29th Annual
PRODUCT OF THE YEAR AWARDS

From the thousands of products introduced in 2004, the editors of *Electronic Products* have chosen the most outstanding. The selections are based on significant advances in technology or its application, a decided innovation in design, or a substantial gain in price-performance. As usual, picking winners was made difficult by the many impressive products announced during the year. Here, then, are the 2004 award winners. Here is a product by *Aeroflex Colorado Springs* chosen as a 2004 award winner.

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RadHard clock generator
IC hurdles size, price barriers

Used throughout high-performance satellite payloads, and in communications, data handling, and attitude orbit control subsystems, clock networks for satellite applications have traditionally lacked available space-qualified integrated solutions. As a result, satellite systems designers had to spend time researching and purchasing many devices (such as space clock oscillators, clock buffers, frequency divider logic, clock generators, and space quartz crystals) applicable for harsh environments and consider the board space, cost, and weight for all these products.

The UT7R995 RadClock clock generator is designed specifically to solve the clock tree design problem with a single chip. The part halves the overall cost of a satellite system while measuring just 0.3927 in.². The eight output quad-bank 6 to 200-MHz part features an output phase programmability that is necessary to optimize the timing of high-performance microprocessor and communication systems. In addition, the device withstands a total ionizing dose irradiation from 100 krad (Si) to 1 Mrad (Si), offers less than 100-ps cycle-to-cycle jitter, and provides latchup immunity to heavy ion energies over 100 MeV-cm²/mg.

Core power supply voltage is 3.3 V, and the chip is housed in a 48-lead ceramic flatpack and a 49-pin ceramic CGA package. ($1,500 ea/100—available 2nd qtr 2005.)

*Aeroflex Colorado Springs*
Colorado Springs, CO, US
Marketing Kit 800-645-8862
http://www.aeroflex.com/RadClock
http://epinfo.us/4474-715

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