

uTrust 4501 F

Dual Interface Smart Card Reader Board



- **EASY TO INTEGRATE**
Quick integration with full ISO/IEC 14443 and ISO/IEC 7816 support
- **CONVERGENCE**
Featuring contactless and NFC technologies for use with mixed credential populations and form factors
- **INTEROPERABLE**
Supports major contactless cards, standards, and technologies in just one device
- **FAST**
Transaction time optimized with support of 848kB/s in ISO/IEC 14443 and 600kB/s in ISO/IEC 7816 for maximum end user acceptance

Identiv's uTrust 4501 F Dual Interface Smart Card Reader Board is the ideal combination of contact, contactless, and NFC technologies in just one single device. Easy integration enables a short time to market for OEMs, system, integrators and VARs building innovative solutions for contact and contactless security, network log-on, secure web-based transactions, or NFC-based customer loyalty programs.

Supporting ISO/IEC 7816 contact cards, 13.56 MHz contactless technology, and NFC, this PC-linked dual interface reader board supports end-user environments where virtually all types of credentials are used, even in mixed credential populations. With its all-in-one concept, uTrust 4501 F enables a smooth transition from well-established traditional technologies into emerging NFC applications, driving new business opportunities. uTrust 4501 F drives the end-user solution acceptance with convenience, transaction time efficiency, security, flexibility, and complete NFC capabilities.

PARAMETER	UTRUST 4501 F
Host Interface	
Host Interface	USB 2.0 CCID (USB 1.1/3.0 compliant)
Communication Speed	12 Mbps (USB 2.0 full speed)
Smart Card Interface	
Supported Standards	ISO/IEC 7816 Part 1 to 4
Supported Tag ICs	All major ISO/IEC 7816 compliant smart card IC support
Protocols	T=0, T=1
Interface Speed	Up to 600 kB/s (depending on card); TA1=97
Clock Frequency	ISO/IEC 7816 compliant up to 5 MHz; operates up to 16 MHz
Supported Smart Card Types	5V, 3V, and 1.8V; ISO/IEC 7816 Class A/B/C
Smart Card Detection	Card present switch, automatic power on/off, short circuit protection
Card Size	ID-1
Contact Type	<ul style="list-style-type: none"> • 8 pin ID-1 sliding contact socket • C4/C8 support • Card detect switch
Contactless Interface	
Supported Standards	ISO/IEC 14443 A/B Part 1 - 4; ISO/IEC 18092; ECMA-340 (NFCIP-1)
Protocols	T=CL, MIFARE™

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Supported Card Chips	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 kB/s (depending on card IC)
Reading Distance	Up to 70 mm (2.756 in), depending on card chip type and card antenna size
Antenna	Integrated
Driver and Software	
PC/SC Driver	PC/SC specification version 2.01.09 for: <ul style="list-style-type: none"> Windows® XP/Vista/7/8 (32&64Bit), Windows® Server 2003/2008/2012, Windows® CE 6.0, 7.0 MacOS 10.5.x, 10.6.x, 10.7.x, 10.8.x Linux 2.4.x, 2.6.x (32 and 64 Bit)
Software	<ul style="list-style-type: none"> PC/SC API CT-API (through wrapper on top of PC/SC) Synchronous-API (through wrapper on top of PC/SC)
Operating Conditions	
Power Supply	Bus-powered USB
Power Consumption	<120 mA, excluding smart card; <185 mA with smart card; <500 µA in standby mode
Dimensions	100 x 70 x 11 mm (3.937 x 2.756 x 0.433 in)
Weight	37 g (0.08 lb) ± 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
MTBF	100,000 hours
Connector	5-pin molex connector
Status Indicator	LED
Firmware In-field Upgradeable	Yes
Certifications/Compliance	
Systems/Standards	ISO/IEC 7816, USB 2.0 full speed, CCID, Microsoft® WHQL
Regulatory/Environmental	CE, FCC, UL94, RoHS2, REACH
Ordering Information	
Product Part Number	905322

Identiv, Inc. (NASDAQ: INVE) is a global provider of physical security and secure identification. Identiv's products, software, systems, and services address the markets for physical and logical access control and a wide range of RFID-enabled applications. Customers in the government, enterprise, consumer, education, healthcare, and transportation sectors rely on Identiv's access and identification solutions. Identiv's mission is to secure the connected physical world: from perimeter to desktop access, and from the world of physical things to the Internet of Everything.

Identiv has offices worldwide. Addresses and phone numbers are listed at identiv.com/contact. For more information, visit identiv.com or email sales@identiv.com.

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