The MFC-1160 fingerprint image sensor is based on capacitive-touch technology with hardened surface and enhanced ESD strength. The build-in analog and digital circuitries minimize the number of external components, and provide easy-to-use, standard SPI interface to microprocessors.

The operation of MFC-1160 is as following, a fingerprint image captured by pixel array, would delivery fingerprint ridge or valley signals to through A/D converting process and digital process, then as a simple reading interface protocol. The image quality of MFC-1160 can be adjusted by setting gain, offset and reference voltage parameters internally. In addition, the internal operation parameters and interface speed can also be configured to meet various finger conditions.

MFC-1160 also has finger detection function and windowing function for different applications.

### 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
- Build-in 8-bit ADC for digitizing image
- Build-in programmable voltage reference
- High speed SPI interface
- 0.03 sec read out time
- 128-byte on-chip data FIFO
- 1.65Volt ~ 3.6Volt for I/O communication
- Advanced SiP package to reduce size and provide better water and dust protection
- Windowing function to crop smaller image
- Finger detection function to detect finger on sensor
- Interrupt pin to wake up host when finger on sensor at sleep and standby mode
- 1.5mA power consumption at standby mode
- 150uA power consumption at sleep mode
- IP 67 approved

### APPLICATIONS
- Personal handheld devices (Mobile/Tablet/Notebook)
- Biometric authentication on card

### ORDERING INFORMATION
- MFC-1160 160*160 capacitive fingerprint sensor