MARKLAND

MCR3508A

USB Type A Contact Smart Card Reader / Writer



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

The MCR3508A 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 MCR3508A 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.

MCR3508A 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 MCR3508A, 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)	Parameter	Details
Supported Standards ISO/IEC 7816 Part 1 to 4, EMV 2011 Ver . 4.1 Evel 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 -0 to 600 kbps (depending on card) -	Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Supported Tag Ics All major BO/IEC 7816 Part 1 to 4, EMV 2011 Ver 4.3 Level 1 (compliant) Supported Tag Ics All major BO/IEC 7816 compliant 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 kbps (depending on card)**** Smart Card Clock Frequency ISO/IEC 7816 compliant; Operates up to 16 MHz Smart Card Clock Frequency 50,9 3.9 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 presents switch; Automatic power on/off; Short circuit protection Card Size ID-1 Contact Type * 8 pin ID-1 Sliding Contact Socket**	Communication Speed	12 Mbps (USB 2.0 full speed)
Supported Tag ICS Smart Card Protocols T=0, T=1, synchronous cards 12C and 3-wire - Up to 600 kips (6epending on card) - TAL 1-97 Smart Card Interface Speed - Up to 600 kips (6epending on card) - TAL 1-97 Smart Card Clock Frequency SUpported Smart Card Types Supported Smart Card Types Supported Smart Card Types Sy3, ya and 1.8V; ISO 7816 smart card Class A, B, and C Supported Smart Card Types Sy3, ya and 1.8V; ISO 7816 smart card Class A, B, and C Smart Card Detection Card Size ID-1 - Spin ID-1 Sliding Contact Socket - CA/CS support - Card present switch. PC/SC Driver PC/SC Driver PC/SC Driver PC/SC Driver PC/SC Driver PC/SC Driver PC/SC Specification Ver. 20.1.14 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 6x, 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)		
Snart Card Protocols T=0, T=1, synchronous cards 12C and 3-wire Smart Card Interface Speed - Up to 600 kbps (depending on card) - 1A1=97 Smart Card Clock Frequency ISO/IEC 7816 compliant; Operates up to 16 MHz Supported Smart Card Types 50, 3 V, and 1.8V, ISO 7816 smart card Closs A, B, and C Power to Smart Card 60 min 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 - 4 CA/CS support - 4 Card present switch * CA/CS support - 4 Card present switch * **** ** ** ** ** ** ** ** ** ** ** **	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)	Supported Tag ICs	All major ISO/IEC 7816 compliant smart cards and synchronous cards
Smart Card Interface Speed *TA1=97 Smart Card Clock Frequency SUpported Smart Card Types SV, 3V, and 1.8V; ISO 7816 smart card Class A, B, and C Power to Smart Card 60m A in Class A; 55m A in Class B, 35m A in Class C Smart Card Detection Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 **Bip ID-1 Sliding Contact Socket* **CAffel Support* **Card present switch* **Card present switch* **Pr/SC Specification Ver 2.01.14 for: **Windows* 7/8/10/11 (32 and 64 bit), Windows* Server 2008/2012/2016/2019, WindowsXP, **MacOS 110.9.x **12.2.x, **Linux 2.6x, and 3.x, 4.x, 5.x (32 and 64 bit), **Admirable 8.0 and higher **Poers Supply Software **Poers April (through wrapper on top of PC/SC) ****CAPI (through wrapper on top of PC/SC) *****ChaPI (through wrapper on top of PC/SC) ****ChaPI (through wrapper on top of PC/SC) ****ChaPI (throu	Smart Card Protocols	T=0, T=1, synchronous cards I2C and 3-wire
Supported Smart Card Types Sy, 3x, and 1.8v; ISO 7816 smart card Class A, B, and C Power to Smart Card Goth Frequency Sy, 3x, and 1.8v; ISO 7816 smart card Class A, B, and C Power to Smart Card Gother Smart Card Gother Smart Card Present switch, Automatic power on/off; Short circuit protection Card Size ID-1 **B pin ID-1 Sliding Contact Socket** **CArdC8 Support** **Card present switch Automatic power on/off; Short circuit protection **Card Size ID-1 **B pin ID-1 Sliding Contact Socket** **CArdC8 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 - 12.2x, **Ininx 2.6x, and 3x, 4x, 5.x (32 and 64 bit), **Android 8.0 and hilper** **PC/SC API** **PC/SC API** **PC/SC API** **PC/SC API** **PC/SC API** **Android 8.0 and hilper** **PC/SC API** **Android 8.0 and hilper** **POPER CONSUMPTION **POWER Supply** **Use Bus-powered** **Power Supply** **Devarting Conditions** **Power Supply** **Use Bus-powered** **Power Supply** **Use Bus-powered** **Power Supply** **Devarting Conditions** **Power Supply** **Use Bus-powered** **Power Supply** **Devarting Conditions** **Power Supply** **Devarting Temperature Range** **Or 1 x 7 x 7 x mm** **Operating Temperature Range** **Or 2 x 7 x 7 x 7 x mm** **Departing Temperature Range** **Or 5 St° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32* to 122* F) **Storage Temperature Range** **Or 1 s 50° C (32		
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 - C4/C8 support - Card present switch; Automatic power on/off; Short circuit protection Card Size ID-1 8 pin ID-1 Sliding Contact Socket - C4/C8 support - Card present switch PC/SC Specification Ver. 2.0.1.14 for: - Windows* 7/81/0/11 (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 - CF-API (through wrapper on top of PC/SC) - M-Card API (through wrapper on top of PC/SC) -	Smart Card Interface Speed	• TA1=97
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, • Inituz 6.5 x, and 3 x, 4 x, 5 x (32 and 64 bit), • Android 8.0 and higher Software PC/SC API • C+CAPI (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) Operating Conditions Power Supply USB Bus-powered 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	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 • Ca/C8 support • Card present switch PC/SC Specification Ver. 2.01.14 for: • Windows* 7/8/10/11 (132 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 Software Power Consumption Consumption Comector 70 x 7 1 x 7.5 mm Veright 50 g ± 5% Operating Temperature Range - 20" to 60" C (-4" to 140" F) Storage Temperature Range - 20" to 60" C (-4" to 140" F) Connector 1.5m USB cable with USB type A connector Status Indicator Green LED Firmware Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft* WHQL	Power to Smart Card	60mA in Class A; 55mA in Class B; 35mA in Class C
S pin ID-1 Sliding Contact Socket **C4/C8 support **Card present switch **Porver 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, **Linux 2.6.x, and 3.x, 4.x, 5.x (32 and 64 bit), **Android 8.0 and higher** **PC/SC API** **C-T-API (through wrapper on top of PC/SC) **Operating Conditions** **Power Supply** **USB Bus-powered** **Power Consumption** **Coma excluding smart card; <20mA with standard card; <500µA in standby mode** **Dimensions(L x W x H)** **To x 7 x 7.5 mm** **Weight** **Departing Temperature Range** **Op' 1.55° (32* to 122* F)* **Storage Temperature Range** **Op' 1.50° (32* to 122* F)* **Storage Temperature Range** **Op' 1.50° (32* to 122* F)* **Storage Temperature Range** **Job 1.50° (24* to 140* F)* **Operating Humidity Range** **Up to 95% RH non-condensing** **Durability** **Silding contact 100,000 card insertions** **Connector** **Jom 1.5m USB cable with USB type A connector** **Status Indicator** **Green LED** **Firmware** **SmartOS*** **Firmware** **SmartOS*** **Setems/Standards** **So/JEC 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 of PC/SC) - Weight - Power Supply - Power Consumption - S6mA 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 - Siding contact 100,000 card insertions - Connector - Status Indicator - Siding contact 100,000 card insertions - Connector - Status Indicator - Firmware - SmartOS** Firmware In-Field Upgradeable - SmartOS** - Systems/Standards - SO/EC 7816, USB 2.0 Full Speed, CCID, Microsoft* WHQL	Card Size	ID-1
PC/SC Driver PC/S	Contact Type	• 8 pin ID-1 Sliding Contact Socket
PC/SC Specification Ver. 2.01.14 for:		• C4/C8 support
PC/SC Specification Ver. 2.01.14 for:		Card present switch
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), • 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 API (through wrapper on top of PC/SC) • M-Card API (through wrapper on top of P	Driver and Software	
PC/SC Driver • 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) 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 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		
• 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) Power Supply Power Supply USB Bus-powered Power Consumption cfmA 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 connector Status Indicator Green LED Firmware Firmware In-Field Upgradeable No Certifications / Compliance Systems/Standards ISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL	PC/SC Driver	
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		
PC/SC API		
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 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	Software	<u> </u>
• M-Card API (through wrapper on top of PC/SC) Power Supply USB Bus-powered Power Consumption		
Operating ConditionsPower SupplyUSB Bus-poweredPower Consumption<6mA excluding smart card; <20mA with standard card; <500μA in standby modeDimensions(L x W x H)70 x 71 x 7.5 mmWeight50 g ± 5%Operating Temperature Range0° to 50° C (32° to 122° F)Storage Temperature Range-20° to 60° C (-4° to 140° F)Operating Humidity RangeUp to 95% RH non-condensingDurabilitySliding contact 100,000 card insertionsConnector1.5m USB cable with USB type A connectorStatus IndicatorGreen LEDFirmwareSmartOS™Firmware In-Field UpgradeableNoCertifications / ComplianceSystems/StandardsISO/IEC 7816, USB 2.0 Full Speed, CCID, Microsoft® WHQL		
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 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 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 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 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 Durability Sliding contact 100,000 card insertions Connector 1.5m USB cable with USB type A connector Status Indicator 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 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 connector Status Indicator 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 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
		CE, RoHS