

MFC-2360 Fingerprint Sensor



Description

The MFC-2360 fingerprint image sensor module is based on capacitive-contact technology with hardened surface and enhanced ESD resistivity. The build-in analog and digital circuitry minimizes the number of external component, and provides easy-to-use with standard SPI

interface to microprocessors. Due to its higher sensing area (256X360 pixels), the MFC-2360 can catch more fingerprint characteristics. The operation of MFC-2360 is controlled through registers, following a simple protocol. The captured image quality can be adjusted by setting gain, offset or reference voltage parameters. The internal operation and interface speed can also be configured to the needs.

Features

- Spatial resolution 508 DPI
- 2D sensor array of 256x360 pixels
- Active sensing area 128 mm x 180 mm
- Build-in 8-bit ADC for digitizing image
- Build-in programmable voltage reference
- High speed SPI interface
- 0.1sec read out time
- 32-byte on-chip data FIFO

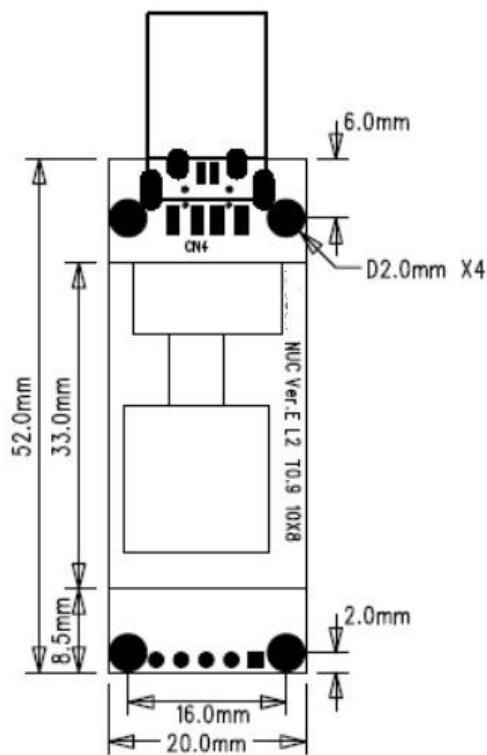
Specifications

Parameter	Unit	Min	Type	Max	Conditions
Dimensions (W x L)	mm	12.8 X18.0			W: Width L: Length
Pixels (X,Y)	dot	256 x 360			
Sensor pixel size	um	50 x 50			
Spatial resolution	DPI	508			
ADC Pixel resolution	bits	8			Max 256 gray Scales
Chip data FIFO	byte	160			
Interface		SPI			
SPI clock	M Hz	1	16	32	
System clock (ADC)	M Hz		6		
Supply Voltage	V	2.7		3.3	
Supply Current	mA		9		
Operation temperature range	°C	-20		70	
Storage temperature range	°C	-40		100	
Extended humidity range	%RH	20		85	
ESD	KV		15		(human body mode)
Dimensions (W x L x H) (Package size)	mm	33 x 20 x 1.7			
Function	Yes / No	Conditions			
Low-power finger detect mode	yes				
Set Calibration data	yes	(OTP)			
I/O and Core Power Isolation	yes				
Reset (from MCU to chip)	yes				
Interrupt (from chip to MCU)	yes				

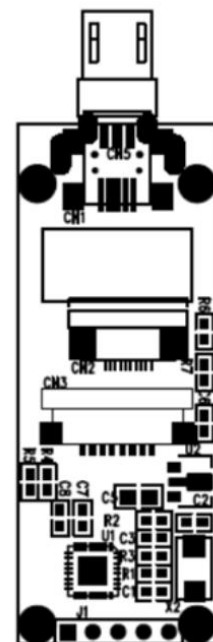
Applications

- Mobile, Desktop and Network Access Security
- Physical Access Control Systems
- Fingerprint Identification Systems
- Time and Attendance
- POS Terminals and Kiosks

MFC-2360 Evaluation Kit



Front view



Back view

USB Connector PIN Description: Pin Description

Name	No	States	Description
VCC	1	Power	VCC (DC+5V)
USB_A	2	I/O/Z	USBD-
USB_B	3	I/O/Z	USBD+
GND	4	Power	Ground
SHIELD	5	Power	Shield

MFC-2360 Evaluation Kit (NU) Specification

Sensor	256 x 360 fingerprint sensor
Scanning Speed	1/4 second via USB
Image Resolution	508 dpi (H), 508 dpi (V)
Gray Level	8 bits/pixel, max 256 gray scales
EK (PCB)Dimension	Version D: 37mm(L) x 24mm(W) Version E: 52mm(L) x 20mm(W)
Scanner Interface Cable	Standard USB compliant cable
Power Supply	30mA, for EK PCB (From USB port) Suspend Mode: < 500 uA
Demo Requirement	XP/Win 7, 8, 8.1, 10, Android, USB 2.0
SOC Spec.	NUC12X or ST Cortex-M4

Contact us

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