OMNIKEY® 5127CK - Mini Reader Board

Embedded CCID and keyboard wedge RFID reader board

HID Global's OMNIKEY® 5127CK-Mini reader board opens market opportunities for system integrators seeking simple integration and development of readers using standard interfaces such as CCID, UART or Keyboard Wedge.

The 5127CK-Mini reader board complements the 5427CK reader by providing a very compact design for installation in space-constrained solutions.

The CCID interface enables integrators to design finished readers without the need to install or maintain drivers, eliminating complex software lifecycle management issues in the field and accelerating introduction of finished devices in the market.

With the Keyboard Wedge functionality, the reader can retrieve data from a card that is presented to the reader and directly input the card data into an application using keystroke emulation. This eliminates the need for customers to manually enter the card data into an application.

The OMNIKEY 5127CK-Mini reader board offers the market-proven OMNIKEY reader feature set and supports low and high frequency technology within a single device. It also supports the latest mobile access solutions via NFC or Bluetooth Smart.

Key features of the OMNIKEY 5127CK-Mini reader board include support for the most common low and high frequency card technologies, including Seos®, iCLASS, MIFARE Classic, MIFARE DESFire EV1/EV2 and HID Prox. It also includes an integrated management tool that enables field updates to readers for new firmware or changing configuration settings.

For quick and easy integration, HID Global provides an OMNIKEY 5127CK reader board Developer Tool Kit (DTK).The DTK provides the necessary tools, documentation and developer resources material to shorten integration cycles and speed time to market with finished products.

KEY BENEFITS:

- Multi-Interface Support – CCID, Keyboard Wedge and UART interfaces offer flexible integration options for a wide range of applications.

- Dual frequency and mobile access – Simultaneously supports low and high frequency credentials, including iCLASS Seos®, HID Prox®, iCLASS SE®, MIFARE Classic® and MIFARE® DESFire® EV1 and EV2; as well as NFC and Bluetooth for mobile devices.

- Compact design – Very small footprint provides capability for installation in space-constrained designs.

- Industrial Housed Option – Rugged case providing protection in the embedded environment.

MOBILE ENABLED READER FEATURES:

- Includes Apple's Enhanced Contactless Polling (ECP) application to support credentials in Apple Wallet

- Adjustable read settings control overall power and read range of Mobile IDs, enabling flexibility for both close-proximity "tap" and long-range "Twist and Go" distances

- Read settings administered using mobile phone during installation

- Directional antenna enables long-range reading distances up to 2m in correct orientation in front of the reader and not behind it

HID

OMNIKEY®
5127CK-Mini
Reader Board

CCID SUPPORT

- Native CCID implementation supporting Windows®, LINUX® and Mac® operating systems

KEYBOARD WEDGE

- Fully configurable and programmable keyboard wedge functionality featuring an integrated management console
- Flexible configuration of data structures and output modes

UART

- Fully featured serial protocol allowing low level integration into host applications
- Autonomous credential processing with card data sent directly over the serial interface

BROAD CREDENTIAL SUPPORT

- NFC and Bluetooth support for Mobile devices
- Dual frequency functionality allowing support for both low and high frequency credentials simultaneously
- HID Prox®, Indala® & EM Prox, MIFARE Classic®, MIFARE® DESFire® EV1/EV2, iCLASS®, iCLASS SE®, iCLASS Seos®, HID Elite®, and other SIO enabled credentials
- Includes Apple's Enhanced Contactless Polling (ECP) application to support credentials in Apple Wallet

ENHANCED LIFECYCLE MANAGEMENT

- Easy firmware updates and configuration setting utilizing a Web interface, SNMP messages and configuration cards
- Developer Tool Kit (DTK) available that contains product samples, development documentation, sample code and access to HID's developer portal

13.56 MHz HF and 125Khz LF Smart Card Reader with CCID and Keyboard Wedge Interface		
Base Model Number	OMNIKEY® 5127CK-Mini	
Bluetooth functionality	WITH BLUETOOTH	WITHOUT BLUETOOTH***
Dimensions	Reader Board: 50 x 35 x 8.94mm (1.96' x 1.38' x 0.35') Industrial Housing: 55 x 40 x 16mm (2.2" x 1.6" x 0.63")	
Weight	Reader Board: 10.5g (0.4 oz) Industrial Housing: 24.4g (0.9oz)	
Power Supply	Bus powered	
Current Requirements	Base Power consumption (RF interface deactivated) - Average 60mA; HF, Prox, amd BLE activated - Average 134mA, Peak 220mA; HF polling only - Average 84mA, Peak 160mA; Prox polling only - Average 73mA, Peak 130mA; BLE advertisement only - Average 60mA, Peak 75mA	
Operating Temperature	32°- 122° F (0° - 50° C)	
Operating Humidity	10 - 90% Relative Humidity	
Storage Temperature	-4° - 176° F (-20° to 80° C)	
	CONTACTLESS SMART CARD INTERFACE	
Protocols and Cards HF*	iCLASS, iCLASS SE/SR, iCLASS Seos, MIFARE Classic, MIFARE DESFire 0.6, MIFARE DESFire EV1/EV2, MIFARE Ultralight C, MIFARE Ultralight, FeliCa (Idm) CEPAS (CAN), ISO 14443A/B, ISO15693, NFC Tag (1,2,3,4,5), T=CL, SmartMx, Student ID in Apple Wallet	
Protocols and Card LF*	HID Prox, Indala Prox, EM Prox, EM4100/4102/4200/4305/4450, AWID Prox, Hitag 1.2.3, ASK, PSK, FSK	
	BLUETOOTH INTERFACE	
Supported Functions	HID Global Mobile Access Service	HID Global Mobile Access Service using NFC (Android Only)
	HOST INTERFACE	
USB Interface	USB 2.0 Full Speed Device (12 Mbps); USB 3.0 extended operability, tested with hubs/controllers	
UART Interface	Baud Rate 9600 to 921600bps; OK5127 Serial Protocol	
Operating Systems	Windows 10/8.1/8/7/Server 2016/Server 2012/Server 2008R2; Linux Debian 6.0+ / Ubuntu 11.04+/ Fedora 15+; Open SUSE 11.4+; Mac OS X**; Android™ 4.x to 9.x**	
PC/SC Driver	Compliant with native OS CCID drivers (in CCID mode) HID proprietary PC/SC drivers available for: Windows® XP / Vista™ / 7 (32 bit / 64 bit) / 8, 2003 Server, 2008 R2 Server, Linux (32 / 64 bit, incl. Debian 6.0, Fedora 15, OpenSUSE 11.4, Ubuntu 11.04) & Mac OS X (10.5 Leopard and higher, Intel 32 / 64 bit)	
Keyboard Driver	Native driver from operating system supporting MF-102 keyboard (Windows/Linux/Mac)	
Supported APIs	PC/SC - API, SAM - API	
	HUMAN INTERFACE	
Status Indicators	Reader Board: Dual color LED (Green=ready, Red=busy); Industrial Housing: Buzzer (Programmable)	
Connectors	Micro USB connector (cable not included); Pico Blade Connector (UART Interface)	
Optional Accessories	Cable Management Kit	
Approvals/Environmental	Compliant to ROHS/REACH, WEEE, IEC 60950-1, CE, UKCA, FCC Modular, IC (Canada)	
Warranty	One year manufacturer's warranty	

*For up to date credential support please refer to Credential Support Matrix
** CCID and KeyBoard Wedge support
*** Available as Reader Board Only (not available with Industrial Housing)