

ACTEL FPGAS IMPROVE GRAPHICAL CONTROL FOR C-MAP'S MARINE NAVIGATION SYSTEMS TECHNOLOGY

C-Map Leverages Reliability Features of Actel SX-A Device for Harsh Environments

SUNNYVALE, Calif., July 21, 2003 - Actel Corporation announced today that C-Map, a leading supplier of marine cartography, has adopted Actel's SX-A field-programmable gate arrays (FPGAs) for use in its marine navigation system offerings. The A54SX32A solution will be used as a graphics controller and display driver, allowing different resolutions, black/white or color displays and a variety of other features, such as animated forecasting against vessel positioning. The SX-A FPGA was chosen for its secure and reliable operation in the rugged and harsh environments of alternate cold and heat and intense humidity in which the marine navigation equipment operates.

Duilio Lagomarsini, technical manager at C-Map, said, "Our immediate need was to find a programmable device that would meet the high-reliability standards required in the unforgiving marine environment. Actel's A54SX32A met this need perfectly, while offering the additional advantages of high performance, low power consumption and design security. Furthermore, it was possible to integrate all the digital functions into one FPGA, obtaining an 80 percent reduction in the number of components used, providing significant space and cost savings."

"Consistently, developers of harsh-environment applications leverage the benefits of Actel's nonvolatile, single-chip SX-A FPGAs due to the performance, reliability and security of the architecture," commented Jon Ewald, director of product marketing, antifuse products at Actel. "We are thrilled to have been chosen by C-Map, the leading global developer of electronic cartography, for its innovative and award-winning marine navigation systems."

About the SX-A Family

With devices up to 108,000 system gates and speeds up to 250 MHz system performance, the SX-A family offers a fine-grained antifuse architecture similar to a masked gate array, providing a high-performance, low-cost solution for a wide range of applications. In addition, the SX-A family offers I/O capabilities that provide full support for hot swapping and is also 66 MHz PCI compliant. Additionally, the A54SX32A device selected by C-Map is extremely secure, preventing copying or reverse engineering of the design.

About C-Map

Formed in 1984 in Marina di Carrara, Italy, the C-Map Group, with 24 companies in 17 countries around the globe, is the world leader in electronic cartography production, maintenance and distribution for air, land and sea. C-Map currently generates over 200 new electronic charts a month; maintains a total portfolio of more than 20,000 such charts; and services hundreds of thousands of navigators worldwide from pleasure and fishing markets through to SOLAS class applications. The C-Map Group is headquartered in Via Caboto 9, 54036 Marina di Carrara (Italy). Telephone +39 0585 772400. Internet: <http://www.c-map.com>.