



Features

- Strong Performance
 - Fast 1:1 and 1:N matching speed
 - Multi fingerprint per one ID (Up to 10 templates)
 - Easy capture of weak, dry and wet fingerprint
- Superior Matching Engine
 - 1st in FVC(Fingerprint Verification Competition)
 - Auto-on Function
 - Recognition of 360° rotation fingerprint
- Advanced Optical Technology
 - Sensor resistant to scratches, impact, vibration and electrostatic shock
 - Minimized distortion of image
 - High quality image capturing
- International Standard Image Format and Interfaces
 - ISO 19794-2 & ANSI 378
- Available to setup security level per user

Applications

- Access control
- Time & Attendance
- Meal Service
- Door lock
- POS System
- ATM

Specification

Item		FIM40 Series			FIM50 Series		
		FIM4060	FIM4110	FIM4120	FIM5060	FIM5110	FIM5120
Fingerprint Sensor	Model	OPP06	TCS1	TCS2	OPP06	TCS1	TCS2
	Type	Optical	Capacitive		Optical	Capacitive	
	Dimensions	20.6x22.5x46	27x20.4x3.5		20.6x22.5x46	27x20.4x3.5	
	Sensing Area [mm]	13.2x15.2	12.8x18.0	10.4x14.4	13.2x15.2	12.8x18.0	10.4x14.4
	Resolution	500 DPI	508 DPI		500 DPI	508 DPI	
Processing Board	CPU	S3C2450 (533MHz) (Marvell)			S3C2410 (266MHz) (Marvell)		
	Memory	DRAM (64MB), Flash (16M)			DRAM (16MB), Flash (8MB)		
	Dimensions	40 X 45 mm			40 X 45 mm		
Environment	Operating Voltage	3.3/5V	5V		3.3/5V	5V	
	Consumption Current	105~130 mA			70~220 mA		
	Operating Temperature	-20~60°C			-20~60°C		
	Operating Humidity	< RH 90%			< RH 90%		
Authentication	Time	1:1	< 700 msec.		< 1 sec.		
		1:N	<1sec. (20,000 templates)		< 1sec. (10,000 templates)		
	Performance	FRR 0.1% / FAR 0.001%			FRR 0.1% / FAR 0.001%		
	Template Capacity	20,000 templates			2,000 templates 10,000 templates	10,000 templates	
Log Capacity	50,000 logs			30,000 logs			
Interface	UART	9,600~115,200 BPS (RS232, TTL)			9,600~115,200 BPS (RS232, TTL)		
	I/O	2+6 Programmable GPIO			2+6 Programmable GPIO		
Encryption	AES			AES			
ISO 19794-2 & ANSI 378	○			○			
Auto-On	○			○			
Setup Personal Security Level	○			○			
Recognition of 360° Rotation Fingerprint	○			○			

Fingerprint Module

FIM Series(Stand alone with CPU) is a standalone fingerprint recognition module mainly consisting of optical/semi-conductor sensor and processing board with high speed CPU and optimized fingerprint recognition algorithm. It supports the best recognition rate, high speed 1:N Identification, user data up/down function, and getting log function. DK board of FIM provides developer with convenient development environment.

Fingerprint Sensor	Optic (NITGEN)	Semi-conductor (UPEK)	
	OPP06	TCS1	TCS2
Processing Board			
FIM40XX	FIM4060	FIM4110	FIM4120
FIM50XX	FIM5060	FIM5110	FIM5120



FIM DK

FIM DK(Developments Kit) contains fingerprint recognition module, assessment board, pc software and document for developer to be further developed for its applications.

No.	Configuration
1	FIM assessment board
2	FIM
3	RS232 serial cable
4	Adaptor (DC 5V)
5	CD : EvTools(NT/2000/XP/Vista/7), Manual

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