

BeyondLSI Fingerprint Authentication Technology

Fchip2



Overview

FCHIP2 is a Fingerprint Authentication Chip provided by BEYONDLSI. It provides customers an IDENTIFY and EASY solution to develop an ID product embedded with fingerprint authentication system without the knowledge about fingerprint techniques.

Fingerprint authentication processing is performed inside the FCHIP2, Authentication result is secured with encryption. Because this solution brings digital ID Providers an add-on biometric ID solution, true secure ID product with individual INDENTIFY become true.

By using FCHIP2 connecting with various sweep fingerprint sensors and an Flash ROM, It is easy to make a compact fingerprint authentication system. Secure data are transferred b etween FCHIP2 and user's interface.

Features

- * CPU speed: 200MHz
- * On-chip ROM: 64KB
- Embedded Fingerprint Identification Engine
- * On-chip SRAM: 64KB
- * Power consumption: 0.5mW/MHz and 100mA @3.3V
- * FBGA package: 144 pins
- * Size: 10 mm x 10 mm x 1.26mm
- * USB1.1 compliant, 12 Mbps full speed rate.
- * UART interface
- * SPI Interface
- * Sensor Interface:

(Compatible with popular used sweep or single-touch fingerprint sensor)

Block Diagram



Applications





USB Token **Security Dongle**

Mobile devices PDA



PC peripherals Mouse, Keyboard



Access control Door locks

Secure Authentication and Confidentiality

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- * General Purpose I/O: 16CHs
- * I/O power supply: 3.3V
- * Core power supply: 1.8v
- * Operating Temperature: -40°C to 85°C
- * Humidity: 5% to 95%
- * Fingerprint Algorithm on Chip: FAR < 0.01% FRR < 1%
- * Matching Speed on chip: <1.5 seconds
- * Fingerprint templates No. : 30
- * AES encryption