



• CORE PRODUCTS

FIM Module Series

FIM Module Series(Stand alone with CPU) is a stand-alone fingerprint identification module composed of optic sensor and processing board. With high speed CPU and optimized fingerprint algorithm, FIM module series boasts high identification rate and supports high speed 1:N identification, uploadability and downloadability of data, providing optimal condition for application to access control system, Door-lock. FIM Module Series has functions of fingerprint enrollment, identification, partial and entire deletion and reset in a single board, it does not require connection with a separate PC, thereby offering convenient development environment.

▶ Module classification

▶ Features / Application area

▶ Product Image

▶ DK Component

▶ Specification

Module classification

PCB \ Sensor		FIM --30	FIM --40	FIM --41
		OPP03	OPP04	OPP04
Module	Specification	500DPI 20.6(W)x22.5(L)x48(H)mm	500DPI 21(W)x32(L)x62(H)mm	500DPI 21(W)x32(L)x62(H)mm

FIM11--	User : 1,000 users Supply voltage : 5V Log data : 2,000ea Sensor Cable : FPCB MIFARE SOC Version		FIM1140HV	
FIM20--	User : 1,000 / 4,000 users Supply voltage : 5V Log data : 8,000ea External I/O : In(4), Out(2) Sensor Cable : FPCB	FIM2030HV	FIM2040HV	
FIM30--	User : 100 users Supply voltage : 3.3V Log data : 2,000ea External I/O : In(3),Out(2) Sensor Cable : FPCB	FIM3030LV	FIM3040LV	
	User : 100 users Supply voltage : 5V / Log data : 2,000ea External I/O : In(3),Out(2) Sensor Cable : FPCB	FIM3030HV	FIM3040HV	
FIM31--	User : 100 users Supply voltage : 3.3V Log data : 2,000ea External I/O : In(3),Out(2) Sensor Cable: Wire Cable			FIM3141LV

● Features / Application area

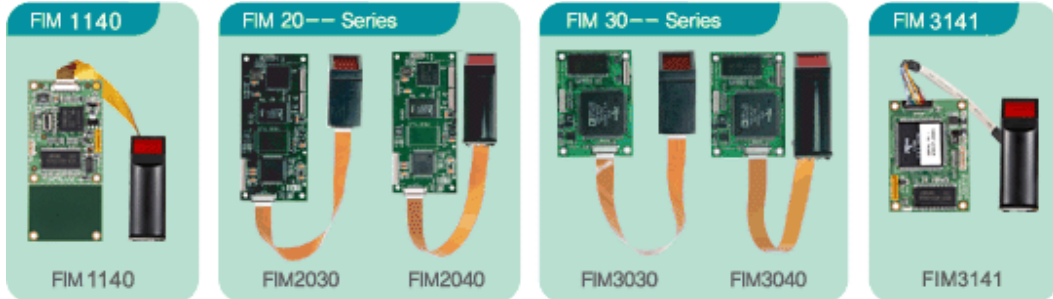
ITEM	FIM 1140
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Features	<ul style="list-style-type: none"> - Built-in fingerprint identification function - MIFARE SOC Version Use of dedicated logic for extraction of high quality image Uploadability and downloadability of user fingerprint information - 1:1, Password, Device Password - Excellent weak, dry and wet fingerprint - Storage of verification log (2,000 ea) - RS-232 Serial Interface
Application Area	<ul style="list-style-type: none"> - Access control system - Attendance control / Personnel Management - DoorLock System

ITEM	FIM2030 / 2040	FIM3030LV/ 3040LV/ 3030HV/ 3040HV
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Features	<ul style="list-style-type: none"> - Built-in fingerprint identification function - Optimized design for application to access control system * High speed 1:N matching algorithm * Various user mode (1,000 / 4,000) * Use of dedicated logic for extraction of high quality image * Uploadability and downloadability of user fingerprint information - 1:1, 1:N, Password Method - Device Password - Excellent weak, dry and wet fingerprint recognition - Storage of verification log (8,000 ea) - RS-232 Serial Interface - RoHS 	<ul style="list-style-type: none"> - Built-in fingerprint identification function - Supply Voltage * FIM3030LV/3040LV : 3.3V / FIM3030HV/3140HV : 5V - 1:1, 1:N, Password Method - Device Password - Provides the minimum recognition time through optimized fingerprint Technology - Excellent weak, dry and wet fingerprint recognition - Storage of verification log (2,000 ea) - RS-232 Serial Interface - RoHS - Sensor Cable : FPCB (FIM 3141 : Wire Cable)
Application Area	<ul style="list-style-type: none"> - Access control system - Attendance control / Personnel Management - ATM, POS etc 	<ul style="list-style-type: none"> - Door Lock Systems - Safe Box - Vehicle Control - Access Controller (Small size) - ATM, POS etc


Product Image



DK Component

FIM Module Series의 Developer's Kit includes FIM module, assessment board, software for PC and document for developers.

1	FIM Module assessment board
2	FIM Module
3	RS232 serial cable
4	Adaptor (DC 5V)
5	CD : EvTools (Windows 98/2000/XP), Manual

 Specification

ITEM	FIM 11 --		FIM 20--	
	FIM 1140		FIM 2030	FIM 2040

Fingerprint Sensor		OPP04	OPP03	OPP04
Sensor Cable		FPCB	FPCB	
Board Spec	Specification	ARM9, SDRAM : 8MB, Flash Memory : 1M	ARM9, SDRAM : 8MB, Flash Memory : 2/2+4M	
	Dimension	43 X 60 [mm ²]	43 X 93 [mm ²]	
User Environment	Supply voltage	5±0.5 [V]	5±0.5 [V]	
	Consumption	60(Idle) ~ 350(Max) [mA]	280(Idle) ~ 300(Max) [mA]	
	Temperature	-20 ~ 60 [°C]	-20 ~ 60 [°C]	
	Humidity	RH 95 [%]	RH 95 [%]	
Authentication	Time	1:1	Less than 1 sec	Less than 1 sec
		1:N	X	Less than 2 sec on average (1,000)
	Rate	FRR : 1/1,000, FAR : 1/100,000	FRR : 1/1,000, FAR : 1/100,000	
	Method	1:1 Password, Device Password	1:1, 1:N, Password, Device Password	
	Log data	2,000 ea	8,000 ea	
	Number of user	1,000 users	1,000 users / 4,000 users	
External I/O	RS232	(2channels) : 9,600 ~ 115,200 [BPS]	(2channels) : 9,600 ~ 115,200 [BPS]	
	In(4)	X	(4) : Enroll, Deletion(entire deletion), Verification, Reset	
	Out(2)	(3): Success, Failure, Card Contact	(2) : Success, Failure	
MIFARE SOC		O	X	
Data Encryption		AES	AES	

ITEM	FIM 30 --				FIM 3141
	FIM 3030LV	FIM 3040LV	FIM 3030HV	FIM 3040HV	FIM 3141LV

Fingerprint Sensor		OPP03	OPP04	OPP03	OPP04	OPP04
Sensor Cable		FPCB			Wire Cable	
Board Spec	Specification	DSP, 8MB SDRAM, 1M Flash				
	Dimension	43 X 60 [mm ²]				
User Environment	Supply voltage	3.3±0.3 [V]		5±0.5 [V]		3.3±0.3 [V]
	Consumption	60(Idle) ~ 250(Max) [mA]				
	Temperature	-20 ~ 60 [°C]				
	Humidity	RH 95 [%]				
Authentication	Time	1:1	Less than 1 sec			
		1:N	Less than 1 sec			
	Rate	FRR : 1/1,000, FAR : 1/100,000				
	Method	1:1, 1:N, Password, Device Password				
	Log data	2,000 ea				
	Number of user	100 users				
External I/O	RS232	(1Channels) : 9,600 ~ 115,200 [BPS]				
	In(4)	In(3) : Enroll, Deletion(entire deletion), Verification				
	Out(2)	(2) : Success, Failure				
MIFARE SOC		X				
Data Encryption		AES				