

Masto, Dagastine & Associates, Inc.

SBD 86-18

Press & Public Relations

Press Information

**FOR: General Electric Company
Silicon Systems
Technology Department**

GARY DAGASTINE
(518) 377-3385

FOR IMMEDIATE RELEASE
Wednesday, April 16, 10:30 a.m.

LARRY STONE
(518) 377-3384

GENERAL ELECTRIC'S SILICON SYSTEMS TECHNOLOGY DEPARTMENT:

SPECIAL-PURPOSE PROCESSORS;

SILICON-FOR-SOFTWARE SUBSTITUTION;

SYNERGY WITH OTHER GE BUSINESSES

RESEARCH TRIANGLE PARK, N.C. -- Advanced special-purpose processors are the products of General Electric's 2-year-old Silicon Systems Technology Department (SSTD) in Research Triangle Park.

These processors are built on the idea that semicustom semiconductors can outperform and cost less than custom software.

The first two products to be marketed by SSTD are the Graphicon™ 700 processor, an interactive 3-D graphics processor with unprecedented display rates, and the GESCAN sequential search system.

The Graphicon 700 displays highly complex, solid-shaded 3-D images up to 100 times faster than competitive systems. Graphicon is the fastest 3-D processor in the world, performing 30 million IEEE floating point operations per second.

-more-

31 Lafayette St. Schenectady, N.Y. 12305 (518) 377-3381

GARY DAGASTINE
(518) 377-3385

LARRY STONE
(518) 377-3384

The Graphicon™ 700 3-D graphics processor from General Electric Company's Silicon Systems Technology Department displays highly complex, solid-shaded 3-D images up to 100 times faster than competitive systems. Graphicon's hardware-based architecture overcomes software bottlenecks common with other systems. The processor comes standard with 4 Mbytes of display list memory, expandable to 16 Mbytes.



in computer-aided design and engineering, Simulation and Controls in simulators, and Aerospace in various government applications.

GE itself is one of the world's largest users of computer graphics in the design and analysis of its own products. The GE businesses working with high performance 3-D graphics include aircraft engine, simulation and controls, the Corporate Research and Development Center in Schenectady, N.Y., and a variety of aerospace and industrial businesses.

"The growth of 3-D graphics applications is exploding within GE," said Rowe. "Our experience shows this is representative of the situation at many other companies."

SSTD is part of GE's Semiconductor Division and, like that Division, has its headquarters and major fabrication areas in Research Triangle Park. The semicustom integrated circuits used in Graphicon and GESCAN were designed and fabricated by GE Semiconductor, which is an emerging force in the application-specific IC marketplace.

GESCAN is a high-speed, hardware-based data-retrieval product that offers 100% accuracy. At 60 million comparisons a second, GESCAN can search the entire Sunday NEW YORK TIMES in 3.5 seconds, never missing a character of text or a single numerical digit.

Using GE's advanced text array processor, GESCAN eliminates the costly and space-consuming need for indexing. It examines every character of the data base until it finds the words or phrases requested.

The Department, headed by General Manager Dale W. Rowe, began as an internal GE venture in March 1984, with a charter to produce state-of-the-art processors for other GE businesses to use in their end-products, and for entering external high-growth markets. The Department is seen as a prime mover in integrating GE's extensive systems experience with its semiconductor capabilities.

A secondary goal is to promote the use of VLSI (very large-scale integration) semiconductor expertise throughout the Company in leading-edge products and systems.

"In the increasingly competitive world environment, companies that don't get their technologies and products to market fast enough, that miss their windows of opportunity, will not be winners in their markets. Our department has moved fast by creating an entrepreneurial setting and by using state-of-the-art computer-aided engineering and design tools," Rowe said.

SSTD is working with numerous GE businesses to incorporate 3-D graphics into GE end-products. These GE businesses include Calma