MCR2100

Dual interface smart card reader/writer

Dual interface USB CCID Smart card reader/writer supports contact ISO/IEC 7816 (ID-1 Slot) contactless ISO/IEC 14443.

MCR2100 is the ideal combination of contact, contactless technologies in just one single device. Supporting ISO/IEC 7816 contact and 13.56 MHz contactless cards, this PC-linked dual interface reader features end-user environments where virtually all kinds of credentials are being used even in mixed populations.

With its all-in-one concept the Dual Interface enables a smooth transition from well-established traditional technologies into emerging Information Security applications pushing new business.

It represents the perfect mix between modern stylish design and the ergonomic use of any credential form factor. The end user experiences convenience、 transaction-time efficiency、 security、 flexibility, for use applications such as network log-on、 secure web-based transactions、 governmental use applications、 online tax declarations、 online games、 automatic control、 IoT......

User Convenience
• Modern design optimized for easy and ergonomic operation, even in limited space environments

Convergent
• Prominent contact and contactless Dual-interface technologies for use with mixed credential populations

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

Fast
• Transaction time optimized with support of 848 kbps in ISO/IEC 14443 and 600 kbps in ISO/IEC 7816 for maximum end user acceptance

Parameter	Details
Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Communication Speed	12 Mbps (USB 2.0 full speed)

Support	
Supported Standards	ISO/IEC7816, ISO/IEC14443 A&B

Contact Smart Card Interface	
Supported Contact 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)
Power to Smart Card	60mA in Class A; 55mA in Class B; 35mA in Class C
Smart Card Detection	Card present switch; Automatic power on/off; Short circuit protection
Card Size	ID-1
Contact Card Slot	ID-1 Sliding Contact Socket (8 pin)
Durability	Sliding Contact 100,000 card insertions

Contactless Smart Card Interface	
Supported Contactless Standards	ISO/IEC 14443 A&B Part 1 - 4
Protocols	T=CL
Supported Contactless Card ICs	MIFARE® Classic Family, MIFARE Ultralight Family, MIFARE Plus Family, MIFARE DESFire Family, FeliCa™, NFC Forum Tag types 1/2/3/4
Data Transfer Rate	106/212/424/848 kbits/s, depending on card IC
Antenna	Integrated

Driver and Software	
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 and higher
Software	PC/SC API; CT-API (through wrapper on top of PC/SC); M-Card API (through wrapper on top of PC/SC)

Operating Conditions	
Power Supply	USB Bus-powered
Power Consumption	<220 mA, excluding smart card; < 400 mA, with smart card; < 600 µA in Standby Mode
Dimensions(L x W x H)	103 x 67.5 x 15 mm
Weight	95 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	1.5m USB cable with USB type A connector
Status Indicator	Dual color LED
Firmware	SmartOS™
Firmware In-Field Upgradeable	Yes

Certifications / Compliance	
Systems/Standards	ISO/IEC 7816, ISO/IEC 14443, USB 2.0 Full Speed, CCID, Microsoft® WHQL
Regulatory/Environmental	CE, RoHS

TECHNICAL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE.

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For more information:
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