The *FingerLoc™ AF-S2™* is AuthenTec's workhorse fingerprint identification sensor IC, using familiar and reliable 0.6 µ CMOS technology. This product combines silicon-based image capture with proprietary sensor control and matching algorithms.

AuthenTec's sensors with TruePrint™ Technology look past the easily obscured outer surface of the skin to the living layer below where the unique ridge and valley patterns of the fingerprint originate.

AuthenTec devices are the first and only fingerprint-based biometric authentication solutions that can work for everyone, everywhere, under the most demanding real-world conditions.

**TruePrint is...**

...AuthenTec's unique, patented imaging technology. During imaging, a small signal is generated between the IC and the finger's live layer. More than 16,000 individual elements in the sensor matrix form a planar antenna array that receives this signal, creating a digital pattern that mimics very accurately the fingerprint's underlying structure.

A powerful complementary utility within TruePrint is called Dynamic Optimization™. This tool analyzes each image, controlling up to 15 parameters to optimize the fingerprint image, without regard to unusual skin conditions or surface contamination.

**High performance...**
- Unequaled "Ability to Acquire"
- Industry's best FAR/FRR

**High-rate frame capture...**
- 15 frames/second

**Image density...**
- 250 thru 1000 dpi, selectable

**Small form factor...**
- 68-pin PLCC package
- 24 x 24 x 3.5 mm (.98 x .98 x .14 in)

**Detection matrix...**
- 13 mm x 13 mm (.50 x .50 in)
- 128 x 128 pixels

**Operating temperature range...**
- -20°C through +70°C

**Voltage...**
- 5Vdc

**Power dissipation @ 5Vdc...**
- 30 mW (Imaging mode)
- 100 µW (Standby mode)

**Robust packaging...**
- Scratch and impact resistant (stress-tested to 41,000 psi)
- Impervious to contamination

**ESD pesistance...**
- IEC 61000-4-2 Lvl 4 (15KV)

**Supported operating systems...**

**Superior image quality...**

The result is a high-quality image that other approaches simply can't equal. This means that AuthenTec’s sensors acquire fingerprints when other methods just can’t cut it.

**Target applications...**

The FingerLoc AF-S2 sensor is optimized for use in time and attendance, access-control, and security applications, and in larger form-factor PCs and peripherals.

**Convenient security...**

The AF-S2 fingerprint sensor is specifically designed for the demands of the PC market and access control markets. Its small size and high repeatability make it ideally secure, reliable, and convenient for such applications.

**Building on success...**

FingerLoc is AuthenTec's original fingerprint sensor family, complementing the EntréPad™ line for the portable PC and mobile product markets. Both product families build on AuthenTec's well-proven TruePrint™ Technology to produce the best imaging in the industry.
The FingerLoc AF-S2 sensor offers...

- Outstanding imaging repeatability
- Superior recognition of "hard-to-get" fingers
- Backward compatibility with existing designs
- Unique power-management system
- High data throughput rates
- Low-cost serial interface
- Easy interface to the Universal Serial Bus (USB)

Launching your design - Fast!

AuthenTec provides a full range of hardware, software, design services, and support. A full range of software and software support tools are available, including advanced sensor control and fingerprint matching algorithms, device driver support for Windows 95, 98, 2000, and NT v4.0, and support for the industry-standard biometric Applications Programming Interfaces. 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 Developers who wish to develop products that interface with AuthenTec sensors.

- Reference Design Kits (RDKs) enable manufacturers of PCs, peripherals, and systems to quickly integrate FingerLoc into their products by providing a complete hardware and software reference solution.

AuthenTec has established technology alliances with key application software developers through its world-wide Solution Providers Network (SPN). This gives instant 100% application software compatibility with all of the leading biometric PC applications.

For more information contact AuthenTec or your AuthenTec representative.