OMNIKEY® Embedded Technology

ITG
Part of HID Global **HID**

O.K OMNIKEY

OMNIKEY® 5321
Reader Board USB

The OMNIKEY® 5321 Reader Board is a dual interface PC-linked reader that reads/writes to both a 13.56 MHz contactless smart card and virtually any contact smart card. The dual interface feature economically supports end-user environments where both contactless and contact smart card technology may be in use. The reader supports contactless smart cards with up to 848kbps in the fastest ISO 14443 transmission mode.

Main features:

- **Supported cards include NXP MIFARE®, DESFire, SMART-*MX*, ICODE, HID: iCLASS®**
- **Mounting screw holes on PCB**
- **Supports ISO 14443 A&B, ISO 15693 and ISO 7816**
- **Up to 848 Kbps transmission rate**
- **Contact unit based on OMNIKEY® 3121**
- **Contactless 2048 bit key generation in RSA mode (JCOP / SMART-*MX*)**

Host Interface	
Host Interface	USB 2.0 CCID [1] (also supports USB 1.1)
Transmission speed	12 Mbps (USB 2.0 full speed)
Power supply	Bus powered

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)
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, AB and C
Power to Smart Card	60 mA
Smart Card detection	Movement detection with auto power-off / Autom. Detection of smart card type / Short circuit and thermal protection
8 Pin Handling	C4 / C8 supported

Contactless (RFID) Smart Card Interface
ISO 14443 A with 848 Kbps transmission rate (depending on card)
ISO 14443 B with 848 Kbps transmission rate (depending on card)
ISO 15693 with 26 Kbps transmission rate (depending on card)

Other Features	
Status indicator	Two LED
Easy mounting	screw holes on PCB

Supported APIs
PC/SC driver (ready for 2.01)
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® 98 / ME, 2000 / XP (32bit), 2003 Server
Windows® CE 5.0 / CE.NET (depending on hardware)
Windows® XP 64bit (AMD64, EM64T, IA64)
Windows® Vista (32bit / 64bit)
Linux®
Mac® OS X

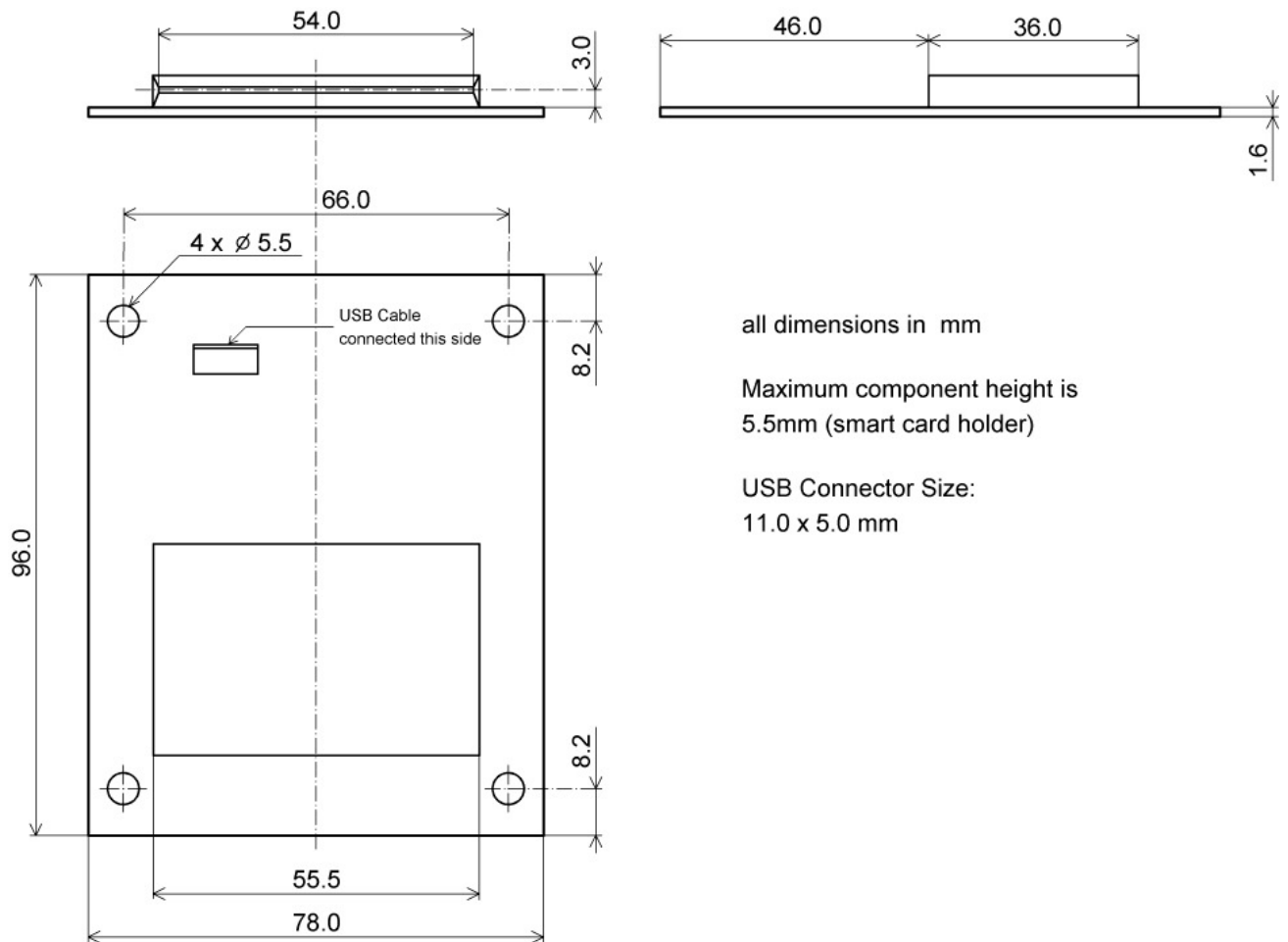| Hardware Specifications	
Dimensions (LxWxH)	96 x 78 x 8mm 3.78" x 3.07 x 0.31''
Weight (incl. cable)	Approx. 71 gr / 2.5 oz
Operating temperature	0°-55°C / 32-131°F
Operating humidity	10-90% rH
Connector cable	180 cm / 70.9"
Durability	100.000 insertions
Meantime between failure (MTBF)	500.000 hours

Compliance / Certification	Safety / Environmental
Microsoft WHQL[3]	CE[5]
EMV[2] 2000 Level 1	FCC[5]
ISO 7816	UL
HBCI[4]	RoHS
USB 2.0 (USB 1.1 compatible)	WEEE
CCID[1] (contact interface only)	

HBCI KERNEL

Mac

Designed for Microsoft® Windows®XP, Windows®XP x64 Edition

Designed for Microsoft® Windows®XP Windows®2000

Works with Windows® Vista™

RoHS COMPLIANT 2002/95/EC

1 = Chip Card Interface Device 2 = Europay® MasterCard® Visa® 3 = Windows® Hardware Quality Lab 4 = Homebanking Computer Interface 5 = In housed readers only

An ASSA ABLOY Group brand

OMNIKEY® 5321 Reader Board USB
Technical Drawing

54.0

3.0

46.0   36.0

1.6

66.0

4 x ∅ 5.5

USB Cable
connected this side

8.2

96.0

8.2

55.5

78.0

all dimensions in mm

Maximum component height is
5.5mm (smart card holder)

USB Connector Size:
11.0 x 5.0 mm