



AuthenTec Sees Wide Use for Fingerprint ID

By Molly Williams

How and tell at his three daughters' schools used to be somewhat off limits for Scott Moody. Programmable semiconductors, it turns out, aren't exactly a hot topic in most elementary classrooms.



But Mr. Moody, chief executive officer of AuthenTec Inc., was a hit earlier this year when he showed his youngest daughter's second-grade classmates a new chip for recognizing fingerprints. The kids at Holy Trinity Academy in Melbourne, FL., put their fingers on a postage-stamp sized square of silicon on a laptop computer, which then identified them and offered up a check fortune for each.

His Florida company is hoping that computer makers, cell phone makers and other hardware companies are equally impressed by this technology – backed by 36 patents – and choose to put its chips into their products.

Fingerprint recognition, sometimes used to control access at sensitive government buildings, has some obvious appeals to consumers and corporations. Instead of remembering passwords – which can be filched or guessed by hackers or thieves – the touch of a finger could authorize PC users to boot up their machines or view sensitive e-mail or Web sites, such as online bank accounts. Better access control could also bring peace of mind to people who lose laptop PCs or portable devices containing sensitive information.

For corporations, who may spend hundreds of dollars per employee each year on password maintenance, fingerprint recognition or biometric authentication techniques could be a less expensive alternative to keep the network secure, backers of the technology argue. Companies could also use scanners instead of keys or combinations on

building doors.

Sales of hardware and software that use anatomy to identify users are expected to surge to \$594 million in 2003 from \$58.4 million in 1999, according to the research firm Biometric Group. Finger scanning is the biggest piece of that market today, representing 34% of sales, rising to 46% in 2003. Other methods include voice recognition, hand recognition, iris scanning and face scanning.

Samir Nanavati, a Biometric Group analyst, said a finger scanner cost as much as \$500 two years ago. The devices were too big and expensive for \$100 cell phones or \$1,000 PCs and there was always a portion of the population that wasn't able to use them. Those who work in factories and might have dirty fingers would find the systems didn't always recognize their prints.

"What has been holding the market back has been size of the scanner, cost and accuracy," said Mr. Nanavati.

Most devices use optical technology to read prints. But AuthenTec's technology monitors electrical impulses given off by the ridges and valleys of living tissue. Its chips look past the first layer of skin – as well as any dirt – to the so-called live layer. For that reason, no one could chop off a finger and try to use it to fool a scanner. "They are the only ones who have the ability to read the live layer," Mr. Nanavati said.

Its chips cost \$25 – \$30 and are expected to go down as low as \$15 in the next couple of years. That makes it easy for a cell phone maker or PC maker to integrate it into its products, without adding much to the cost. Separate scanners are expected to cost \$100 to \$150.

AuthenTec, based in Melbourne, is the brainchild of some engineers from Harris Corp., where Mr. Moody was a vice president in the semiconductor group. The team was looking at new

ways to use the company's technology and came up with a chip that users put their finger directly on. Mr. Moody's immediate response was negative. First, as a chip guy, he didn't think anyone should actually touch the silicon, and since he only had one PIN number to remember at the time, the market didn't seem that large.

But customers expressed interest, so Mr. Moody and his engineers worked for a year on the technology. In 1998, the company was set up as a separate concern. In all, AuthenTec has received about \$25 million in funding since its inception and Harris retains about a 40% stake.

AuthenTec introduced its first products in October 1999 and its first chips for wireless hand-held devices a few months ago. Now, Texas Instruments Inc. is including AuthenTec's technology in a coming set of standards for new Internet-enabled cell phones. Texas Instruments is expected to demonstrate a cell phone with the finger scan device at a trade show early next year. And Kingston Technology Inc. will be making a standalone peripheral device that hooks up to a PC so that users can log on with their fingerprint.

Some Asian PC makers are expected to integrate the technology into their laptops sometime next year. Mr. Moody said revenue has been doubling each successive quarter and that by the end of this quarter the company will have a \$6 million annual run rate.

The success has another benefit for Mr. Moody, who now carries samples of the chips to all of his daughters' soccer games so he doesn't have to explain semiconductor jargon like "field programmable gate arrays" to parents who ask what he does. Now its show-and-tell for the adults as well. ■

(Molly Williams is a staff reporter for The Wall Street Journal. This article appeared in the Thursday, December 14, 2000 edition, page B-12.)