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Editor's Choice Products



SPARC-based microprocessors for space applications

Engineers at Aeroflex Colorado Springs improved performance in a 130 nm CMOS process with their new microprocessors – the UT699E and the UT700. The UT699E is an enhanced version of the company's UT699. It was migrated from .25 micron CMOS to 130 nm CMOS, resulting in a faster microprocessor with targeted speeds of 100/166 MHz respectively that is also lower power. Software developed for the UT699 also will be 100 percent compatible with the UT699E. The UT700 is a derivative of the UT699E that has a more powerful EDAC scheme as well as a 1553 port to support the bus controller remote terminal function. A Reed Solomon EDAC provides fault-tolerant protection for the SDRAM.

Both devices have a seven-stage pipelined monolithic, high-performance, fault-tolerant SPARC V8/LEON 3FT processor and a compliant 2.0 AMBA bus interface that integrates the on-chip LEON 3FT, SpaceWire, Ethernet, memory controller, CPCI, CANbus, and programmable interrupt peripherals. While the UT699 and UT699E are pin-to-pin compatible, the UT700 is not. Aeroflex added additional I/O and improved the EDAC scheme so it has a slightly different pinout but is offered in the same packages to the other devices.

Aeroflex Colorado Springs | www.aeroflex.com/LEON | www.mil-embedded.com/p9914566

