

Datasheet



Our company focuses all of our efforts on creating the highest possible quality in fingerprint sensor technology at an affordable price. We hope that this product meets your requirements, and we welcome your feedback.

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1. General Description

The FP is a compact, USB Single Finger Capture Device that captures highly accurate, high quality fingerprint images. The FP is certified as meeting or exceeding minimum FBI interoperability standards that ensure high quality images under the PIV-071006 standard established by NIST. Specifically, the FP is certified for used in the FIPS 201 PIV program as well as FAP 20 Mobile ID implementations. The FP is a USB 2.0 supported device and includes Auto-On™, automatic finger placement detection capability.

Key Features

- FBI Certified for FIPS 201 (PIV) & FAP 20 Mobile ID Compliance
- ICAO Compliant Image Quality
- Auto-On™
- Smart Capture™
- USB 2.0 Hi-Speed Compliant
- Bulk mode transfer
- Programmable serial number
- Multi-Device connection support
- USB bus-powered
- SDKs available for integration into applications

Applications

- PC Peripherals
- PIV Fingerprint Verification Station
- Government Logical Access Control
- Airport Security
- E-Passport Fingerprint Scanner

Auto-On and Smart Capture

Auto-On (Automatic Finger Placement Detection) and Smart Capture (Automatic Image Quality Adjustment) are technologies implemented in the FP, but they must be used in conjunction with software applications, such as those developed with Software Developer Kits, in order to enable these functions.

2. Specifications

| Optical | |
|-----------------------------|---|
| Image Sensor | CMOS |
| Image Resolution | 500 PPI |
| Image Size | 300 x 400 pixels |
| Platen Size | 18.2 mm x 22.9 mm |
| Effective Sensing Area | 15.24 mm x 20.32 mm |
| Image Grayscale | 256 levels (8-bit) |
| Light Source | Red LED |
| Lifetime (typical) | 60,000 hours |
| Electrical | |
| Supply Voltage | 5.0V DC \pm 5% via USB |
| Current Consumption (max) | 150 mA |
| General | |
| Dimensions (W x L x H) | 30.0 x 46.6 x 22.2 mm |
| Operating Temperature | -20°C ~ 65°C |
| Operating Humidity | 90% RH or less, noncondensing |
| Other | |
| USB | USB 1.1 Full-Speed and USB 2.0 Hi-Speed |
| Image Capture Speed | 0.2 ~ 0.5 seconds with Smart Capture™ (varies according to finger condition) |
| Operating Systems Supported | Windows 8 / 7 / Vista / XP / 2000 / CE, Server 2008 R2 / 2003, Linux, Android 4.1 & above |

4. Connector Specifications

| Name | Connector | Part Number | Vendor |
|------|-----------|---------------------------------------|--------|
| J2 | 5 Pin | 53047-0510 Match Connector (51021-05) | Molex |

J2 (5 Pin) Connector Description – USB I/O

| Pin No | Name | States | Description |
|--------|------------|--------|--------------------|
| 1 | USB_VCC | Power | USB Power (DC +5V) |
| 2 | USB_DM | I/O/Z | USB D- |
| 3 | USB_DP | I/O/Z | USB D+ |
| 4 | USB_GND | Power | Ground |
| 5 | USB_SHIELD | Power | Shield |

5. Ordering Information

| Product | Part-number | Description |
|---------|-------------|--|
| FP | EA4-0017A | optical fingerprint sensor module and USB cable. |
| FP | EA4-0017ANC | optical fingerprint sensor module (without USB cable). |
| FP | EA4-0017M | optical fingerprint sensor module and microUSB cable. |

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