MARKLAND

MCR3508AC

USB Type A&C Contact Smart Card Reader / Writer





This USB CCID PC/SC ultra-compact reader / writer - ideal for online banking / secure access / ID card reader.

The MCR3508AC is the ideal PC-Linked USB contact smart card reader for a huge variety of applications. Providing full compliance with all major industry standards such as ISO/IEC 7816, USB CCID, PC/SC, and Microsoft WHQL the MCR3508C seamlessly works with virtually all contact smart cards and PC operating systems.

Full support and compliance to EMV 2011 and GSA FIPS 201 expands daily use to applications requiring additional security and data protection. MCR3508 represents the perfect mix between modern stylish design, ergonomic handling, and a compact footprint. The extended card data

transmission rate of up to 600 kbps with the support of TA1=97 enables the shortest possible transaction time for maximum end-user convenience.

The Identiv-specific SmartOS™ features easy and complete support of all major contact smart cards. With MCR3508C, the end user experiences convenience, transaction time efficiency, security, and reliability for applications including network log-in, Windows authentication and Single Sign-On (SSO), banking and cashless payment applications, and high-security use cases for federal governments.

Ready To Use

Driver support for all major PC operating systems

Supports All Applications

• Supports all major smart card ICs and technologies in just one device

Fast

• Transaction time optimized for maximum end-user acceptance

Convenient

 Ultra-compact and robust design streamlined for mobile operation

Field Proven Firmware

Powered by Identiv-specific SmartOS™



Host Interface USB 2.0 CCID (USB 1.1/3.0 compliant) 20 Minus (USB 2.0 Full speed) 12 Mings (USB 2.0 Full speed) 12 Mings (USB 2.0 Full speed) 12 Mings (USB 2.0 Full speed) 12 Minus (USB 2.0 Full speed) 12 Minus (USB 2.0 Full speed) 13 Minus (USB 2.0 Full speed) 13 Minus (USB 2.0 Full speed) 14 Minus (USB 2.0 Full speed) 15 M	Parameter	Details
Supported Standards Supported Tag ICS All major ISO/IEC 7816 Part 1 to 4, EMV 2011 Ver .4.3 Level 1 (compliant) Supported Tag ICS All major ISO/IEC 7816 compliant smart cards and synchronous cards T=0, T=1, synchronous cards IC2 and 3-wire Smart Card Interface Speed - 10 to 600 kbps (depending on card) - 7A3-97 Smart Card Clock Frequency SSO/IEC 7816 compliant; Operates up to 16 MHz Supported Smart Card Types Sy, 3v, and 1.8v; ISO 7816 smart card Class A, B, and C Power to Smart Card Types Simant Card Obectcion Card present switch Card present switch - 48 pin ID-1 Sliding Contact Socket - (-4/C8 support - Card present switch - 4 windows * 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - 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 - 4 Mindows * 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows*Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows*Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows*Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows*Server 2008/2012/2016/2019, Windows*XP, - Windows* 7/8/10/11 (32 and 64 bit), Windows*Server 2008/2012/2016/2019, Wi	Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Supported Tag Ics All major ISO/IEC 7816 Part 1 to 4, EMV 2011 Ver 4.3 Level 1 (compliant) Supported Tag Ics All major ISO/IEC 7816 Scompliant smart cards and synchronous cards Smart Card Protocols T=0, T=1, synchronous cards 12C and 3-wire Smart Card Interface Speed ***Up to 600 Robs (depending on card)**** ***Smart Card Clock Frequency ISO/IEC 7816 compliant; Operates up to 16 MHz Smart Card Clock Frequency Sy 3V, and 1.8V; ISO 7816 smart card Class A, 8, and C 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 Type *** 8 pin ID-1 Sliding Contact Socket** *** CACK? Support** *** 200 CACK Support** *** Card present switch *** Priver and Software PC/SC Specification Ver. 2.01.14 for: *** 200 CACK Support** *** Windows** 7/8/10/11 (32 and 64 bit), Windows** Server 2008/2012/2016/2019, WindowsXP, *** Macos 10.9 x - 12.2 x, *** (13 and 64 bit), *** Android 8.0 and higher *** (13 and 64 bit), *** Power Supply USB 8u-powered *** Operating Conditions *** Departi	Communication Speed	12 Mbps (USB 2.0 full speed)
Supported Tag ICS All major ISO/IEC 7816 compliant smart cards and synchronous cards Smart Card Protocols T=0, T=1, synchronous cards I2C and 3-wire - Up to 600 kbps (depending on card) - TA1=97 Smart Card Clock Frequency ISO/IEC 7816 compliant, Operates up to 16 MHz Supported Smart Card Types Sy1, and 1.8V; ISO 7816 smart card Class A, B, and C Power to Smart Card God (God Frequency) ISO/IEC 7816 compliant, Operates up to 16 MHz Supported Smart Card God (God Frequency) ISO/IEC 7816 compliant, Operates up to 16 MHz Supported Smart Card God (God Frequency) ISO/IEC 7816 smart card Class A, B, and C Power to Smart Card God (God Frequency) ISO/IEC 7816 smart card Class A, B, and C Card Size ID-1 - Spin ID-1 Silding Contact Socket - CA/CS support - CArd Size ID-1 - Spin ID-1 Silding Contact Socket - CA/CS support - Card present switch - PC/SC Driver - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, WindowsXP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, WindowsXP, - Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, WindowsXP, - Windows* A, Siz (32 and 64 bit), - Android 8.0 and higher - PC/SC CAPI - CT-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) -	Support	
Smart Card Protocols T=0, T=1, synchronous cards 12C and 3-wire Smart Card Interface Speed * Up to 600 kbps (depending on card)************************************	Supported Standards	ISO/IEC 7816 Part 1 to 4, EMV 2011 Ver 4.3 Level 1 (compliant)
Smart Card Interface Speed * Up to 600 kbps (depending on card) * 7AL-97 Smart Card Clock Frequency ISO/IEC 7816 compliant; Operates up to 16 MHz Supported Smart Card Types SV, 3V, and 1.8V; ISO 7816 smart card Class A, B, and C Power to Smart Card Well of Smart Card Types SP, 3V, and 1.8V; ISO 7816 smart card Class A, B, and C Power to Smart Card Detection Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 Smart Card Detection Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 Card Size ID-1 Smart Card Detection Smart Card Size Smart Card Detection Smart Card Size Smart Card Detection Smart Card Detection Smart Card Size Smart Card Detection Smart Card Detection Smart Card Size S	Supported Tag ICs	All major ISO/IEC 7816 compliant smart cards and synchronous cards
Smart Card Interface Speed Spot Smart Card Clock Frequency Supported Smart Card Washed Sy, 3v, and 1.8v; IsO 7816 smart card Class A, B, and C Power to Smart Card Smart Card Detection Card Size Ontact Type Spot Spot Smart Card Spot Spot Spot Spot Spot Spot Spot Spot	Smart Card Protocols	T=0, T=1, synchronous cards I2C and 3-wire
Supported Smart Card Types Power to Smart Card 60mA in Class A; 55mA in Class B; 35mA in Class C Smart Card Detection Card Size ID-1 8 pin ID-1 Sliding Contact Socket - CAf/CB support - Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 - 8 pin ID-1 Sliding Contact Socket - CAf/CB support - Card present switch - Windows* 7/81/0/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, WindowsXP, - MacOS 10.9x - 12.2x, - Linux 2.6x, and 3.x, 4x, 5x (32 and 64 bit), - Android 8.0 and higher - PC/SC Apresent - PC/SC Apresent - PC/SC Apresent Switch - Windows* 7/81/0/11 (32 and 64 bit), - Android 8.0 and higher - PC/SC Apresent Switch - POWER Support - CT-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top	Smart Card Interface Speed	
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 Type - 8 pin ID-1 Sliding Contact Socket - C4/C8 support - card present switch Driver and Software 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, - elinux 2.6 x, and 3x, 4x, 5x (32 and 64 bit), - Android 8.0 and higher PC/SC API - CT-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) Operating Conditions Power Consumption <6m excluding smart card; <20mA with standard card; <500µA in standby mode	Smart Card Clock Frequency	ISO/IEC 7816 compliant; Operates up to 16 MHz
Smart Card Detection Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 Contact Type * 8 pin ID-1 Sliding Contact Socket • C4/C8 support • Card present switch Driver and Software 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, • Initux 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 Consumption < 6mA excluding smart card; < 20mA with standard card; < 500µA in standby mode	Supported Smart Card Types	5V, 3V, and 1.8V; ISO 7816 smart card Class A, B, and C
Contact Type - 8 pin ID-1 Sliding Contact Socket - C4/C8 support - Card present switch - Card present switch - 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 - PC/SC API - CT-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-	Power to Smart Card	60mA in Class A; 55mA in Class B; 35mA in Class C
* 8 pin ID-1 Sliding Contact Socket * C4/C8 support * Card present switch **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 **PC/SC API **CT-API (through wrapper on top of PC/SC) **Operating Conditions** **Power Supply** **USB Bus-powered** **Power Consumption** **Comments of Special States** **Operating Temperature Range** **Operating Temperature Range** **Operating Temperature Range** **Operating Temperature Range** **Operating Humidity Range** **Up to 95% RH non-condensing** **Durability** **Siding contact 100,000 card insertions** **Connector** **Ism USB cable with USB type A&C connector** **Status Indicator** **Green LED** **Firmware** **SmartOS*** **Systems/Standards** **SO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft** WHQL**	Smart Card Detection	Card present switch; Automatic power on/off; Short circuit protection
Contact Type - C4/C8 support - Card present switch - C4/C8 card present switch - 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 - PC/SC API - CT-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) - M-Card MPI (through wrapper on top	Card Size	ID-1
PC/SC Specification Ver. 2.01.14 for:	Contact Type	• C4/C8 support
• 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 • PC/SC API • CT-API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) • M-Card	· ·	
Software • CT-API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of PC/SC) Power Supply USB Bus-powered Power Consumption • 6mA excluding smart card; <20mA with standard card; <500μA in standby mode Dimensions(L x W x H) 70 x 71 x 7.5 mm Weight 50 g ± 5% Operating Temperature Range 0° to 50° C (32° to 122° F) Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	PC/SC Driver	 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),
Power Supply USB Bus-powered Power Consumption <6mA excluding smart card; <20mA with standard card; <500μA in standby mode	Software	CT-API (through wrapper on top of PC/SC)
Power Consumption <6 mA excluding smart card; <20 mA with standard card; <500µA in standby mode Dimensions(L x W x H) 70 x 71 x 7.5 mm Weight 50 g ± 5% Operating Temperature Range 0° to 50° C (32° to 122° F) Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Operating Conditions	
Dimensions(L x W x H) 70 x 71 x 7.5 mm Weight 50 g ± 5% Operating Temperature Range 0° to 50° C (32° to 122° F) Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Power Supply	USB Bus-powered
Weight 50 g ± 5% Operating Temperature Range 0° to 50° C (32° to 122° F) Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Power Consumption	<6mA excluding smart card; <20mA with standard card; <500μA in standby mode
Operating Temperature Range O° to 50° C (32° to 122° F) Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Dimensions(L x W x H)	70 x 71 x 7.5 mm
Storage Temperature Range -20° to 60° C (-4° to 140° F) Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Weight	50 g ± 5%
Operating Humidity Range Up to 95% RH non-condensing Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Operating Temperature Range	0° to 50° C (32° to 122° F)
Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Storage Temperature Range	-20° to 60° C (-4° to 140° F)
Connector 1.5m USB cable with USB type A&C connector Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Operating Humidity Range	Up to 95% RH non-condensing
Status Indicator Green LED Firmware SmartOS™ Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Durability	Sliding contact 100,000 card insertions
Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Connector	1.5m USB cable with USB type A&C connector
Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Status Indicator	Green LED
Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Firmware	SmartOS™
Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	Firmware In-Field Upgradeable	No
		Certifications / Compliance
	Systems/Standards	ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL
	Regulatory/Environmental	