables a smooth transition from well-established traditional technologies into emerging NFC applications, pushing new business. It represents the perfect mix between modern, stylish design and the ergonomic use of any credential form

factor, like ID-1 cards, tokens, or NFC-enabled smart phones. With its protected SAM socket, uTrust 4711 conveniently adds security to most contactless applications.

Experience convenience, transactiontime efficiency, security, f lexibility, and full NFC capability for applications such as network logon, secure web based transactions, and even NFC based customer loyalty programs.

User Convenience

 Modern housing design optimized for easy and ergonomic operation, even in limited space environments

Convergent

 Features contactless, Lascom, and NFC technologies for use in mixed credential populations

Interoperable

 Supports major card ICs, standards, and technologies in just one device

Fast

 Transaction time optimized with support of 848 kpbs in ISO/IEC 14443 and 600 kpbs in ISO/IEC 7816



Parameter	Details
Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Communication Speed	12 Mbps (USB 2.0 full speed)
Supported Standards	ISO/IEC 7816 Part 1 to 4
Supported Card ICs	All major ISO/IEC 7816 compliant Smart Card IC support
Contact Smart Card Protocols	T=0, T=1
Smart Card Interface Speed	Up to 600 kbps (depending on card) TA1=97
Smart Card Clock Frequency	ISO/IEC 7816 compliant up to 5 MHz; Operates up to 12 MHz
Supported Smart Card Types	ISO/IEC 7816 voltage classes A/B/C (5V, 3.3V, 1.8V)
Smart Card Detection	Card present switch; Automatic power on/off; Short circuit protectio
Contact Card Size	ID-000 (25 mm × 15mm)
Supported Standards	ISO/IEC 14443 A&B Part 1 - 4
Contactless Smart Card Protocols	T=CL
Supported Contactless Card ICs	• MIFARE™ (Classic, Ultralight, Ultralight C, MIFARE PLUS, DESFire, DESFire EV1 2/4/8k), FeliCa™, Calypso, CD21, NFC Forum Tag types 1/2/3/4
Data Transfer Rate	106/212/424/848 kbits/s, depending on card IC
Antenna	Integrated
DRIVER	
PC/SC DRIVER	PC/SC Specification Ver. 2.01.14 for: • Windows® 7/8/10/11 (32 and 64 bit), Windows® Server 2008/2012/2016/2019, WindowsXP, • MacOS 10.9.x - 12.2.x, • Linux 2.6.x, and 3.x, 4.x, 5.x (32 and 64 bit), • Android 8.0 以上
Software	PC/SC API; CT-API (through wrapper on top of PC/SC); M-Card API (through wrapper on top of PC/SC)
Operating condition	
Power Supply	Bus-powered USB
Power Consumption	<120 mAexcluding SAM;<185 mA with SAM; <500 uA in standby mode
Dimensions(L x W x H)	112 x 80x21mm
Weight	117 g ± 5%
Operating Temperature Range	0° to 50° C (32° to 122° F)
Storage Temperature Range	-25° to 85° C (-13° to 185° F)
Operating Humidity Range	Up to 95% RH non-condensing
Connector	USB Type A Connector
Status Indicator	LED
Firmware	SmartOS™
Firmware In-Field Upgradeable	Yes
Certifications / Compliance	
Systems/Standards	ISO7816,ISO/IEC 14443, USB 2.0 Full Speed, CCID, Microsoft® WHQL
Regulatory/Environmental	RoHS