



MFC-1168

All-in-one 160\*160 sensor with MCU & Algorithm embedded



ALGORITHM

- Good adaptability to dry, wet, or fuzzy finger
- Repair the fractured fingerprints automatically
- Great anti-deformation ability
- Supporting 360 °Authentication
- Self-learning during usage
- ISO Standard: ANSI/INCIT 378 Compliant Extractor & Matcher
- Compliant ISO/IEC 19794-2 fingerprint minutia standards.
- Fingerprint Template Size < 1KB
- Verification speed < 700 ms

The MFC-1168 is a highly integrated fingerprint image sensor combined with MCU which can be provided completely functions of fingerprint module. It is based on capacitive-touch sensing technology with hardened surface coating and enhanced anti-ESD ability already. A variety of communication interfaces, USB, UART and SSI are provided to connect with kinds of host system flexible and easily.

For resolving security concern, the fingerprint template can be sorted in internal 512K Bytes flash memory with the security element to protect the fingerprint template data. This way can effectively resolve security concern in portable device payment application, avoiding risk in fingerprint template been intercepted.

With sleep-mode finger detection function, host system can enter sleep mode and be waked up by finger detection interrupt pin to enter normal operation mode.

The software SDK including fingerprint algorithm is provided to reduce development time. With a few software connection APIs, it can integrate with windows or android system. Other simple MCU system can be easily integrated, too.

FEATURES

- Spatial resolution 508 DPI
- 2D sensor array of 160x160 pixels
- Sensing area 8 mm x 8 mm
- 13.4mm x 13.9mm package size
- IP67 dust and water resistant
- Finger detection function to detect finger on sensor
- Interrupt pin to wake up host when finger on sensor at sleep and standby mode
- Communication interface
  - USB 2.0 Full Speed x 1 / UART x 1 / SPI interface x1
  - SSI (Slave-synchronous Serial Interface) x 1 / SQI interface x1 / I2C interface x1
- Embedded Storage
  - USB 2.0 Full Speed x 1
  - OTP 1K Bytes
  - Flash 512K Bytes
- Security Engine support
  - AES, RSA, DES/3DES

APPLICATIONS

- Fingerprint locker for car, motor or bicycle.

ORDERING INFORMATION

- MFC-1168 All-in-one 160\*160 sensor with MCU & Algorithm embedded.