EntréPad®
AES2510
Fingerprint Sensor

Introducing...

The new EntréPad® AES2510 slide sensor is AuthenTec's latest in a line of low cost high performance fingerprint sensors. Designed for mobile handset applications, the AES2510 provides both the unparalleled fingerprint imaging capability of TruePrint® Technology and full graphical cursor control for menu, navigation, and gaming applications.

AuthenTec has adapted its patented, award winning TruePrint technology to read fingerprints while the finger is pulled across the AES2510's rectangular surface. In this manner, the fingerprint images are acquired while the sensor is substantially reduced in size.

The AES2510 combines silicon-based image capture with proprietary sensor control and matching algorithms to provide the best quality, lowest cost biometric authentication solution available.

TruePrint Is...

AuthenTec's unique, patented imaging technology. All of AuthenTec’s EntréPad and FingerLoc® sensors utilize TruePrint technology, enabling the sensor to look beyond the easily obscured outer surface of the skin into the living layer beneath where the unique ridge and valley patterns of the fingerprint originate.

High Performance Features...
- TruePrint for sliding fingers
- >15cm/sec finger slide speed
- Uneqaul "Ability to Acquire"
- Industry’s best FAR/FRR
- Security Features
- Graphical Navigation Support

Ultra-Small Form Factor...
- 48 Ball Grid Array (BGA)
- 13.8mm x 5mm x 1.3mm

Robust Packaging...
- Scratch and impact resistant
- Rub-resistant to >10M rubs
- Silver or Gold Drive Ring

Detection Matrix...
- 192 x 16 pixels
- 9.75mm x 0.81mm
- 500 ppi high-resolution images

SelectaBus...
- 8 Mbps Synchronous Serial with Master & Slave modes
- Master-mode SPI supports DMA-based Image Capture
- 8-bit Parallel @ 9 MHz

Mobile Voltage Operation...
- 2.4V - 3.6V Single Supply

Mobile Temperature Operation...
- -20°C through +70°C

Current Consumption @ 2.5V...
- Advanced power management
- 35mA peak imaging
- 2.5mA hardware finger detect
- 2.5mA navigation mode

High-Rate Image Capture...
- Up to 240 image frames /sec.

ESD Resistance...
- IEC 61000-4-2 Level 4 (±15KV)

Supported Operating Systems...
- Microsoft® Windows® Mobile®
- Symbian® 6.1, 8.x
- uITRON v3.0, v4.0

Advanced Features...

The AES2510 provides on-chip support for graphical navigation. This HW assisted software feature provides accurate delta-x/delta-y motion detection with both low sensor current consumption and low system CPU load.

Select from multiple system interfaces to provide maximum system flexibility and ease of integration including 8-bit parallel and SPI. The master-mode SPI interface permits image capture via a DMA channel freeing the application processor from the time consuming task of obtaining an image. The navigation packet timing engine provides multiple timed-data for accurate motion & gesture calculations.

Convenient Security...

The EntréPad AES2510 fingerprint sensor features hardware finger detection capability and specialized security features for system integrity. Digitally signed Image steams and Challenge/Response protocol protect the system from a variety of security attacks provide a secure mobile environment.

Authentication Solution Cost...

The AES2510 is AuthenTec’s answer authentication requirements where minimizing cost is paramount. AuthenTec remains committed to providing the lowest overall cost of authentication in any configuration with the widest range of fingerprint sensors.
In addition to AuthenTec’s latest sensor, let us introduce you to the AuthenTec family of kits…

AuthenTec provides a full range of hardware, software, and support for easy integration. This includes advanced sensor control, fingerprint matching algorithms, and device drivers supporting Windows Mobile, Symbian 6/7/8 and is “OS-ready” for other mobile embedded applications. Support is also provided for industry-standard biometric Applications Programming Interfaces (APIs). All these features are conveniently bundled into kits:

- Technology Evaluation Kits (TEKs) are low cost introductory tools that come complete with a sensor module, matching algorithms, and demonstration software. TEKs enable quick and easy investigation of our technology.

- Software Developer’s Kits (SDKs) are available for Independent Software Vendors (ISVs) who wish to develop products that interface with AuthenTec sensors.

- Reference Design Kits (RDKs) enable manufacturers of PCs, peripherals, PDA, and wireless devices to quickly integrate AuthenTec sensors into their products.

- AuthenTec's software is "OS-ready," therefore enabling AuthenTec to quickly provide dedicated software drivers in support of unique customer requirements. Contact AuthenTec directly for more information regarding this support.

For more information contact AuthenTec or your local AuthenTec representative.