

Finger on the pulse of ID

According to UPEK (www.upek.com), passwords and PINs are the weak links in security. The company, which is a Californian-based spin-off from STMicroelectronics, provides hardware and software for fingerprint authentication, from sensors and companion chips with firmware algorithms; driver and bioalgorithm software; application software for system and network servers to complete the security chain.

In Europe, the TouchStrip and TouchChip silicon fingerprint area and stripe sensors, companion processors, USB readers, embedded biometric subsystems, development kits and application software, are available, with sales and technical support from WBC, a specialist semiconductor distributor within Avnet Electronics (www.wbc-europe.com).

As IT staff report spend an average of nearly half an hour a day dealing with password problems, eliminating multiple passwords can only improve productivity. The biometric market is expected to grow at 40 per cent CAGR from 2004, when the industry was valued at \$1.2billion, to \$4.6billion in 2008.

Biometrics offers benefits such as nothing to forget, like PINs, or to lose, such as keys and smartcards. The biometric data can also not be shared and is not equivocal. UPEK describes it as 'securing the last millimetre', building upon existing digital security infrastructures.

The silicon sensor uses best signal to noise in an patented active capacitive sensing technology. It has a thick plastic coating as protection, but is claimed to offer the best image quality for all fingers under all conditions, with a total area of 256 x 360mm. UPEK

president and CEO, Alan Kramer, compares this to Authentec's AES3500, which at 128 x 128mm provides less than half the coverage.

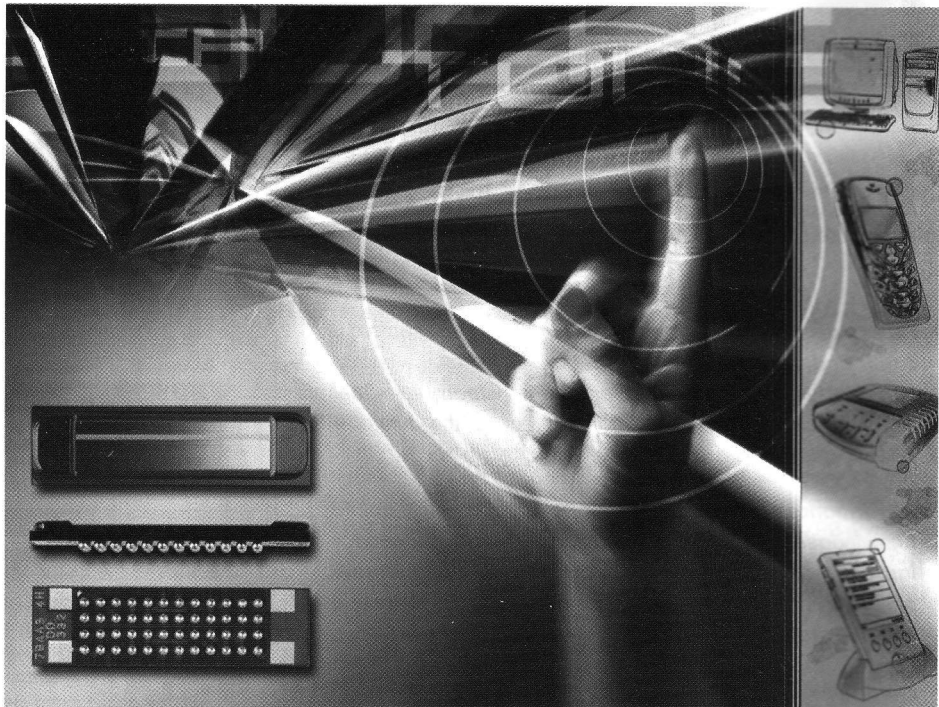
The TouchStrip embedded biometric subsystem can be used in mobile devices, such as mobile phones and PDAs. A future trend, could be the secure portability of data, using flash and external hard drives. PCs and peripherals are another area for use.

The company is the leading supplier for biometric notebooks, IBM has combined TouchStrip with its Embedded Security

Subsystem in its ThinkPad T43 notebooks, using the Intel Centrino mobile technology platform to replace passwords with a finger-swipe and single password for a secure sign-on.

TouchStrip fingerprint authentication solution combines the TCS3 silicon-based strip sensor for data acquisition and the TCD4 ASIC for fingerprint matching and secure data transfer.

PerfectMatch software uses biometric algorithms to match fingerprints from a stored database.



Conference concentrates on commercialisation

Later this month, the IEE will hold the International Conference on Commercialising Technology and Innovation at London's Savoy Place (Wednesday 14 and Thursday 15 September). The topical issues to be covered are medical and security and how these can drive business growth.

IT security is one topic, including the increased need for data protection, trusted computing, secure system development and secure use.

Another topic covered is secure mobile communications. This is a growing concern for mobile communications networks, as new ways to spread viruses and worms increase, together with digital devices being introduced and new approaches to

intercepting communications.

A third area to be covered is disaster prediction, detection and recovery and the need to understand the technology and systems required to prevent both natural and man-made disasters.

There will also be a forum on medical electronics, discussing electronics and technologies being developed in Europe and how to understand and respond to healthcare needs, looking at trends and challenges for the electronics industry. Ubiquitous computing, where computers will be embedded to interact with sensors and actuators, could bring about the realisation of wearable sensors/computing, as well as mobile computing to help, for example in a hospital

environment, or transport and energy use.

Speakers at the conference include Sony's Tsugio Makimoto, Arm's Sir Robin Saxby, Microsoft UK's chief security adviser, Ed Gibson, David Litchfield, managing director, NGS Software, Mark Cox, head of security response team, Red Hay and Vodafone's group R&D director, Mike Walker.

For more information, visit
[http://conferences.iee.org/
cti2005/welcome.html](http://conferences.iee.org/cti2005/welcome.html)

