T-SHAPE™

ULTRA THIN SENSOR MODULE
FPC1300-SERIES

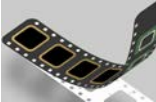FINGERPRINTS

FPC1300-SERIES T-SHAPE™

GENERAL DESCRIPTION

Building on extensive experience from eighteen years of fingerprint touch sensor deployments and patented capacitive sensor technology, the FPC1300-series T-Shape™ sensor module and fingerprint recognition algorithm is optimized for incorporation into smart cards. It is adopted for existing industry standard processes, enabling lower total card cost. The package is created to fit standard mass production at the same time as making aesthetic design integration of the sensor in the card possible.

Compact size and ultra-low power consumption makes it optimal to use in contact or contactless applications. Fingerprint image data is captured in three dimensions (3D) delivering superior image quality at 508 dpi resolution. The proven fingerprint recognition algorithm, together with the fingerprint touch sensor FPC1300-series performs fast fingerprint matching with highest security level and optimal user convenience.

FEATURES

- Complete fingerprint sensor module
- Ultra-thin bendable package: 540 µm
- Developed to comply with ISO and CQM
- Compact and easy to integrate
- Optimized design for aesthetic card integration
- Excellent 3D image quality
- Superior imaging quality with 256 true grey scale values in every pixel
- Robust protective coating capable of more than 10 million finger placements
- Fast image capture, fast power up in less than 1ms

- Ultra-low power consumption (10-15 times lower Power consumption than competition)
- 1.8/3.3 Volt operation
- High-speed SPI interface
- Excellent balanced between size and biometric performance
- Smart wake-up function FPC OneTouch®
- Reads any angle of the fingertip with FPC 360Touch™
- Adopted for industry standard productions
- Includes all passive components and bezel
- Full ESD protection to more than ±15kV

PARAMETER	DESCRIPTION	VALUE	UNIT
Package thickness		540	µm
Interface	SPI	4+1	pin
Supply voltage	VDD voltage, typical	1,8	V
Power consumption capture	Typical @1.8V	<5	mA
Power consumption sleep	Typical @1.8V	<1	µA
Quick start up	From power up to image capture	<1	ms
Verification time	From image capture to match	<1	sec
ESD Protection	IEC61000-4-2, level X, air discharge	±15	kV
Sensor Wear-and-tear	No of wear cycles at 0.6N	>10 million	times
Operating temperature		-40 to +85	°C

TARGET APPLICATIONS:

PAYMENT CARDS

ACCESS CARDS

AVAILABILITY:
Commercially available end of 2017

For more information please visit fingerprints.com