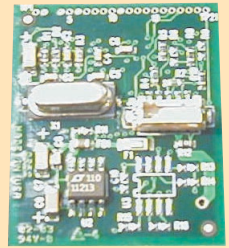
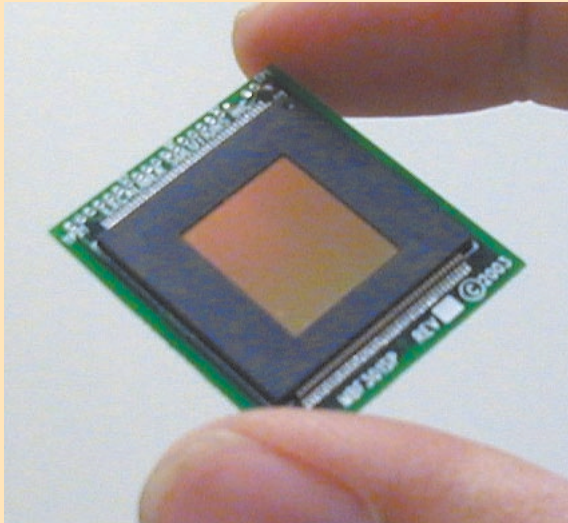


SPF200-USB Fingerprint Sensor



(Front view)



(Back view)

Features

- All-in-one Fingerprint module with USB connector.
- Easy to integrate with other devices
- Uses Fujitsu MBF200 Fingerprint Sensor
- Low Power
 - 18 milliamps: Operating
 - 500 microamps: Standby
- USB 1.1 compatible (to 13 FPS)
- 256 x 300 Pixel Array (50 μm pixel pitch)
- 500 DPI resolution
- 8-bit grayscale (256 gray levels)
- On board A/D Converter
- Programmable gain control for image optimization
- 12.8mm x 15mm image area
- UL Certified ESD & EMI (FCC-B & CE)

Description

The Fujitsu SPF200-USB is an all-in-one USB device. Simply connect it to your USB cable and you have a working fingerprint sensor! The SPF200-USB is ideal for integrating into devices where USB is the communication interface such as computer peripherals and embedded applications. Mount the SPF200-USB into your device and you have a completed product without going through the expense of board layout and debug.

Users will no longer be required to remember and enter cumbersome passwords or PIN codes. Fingerprint authentication provides a reliable, quick and user friendly alternative to passwords. The SPF200-USB fingerprint sensor has the USB 1.1 controller logic built right into the sensor, no external hardware is required. Merely plug the sensor into the USB cable, the power and data communications is managed by the USB protocol.

SPF200-USB Fingerprint Sensor

► Description (cont.)

The Fujitsu SPF200-USB fingerprint sensor with Fujitsu Matching Engine Software quickly captures the image of the fingerprint, analyzes it and compares it to a previously registered fingerprint template. The Fujitsu SPF200-USB fingerprint sensor consists of a 256 column x 300 row array of tiny metal electrodes. Each electrode acts as one plate in a capacitor and the finger acts as the second plate in a capacitor.

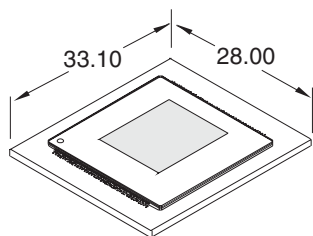
A passivation layer on the surface of the device forms a tough outer shell, protecting the device from abrasion, chemicals, moisture and other forms of damage. The SPF200-USB is manufactured in standard CMOS technology, a mature and cost effective manufacturing method.

► Applications

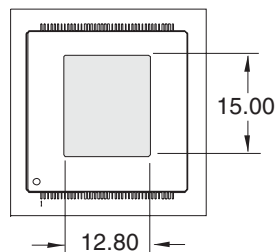
- Computer peripherals – improves security and convenience
- Physical access systems – approval for entry
- Transportation systems – validation of operators, drivers and inspectors
- Medical equipment – authorization of operator or technician
- Kiosks and vending machines – confirmation of person receiving the selection
- Point of Sale terminals – authentication of tellers and cashiers

► Specifications

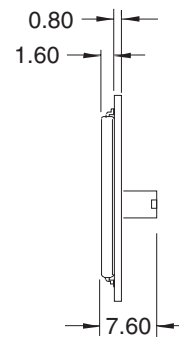
- Power: 5 volts DC (from USB)
- Operating Current: 18 milliamps
- Standby Current: 500 microamps
- Fingerprint Sensor: MBF200
- Operating Temperature: 0 to 60°C
- Storage Temperature: -65 to 150°C
- Resolution: 500 DPI, 8-bit grayscale
- ESD: FCC-B and CE (± 10 kv)
- EMI: FCC-B and CE certified



Isometric View



Top View



Side View

Note: All dimensions in millimeter.

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