OKI SEMICONDUCTOR

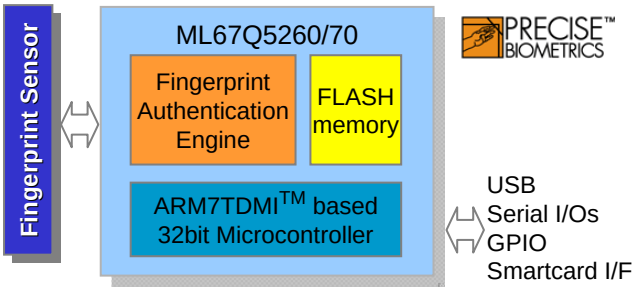
Ultra Small Fingerprint Authentication MCU

ML67Q5260/ML67Q5270

NEW PRODUCT

■Features

The ML67Q5260/ML67Q5270 are fingerprint authentication microcontrollers, which realize high performance fingerprint authentication with high level of security and ultra small space.
The fingerprint authentication is processed by the hardware accelerator using Precise Biometrics' DFT (Differential Fourier Transform) based algorithm without any external memory. And WCSP (Wafer Chip Size Package) enables to apply this LSI on to an IC card type of product. And because of rich peripherals and 32bit CPU capability, this LSI can be used as customers' main controller too.



APPLICATIONS
- ■ Network Token / Dongle
- ■ Personalization for AV equipment
- ■ Add-on security for lock, control panel for industrial equipment and so on

■Specifications

Fingerprint Authentication	■Hardware accelerator	Algorithm	DFT based (*licensed by Precise Biometrics)
		Execution time *1	Authentication : 0.80sec max. (1:1) 1.80sec max. (1:45)
		Maximum enrollment number	15 fingers (3 data / finger) or 45 fingers (1 data / finger)
		Write/Erase times	10,000 times (max.)
	■Applicable sensor	Slide sensor	AuthenTec AES1751/ AES1711
		Touch sensor	Connectable (* depending on the sensor's spec.)

Microcontroller	■CPU		32bit RISC CPU ARM7TDMI-S™
	■Memory	Flash	User area approx. 64kB Finger Data area approx. 64KB *2
		SRAM	User area approx. 4kB
		External *3	ROM/FLASH, SRAM, I/O
	■Interface		USB2.0 FS Device x 1, SPI x 2, SSIO x 1, SIO x 1, GPIO x 25(37 *3) ISO-7816 Smart Card IFx1
	■Security features		Access Control to Flash memory

ML67Q5260 WCSP

Others	■Operating frequency		32MHz (CPU)
	■Operating voltage		I/O : 3.0 – 3.6V Core : 1.62 – 1.98V
	■Power consumption		Operating : 51mA typ. Stand-by : 52uA typ.
	Product Name	Package	Size (mm)
	ML67Q5260-NNNHB	63pin WCSP	4.03 x 4.01 x 0.4
	ML67Q5270-NNNLA	144pin LFBGA	11.0 x 11.0 x 1.5

*1 These numbers are measured using AuthenTec AES1751.
*2 This is approximate number in case of enrolling 45 fingers.
*3 This function is available only for the ML67Q5270.

■Software Development Kit (SDK)


ML67Q5260SDK-1751
(ML67Q5260/ML67Q5270)

This is leaflet, not products' data sheet. Specifications are subject to change without notice.
OKI SEMICONDUCTOR CO., LTD. URL: http://www.okisemi.com/en/ Sep. 21, 2010 FECL67Q5260_5270-01