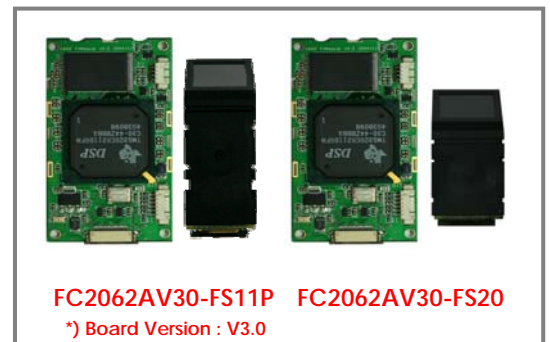


### KEY FEATURES

- Embedded Stand-alone Fingerprint Identification Module
- Verification (One-To-One) and Identification (One-To-Many)
- Onboard Template & Record Data Storage
- Simple Serial RS-232C/CMOS Interface
- Downloading/Uploading Template from/to Host
- Easy to integrate giving minimal Time-To-Market

### APPLICATION

- Fingerprint based access control systems & door-lock
- Fingerprint personal identification system
- Time attendance system using fingerprint
- Fingerprint based machine control
- Fingerprint based weapon control system
- Fingerprint based car locks



### DESCRIPTION

IZZIX FingerENGINE in FIModule follows the commonly accepted fingerprint identification scheme, which uses a set of specific fingerprint feature points (minutiae). However, it contains many powerful algorithmic solutions, which enhance the system performance and reliability. Some of them are listed below:

- Quality Check of Fingerprint Image
- Efficient Feature Extraction
- Fully Tolerant to Fingerprint Distortion and Rotation(360°)
- Fingerprint Enroll Mode with Feature Collection
- Classification Feature by Global Feature Vector
- Suitable Algorithm to 1:1 and 1:N Mode

And, FIModule acts as a biometric subsystem with template & record data storage. FIModule can be used to any fingerprint application and be controlled by a host sending/receiving command via the standard serial interface. FIModule makes fingerprint templates and stores directly in flash memory. Templates can also be exported for external memory and be imported by external fingerprint device and IZZIX FingerENGINE algorithm (ex, IZZIX FD1000).

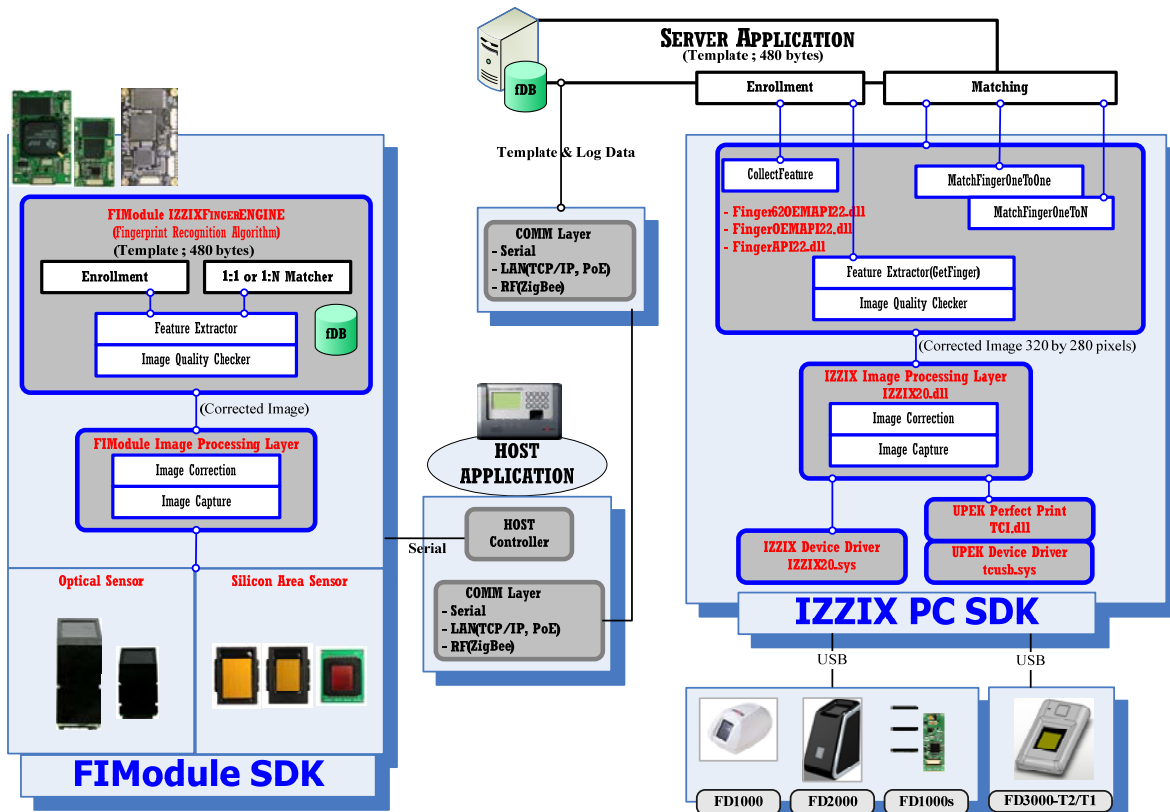
### QUICK SPECIFICATION

Response Time(sec)	Enrolled Fingerprints		Matching OK
	1:1 Mode		
1:N Mode		500	< 0.60
		1,000	< 0.80
		2,000	< 0.97
		3,000	< 1.22
FAR(False Acceptance Rate)	< 0.0001 %		
FRR(False Rejection Rate)	< 0.1 %		
Matching Mode	Identification(1:N Mode), Verification(1:1 Mode)		
Times of Enrollment	3 times ⇒ 1 feature data/1 user		
Number of Fingerprint & Record		Fingerprint	Record
	2M Flash ROM	3,000	8,000
User Data Size	512 Bytes (= 480 Bytes Template Data + 32 Bytes Header Data)		
Record Data Size	16 Bytes		
Start-up Time	Reset Time	300 msec	300 msec

Digital Signal Processor	TI TMS320C6211		
Fingerprint Board	FB2062AV30-OPT1 (Board Version : V3.0)		
Optical Fingerprint Sensor	FS11P/FS20, CMOS CIF Image Sensor		
Dimensions & Weight	FB2062AV30-OPT1	65 × 37 × 8 mm	< 15 gr
	FS11P	20.5 × 25 × 55 mm	< 40 gr
	FS20	20.5 × 25 × 42 mm	< 32 gr
Window Size	18.8 × 16 mm		
Resolution	500 DPI		
Operating Voltage	5V DC		
Power Consumption	240mA (Sensing Mode)		
Temperature/Humidity	0°C ~ 40°C / 15% ~ 80 %		
External Interface	7Pin Connector : RS232C Level UART		

# FC2062AV30-FS11P/FS20

## FIModule Product Sheet



### Ordering Information

#### •FC2062AV30 Module Series

FC2062AV30 – x1 – x2 x3 x4 x5 (Board Version :V3.0)

FC20	Algorithm Version V20 series	
62AV30	DSP TMS320C6211 and Board Version V3.0	
① x1	CMOS CIF Optical Image Sensor	<b>FS11P/FS20</b>
② x2	Communication Interface (Hardware)	<b>R : RS232C</b>
③ x3	Flash Memory Capacity (Number of Fingerprints)	<b>M2 : 2M Byte (3000 Fingerprints)</b>
④ x4	Supply Voltage	<b>V50 : 5.0 Volt</b>
⑤ x5	Total Length(TL) and Insulation Length(IL) of FFC Cable : TL(IL) <b>L160 / L120 / L80 -&gt; 160(150) / 120(110) / 80(70)mm</b>	

FIModule	Fingerprint Board
FC2062AV30 – FS11P – RM2V50L160(L120, L80)	<b>FB2062AV30 – OPT1</b>
FC2062AV30 – FS20 – RM2V50L160(L120, L80)	

(Note) The sensor FS10/FS11 is EOL(End Of Life) status, so the module FC2062AV30-FS10/FS11 is EOL.

But, the FS10/FS11 sensor can be used in the board FB2062AV30.

#### •FC2062AV30 SDK

FC20 SDK-E2 (62AV30-FS11P/FS20)



*This specification is subject to change without prior notice.*

**DIGENT - Advanced Fingerprint Security Solution**

www.digent.com

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Refer to Manual for details and usage specification