





CONTACT AND CONTACTLESS USB READER BOARDS

- Designed for easy and quick integration while offering unparalleled support and compatibility to ISO 14443 A/B and ISO 7816 standards
- Versatile Applications Ideal device for both contactless and contact smart card technology environments
- Fast and Secure Data Transmission Advanced design and features enable shorter card/passport read time
- **Enhanced Security** Enables integrators to offer quick and easy expansion to advanced security and identification applications

PRODUCT FEATURES:

- Contact and/or contactless security applications such as Windows* log-on, mail encryption, hard-disk encryption and secure transactions
- Loyalty applications
- eGovernment home applications such as contact or contactless identification through ePassports, eID cards and driving licenses
- Item tagging applications that are based on ISO14443 A+B or ISO 15693
- Any other application supporting contactless or dual interface cards.

The OMNIKEY* 5321 and CL SAM reader boards enable OEMs, value added resellers and system integrators to build solutions for contact and contactless security, loyalty and government applications. It is an ideal device for organizations, which need to integrate a highly secure contact and/or contactless PC connected smartcard reader board which in turn enables end-users to use advanced security applications for the convenience of contactless technology.

The OMNIKEY 5321 and CL reader boards are both optimized for an easy design-in and with the additional support of Electro Magnetic Distortion (EMD) suppression ensure high transmission speeds. The reader boards support a wide variety of already existing contact and contactless smart card applications and additionally offer the opportunity to house a SIM sized card to enable further and advanced security and identification applications.



SPECIFICATIONS





Model	OMNIKEY* 5321 Reader Board	OMNIKEY® 5321 CL SAM Reader Board
Base Model Number	R53210015-2	R53210033-2
Dimensions	3.78 x 3.07 x 0.31 inch / 96 x 78 x 8 mm	
Weight	Approx. 2.5 oz / 71 g	
Power Supply	Bus powered	
Operating Temperature	32°-131° F (0° - 55° C)	
Operating Humidity	10-90% rH	
	ноѕт	INTERFACE
Host Interface	USB 2.0 CCID ¹ (also compliant with USB 1.1)	
Transmission Speed	12 Mbps (USB 2.0 full speed)	
	CONTACT SMART CARD INTERFACE	
Standards	ISO 7816 & EMV ² 2000 Level 1	
Protocols	T=0, T=1, 2-wire: SLE 4432/42 (S=	=10), 3-wire: SLE 4418/28 (S=9), I ² C (S=8)
Card Size	ID-1 (full-size)	ID-000 (SIM sized)
Smart Card Interface Speed	420 kbps (when supported by card)	
Smart Card Clock Frequency	Up to 8 MHz	
Supported Card Types	5V, 3V and 1.8V Smart Cards, ISO 7816 Class A, B and C	
Power to Smart Card	60 mA	
Smart Card Detection	Movement detection with auto power-off /Automatic detection of smart card type/ Short circuit and thermal protection	
	CONTACTLESS S	MART CARD INTERFACE
Protocols	T=CL, ISO 14443 A with 848 Kbps transmission rate (depending on IC and OS) ISO 14443 B with 848 Kbps transmission rate (depending on IC and OS) ISO 15693 with up to 26 Kbps transmission rate (depending on IC and OS)	
Noise Compression	EMD suppression algorithm implemented	
Encryption Support	Basic Access Control (BAC) and Extended Access Control (EAC)	
	GENER	AL FEATURES
Supported APIs	PC/SC driver, CT-API (on top of PC/SC, for contact interface), OCF (on top of PC/SC, for contact interface), Synchronous API (on top of PC/SC)	
PC/SC Driver Support	Windows® XP/Vista/7/8 (32 bit / 64 bit) • Windows Server 2003/2008 (32 bit / 64 bit), 2008R2 (64 bit) • Windows CE 4.2/5/6/7 (depending on hardware) • Linux®, Mac® OS X and Android™	
Status Indicator	Dual color LED (green=ready, red=busy)	
Housed Reader	Also available as a desktop reader	
Composition	RC4	
Connector Cable	70.9" (180 cm)	
Durability	100,000 insertions	3,000 insertions
Meantime Between Failure (MTBF)	500,000 hours	
Compliance / Certification	ISO 14443A/B, ISO 7816, Microsoft* WHQL³, USB 2.0 (USB 1.1 compatible), CCID¹ (contact interface only), GSA FIPS 201 approved product list (as housed product)	
Safety / Environmental	RoHS, WEEE	
Warranty	Two year manufacturer's warranty. (For drivers, see complete lifetime support policy.)	

1 = Chip Card Interface Device, 2 = Europay MasterCard Visa, 3 = Windows Hardware Quality Lab, 4 = Home Banking Computer Interface

hidglobal.com

North America: +1 949 732 2000 Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +44 1440 714 850 Asia Pacific: +852 3160 9800 Latin America: +52 55 5081 1650 © 2014 HID Global Corporation/ASSA ABLOY AB. All rights reserved. HID, HID Global, the HID Blue Brick logo, the Chain Design and OMNIKEY are trademarks or registered trademarks of HID Global or its licensor(s)/supplier(s) in the US and other countries and may not be used without permission. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners. 2014-03-11-omnikey-5321-usb-clsam-rb-ds-en PLT-00351