

search



#### DEPARTMENTS

SEMICONDUCTORS

SYSTEMS & SOFTWARE

EE DESIGN

TECHNOLOGY

THE WORK CIRCUIT

COMMSDESIGN

PLANET ANALOG

EMBEDDED.COM

#### HOT LINKS

- ▶ Ask the Headhunter
- ▶ Books
- ▶ Calendar/Events
- ▶ Conference Coverage
- ▶ e-sources
- ▶ EET Info/Reader Service
- ▶ In Focus Reports
- ▶ Mentors Board - Students
- ▶ Online Seminars
- ▶ Opinion/Columns
- ▶ ProductWeek
- ▶ Salary Survey 2001
- ▶ Special Reports
- ▶ TWC on Campus

#### NETWORK RESOURCES

JOB SEARCH



cyclopedia



library



NetSeminar



#### NETWORK SITES

EDTN HOME

EE TIMES

EBN

EMBEDDED

INTERNATIONAL

CHIP CENTER



## SYSTEMS & SOFTWARE

### Spin-off touts touch-screens for handhelds

By [Rick Merritt](#)  
[EE Times](#)

February 21, 2002 (2:50 p.m. EST)



SAN MATEO, Calif. — A systems integrator is spinning off its touch-screen display business in the hope of putting some fire into a market that has seen a wave of consolidation. Touch International Inc. will bring an improved resistive technology to market and announce a handful of manufacturing partners later this year.

Touch International is a spin-off of TouchSystems, a sales representative for the touch-screen business of eTurbo Touch (Chungli, Taiwan). The new company has added engineering clout by appointing Gary Barrett as chief technology officer; Barrett holds several touch-screen patents, including one for five-wire resistive technology.

Barrett, chief executive officer Michael Woolstrum and other principals at Touch International left existing touch-screen companies and decided to strike out on their own. Over the last two years, 3M Co. acquired both Microtouch Systems Inc. and DynaPro, and conglomerate Tyco International Ltd. acquired Elo TouchSystems Inc. and Carroll Touch Systems.

"With all the acquisitions there have been a lot of defections and a bit of a brain drain in the touch-screen field," said Woolstrum. "Customers are finding they actually need to provide these companies with some design guidance. We come in as a new company that is a lot hungrier than these large established players," he said.

"They have an aggressive plan, but at this point it's just a plan," said Mark Fihn, vice president of market watcher DisplaySearch (Austin, Texas), who tracks portable computer displays.

Touch International has a chance to make hay with a focus on the fast growing flat-panel display market and with its locations in the United States, Asia and Germany, Fihn said. "There are no touch-screen players with the exception of 3M with a strong global presence right now, and these guys are going after a global market," he said. "But going up against 3M will not be easy."

#### Product plans

The company's first product, the Turbo T6, brings five-wire resistive technology to handhelds like the iPaq and Palm computers, which use 3.8-inch diagonal LCDs. That technology used to require a half-inch border of touch-screen overlay around the display, but Touch International reduced that border to less than a quarter-inch thanks to a new resistive circuit.

Register Now!

Synopsis Users Group  
2002

SNUG Europe MARCH 7-8

SNUG San Jose MARCH 13-15



The T6 also sports a handful of other enhancements. The durability of the overlay material has been improved to reduce hazy display images from worn overlays. And it has added EMI shielding that's needed for some medical applications. In addition, the overlay sports a "palm rejection" feature that rejects input from a hand resting on the display while the touch-screen concentrates on input from a pen tip.

The company plans to roll out its initial product line at CeBit in Hannover, Germany on March 13.

Barrett's team is now working on two new products that could debut before the end of the year. One uses a force-sensitive technology to compete with capacitive and acoustic-wave touch screens. It is aimed at kiosks that can provide a bright outdoor image and respond to touch from a gloved hand or other object.

The other project will use a non-glass, flexible screen aimed at small handheld systems, especially those that might want a convex or concave display. It will use a technology that competes with capacitive displays.

But market watcher Fihn was skeptical the small company will deliver any radically new technologies. "I don't see them doing anything that is really new so much as bringing together existing technologies," Fihn said.

Touch International will rely on eTurbo in Taiwan for the majority of its manufacturing of resistive and capacitive touch screens. However, it also has relationships with manufacturing partners in China, Korea and Japan that have additional capabilities, including an ability to provide other touch-screen technologies or whole systems packages.

#### **Little leverage**

By relying on manufacturing partners, Touch International will be able to move forward with a small payroll of only about 25 employees scattered across the United States, Asia and Europe. Woolstrum said he intends to leverage the company's low overhead to be aggressive on product pricing against better-heeled competitors.

The company is getting off to a running start. Thanks to a transfer of some existing business from its systems integrator parent, Woolstrum said he thinks Touch International can pull in \$20 million in revenues in 2002. He aims to grab more than 10 percent of the market for touch-screen products.

The worldwide market for touch screens will increase to \$4 billion in revenues by 2004, according to Touch International. Touch-screen displays are used in a wide variety of kiosks, point-of-sale terminals and handheld devices, the company said. ATMs and point-of-sale machines have contributed to the market's dramatic growth, analyst Fihn said.

Touch screens in mainstream computers could lead to the next wave of adoption, he added. "Every PDA has a touch screen, and 15 million of them shipped last year," Fihn said. "PDAs have educated people in pen input, and that will now extend to new tablet PCs," he said. "Acer, Compaq and HP have beautiful designs for these machines."

#### **Recent Articles**

##### **Systems and Software News**

- [Data networks pose crypto conundrum](#)
- [Gov't IP hearings to cover chip, software patents](#)
- [Consumer firms agree on high-capacity DVD standard](#)
- [Industry group mulls proposal to require security disclosures](#)
- [Microsoft operating system supports GSM on PDAs](#)
- [Sharp to build LCD plant for TV screens](#)

- [Alliances take shape at 3GSM conference](#)

[Archives](#)

**THE RESOURCE CENTER**

**INTERNATIONAL JOB SEARCH**  
FIND A JOB  
 [GO](#)

**NetSeminar**  
FIND AN [ONLINE SEMINAR](#)  
 [GO](#)

PRINT THIS STORY    SEND AS EMAIL

**search**  
FIND A RELATED STORY  
 [GO](#)

**cyclopedia**  
LOOK UP A TECHNICAL TERM  
 [GO](#)

**library**  
FIND A WHITE PAPER  
 [GO](#)

**Sponsor Links**

**EE Times/Forward Concepts**  
[Free seminar on Reconfigurable Computing technology and opportunities](#)

**TransEDA**  
[New! FSM Path Coverage White Paper -- Request One Now!](#)

**Synopsys**  
[FREE Synopsys Seminars: Verification, SystemC & Synthesis. Register Now!](#)

**Microsoft**  
[Order your Windows Embedded Evaluation Software today!](#)

All material on this site Copyright © 2002 CMP Media LLC. All rights reserved.

[Privacy Statement](#)