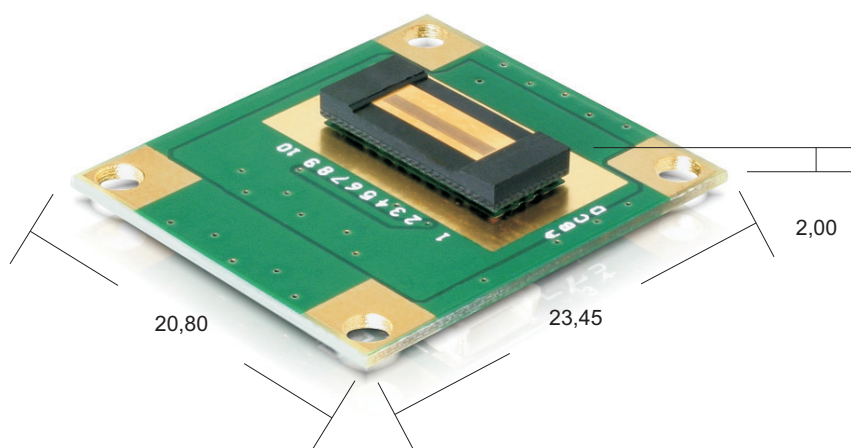


Specification

95846

Delock industry fingerprint sensor USB 2.0 module



date: 29.05.2009

Specification

95846

Delock industry fingerprint sensor USB 2.0 module

Contents:

- device overall description
- features
- specification compliance
- block diagram
- host interface connector
- power consumption
- software & OS support
- pinout and definition
- mechanical dimension

Specification

95846

Delock industry fingerprint sensor USB 2.0 module

Device overall description

The 95846 is a breakthrough slide sensor – delivering the industry's most innovative security, touch pad navigation, and other unique features in the smallest solution for PC/NB/UMPC applications.

It is based on Authentec AES1610 fingerprint slide Sensor module that employs AuthenTec's award winning TruePrint® and TrueMatch technologies, the most accurate sensor and pattern matching technologies in the industry. Authentec AES1610 integrates AuthenTec's next generation TrueFinger™ anti-spoofing protection, TruePrint technology provides the most accurate fingerprint image and TrueMatch pattern matching technology runs on the highperforming host processor

Specification

95846

Delock industry fingerprint sensor USB 2.0 module

Features

- Authentec AES1610 Fingerprint Sensor,

Patented truePrint technology for best ability to acquire (ATA), best ability-to-enroll (ATE) >>99%, false acceptance rate (FAR) <1:100,000, and lowest false rejection rate (FRR) < 1:500

high definition 128 X 8TtruePrint technology based pixels , 500 pixel per inch (ppi) array

Ultra-hard wearing surface coating is scratch and impact resistant > 10 Million rubs w/o degradation

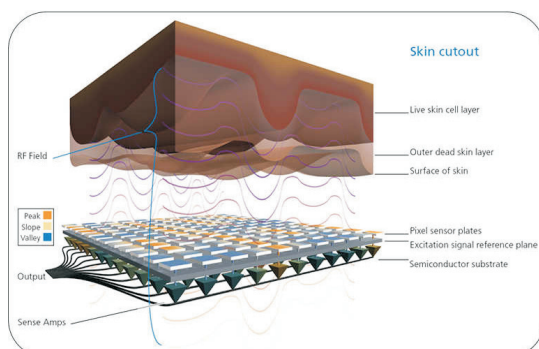
IEC 61000-4-2 Level 4 ESD immunity (+/- 15KV Air)

USB 2.0 full speed(12 Mbits/s) interface with suspend and remote wakeup

Full support for C3 selective suspend mode

Built-in low power finger detection w/ remote wakeup capability

The slide speed of the device is selectable and ranges from 20cm/s to 50cm/s during an imaging event, the RF TruePrint signal is conducted via the drive ring to the users' finger. TheTruePrint signal is then conducted through and modulated by the "live layer" of the finger where the true fingerprint originates. The imaging array measures the TruePrint signal, the strength of which corresponds to either a ridge or valley region. The sensing element of each pixel is an RF sense-amplifier, which picks up the TruePrint (high frequency AC) signal.



Specification

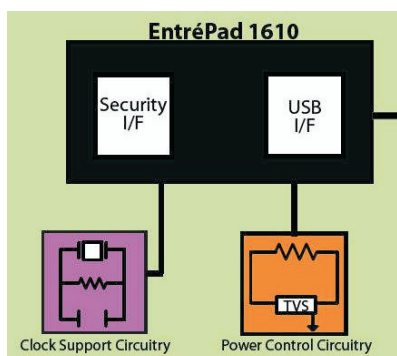
95846

Delock industry fingerprint sensor USB 2.0 module

Specification Compliance

- USB Specification V2.0 Full Speed (12Mbps/s)

Block Diagram



Power consumption (**Draft !**)

electrical characteristics	minimum	typical	maximum	units
supply voltage	3,15	3,3	3,45	V
normal waiting for finger		4,4		mA
idle USB suspend		0,4		mA
imaging/finger swiping @30cm/s		37		mA

temperature range	minimum	typical	maximum	units
ambient operating temperature range	0		70	°C
storage temperature range	-20		85	°C

Specification

95846

Delock industry fingerprint sensor USB 2.0 module

Host interface connector

- Aces 88460-0401, pitch=0.8mm Height 1.8mm RA type

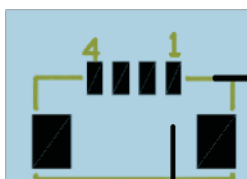
Software & OS support

3rd Party vendor support from
Arachnoid Technology (ABIG), Bio-Me
Bio-Key International
Cogent Systems
EZValidation
M2SYS Technology
Phoenix Technologies
silex technology america, Inc.
Softex Incorporated, Omnipass

Pinout and Definition

Pin#	signal name	description
1	signal GND	ground for signal
2	USB_D+	USB data plus
3	USB_D-	USB data minus
4	Vcc	main power input 3,3V DC

* Pls make sure the module is FULLY grounded(via screw ground plate) to chassis ground or USB shield ground to ensure ESD result.



Specification

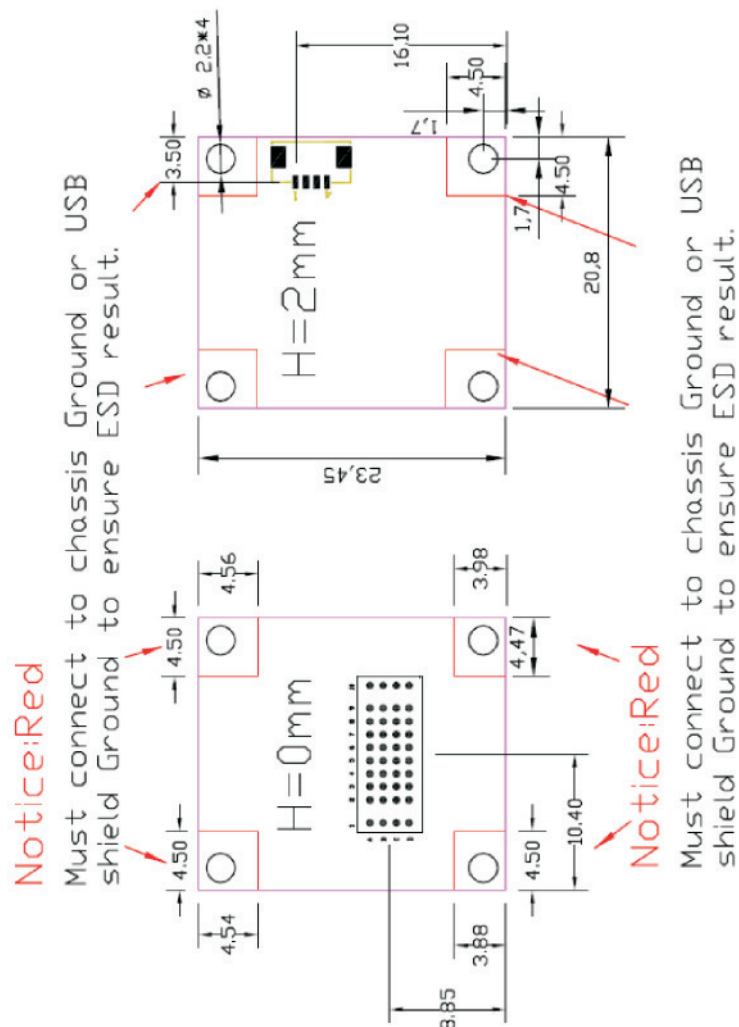
95846

Delock industry fingerprint sensor USB 2.0 module

Mechanical dimension

(Dimensions might change without prior notice, pls always enquire in advance)

- 23.45 mm x 20.8mm x 4.44 mm (L x W x H) 1.8mm ACES 88460 connector + 0.8mm PCB + 1.84mm sensor height



Specification

95846

Delock industry fingerprint sensor USB 2.0 module

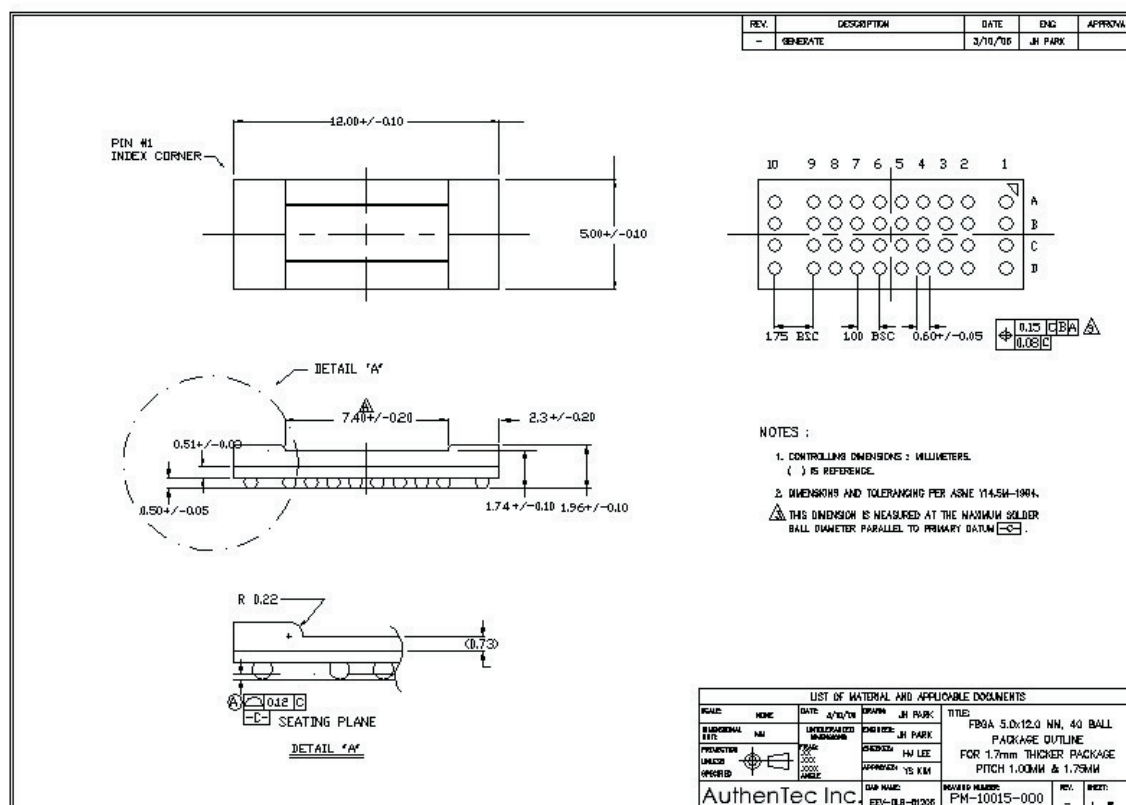


Figure 3-2 40 BGA eXtendaBall thick package

Specification

95846

Delock industry fingerprint sensor USB 2.0 module

