

New - SPACE WIRE physical layer transceiver - QML qualified and in production

The UT200SpWPHY01 Physical Layer Transceiver (the LVDS physical layer for Aeroflex's SpaceWire Protocol Handler) is designed to handle the critical timing issues associated with the SpaceWire Data/Strobe Encoding scheme. The UT200SpWPHY01 supports data rates up to 200 Mbits/sec with Data/Strobe transmit skew less than 400pS. The UT200SpWPHY01 has a 3.3V power supply and the added benefit of cold spare on LVDS pins. ESD performance of LVDS inputs/outputs is greater than 8000 volts HMB. The UT200SpWPHY01 is designed to withstand 300 krad(Si), upsetting charge particle strikes to 40 MeV-cm²/mg and is SEL immune to greater than 100MeV-cm²/mg. The UT200SpWPHY01 is packaged in a space-saving 28-pin flatpack (0.14 in² ceramic body) and is QML Q and V compliant.

New - RadHard CLOCK DRIVER

Aeroflex's UT54ALVC2525 RadHard Clock Driver is a low-voltage, minimum skew, one-to-eight clock driver that distributes a single clock to eight, high-drive, outputs with low skew across all eight outputs.

The UT54ALVC2525 withstands total ionizing dose irradiation from 100 krad(Si) to 300 krad(Si), or 1Mrad(Si) and is guaranteed to operate from 2.0V to 3.6V volts. The UT54ALVC2525 is available through a Standard Microcircuit Drawing (SMD) with QML Q and V qualification and is offered in a 14-lead ceramic flatpack.

RadHard Clock Driver providers have announced reductions or even obsoleted their products in the last year; customers came to us requesting a drop-in compatible version of the industry standard 2525 RadHard Clock Driver.

New - MSI LOGIC FAMILY expanded with six new products

Aeroflex Colorado Springs announced six new RadHard MSI Logic products targeted for spaceborne applications. These include three products for our RadHard MSI family – the **UT54ACS299** (8-bit Universal Shift/Storage Register), **UT54ACS630** (RadHard EDAC) and **UT54ACTS899** (9-bit Latchable Transceiver), and three products to the RadHard 16-Bit Logic family the **UT54CTQ16244** (16-bit Buffer/Line Driver), **UT54ACTQ16245** (16-bit Bidirectional Transceiver) and **UT54ACTQ16374** (16-bit D Flip/Flop). Four new 16-bit Logic products introduced have been introduced in 2006 (**UT54ACS164646S** in May 2006).

New - RadHard MIXED-SIGNAL ASIC capability

Aeroflex Colorado Springs, announced the addition of RadHard Mixed-Signal ASICs to their RadHard product line. For over 25 years, Aeroflex has been developing RadHard Digital ASIC solutions for space; RadHard Mixed-Signal ASICs offer a designer another option from one supplier.

Aeroflex's RadHard Mixed-Signal ASICs combine high-performance analog with digital logic and will be offered in 0.6µm (5V) and 0.35µm (3.3V to 10.0V). Specializing in precision data

conversion products, Aeroflex's analog IP includes ADC's (up to 21 bits resolution) and DAC's, along with embedded voltage references, op amps, sample-and-hold, and analog muxes. "RadHard Mixed-Signal ASICs will meet the same radiation-hardened specifications as our Digital ASICs -- 100krad (Si) to over 1 Megarad (Si) total ionizing dose," said David Kerwin, director, Mixed-Signal ASICs. "As a fab-independent supplier, Aeroflex is bringing state-of-the art analog/mixed-signal CMOS from multiple foundry partners to the RadHard space market. We are currently designing multiple RadHard mixed-signal ASICs in our Commercial RadHard™ 0.35µm Triple-Well CMOS process for customers, with first deliveries in 1Q07." Future plans include a RadHard 0.18µm Triple-Well CMOS technology and RadHard standard data converter products for space applications.

New - Agreement with GAISLER RESEARCH AB to license their GRLIB IP LIBRARY LEON3 SPARC processor

"Aeroflex is very excited about the opportunity to incorporate Gaisler's GRLIB IP libraries into our future RadHard standard products," said Anthony Jordan, director-standard products. "The GRLIB IP Library is an integrated set of reusable IP cores, designed for system-on-chip (SOC) development. The IP cores are centered around the common on-chip bus, and use a coherent method for simulation and synthesis. The library is vendor independent, with support for different CAD tools and target technologies. A unique plug and play method is used to configure and connect the IP cores without the need to modify any global resources." Based around the AMBA bus standard, the GRLIB IP library contains advanced high-quality cores such as the LEON3 SPARC processor, a fully pipelined double-precision IEEE-754 floating point unit, a 32-bit Master/Target PCI core with DMA and FIFOs, PC133 SDRAM controller, Spacewire Codec with RMAP support, 10/100 Mbit ethernet MAC, timers, UARTS, VGA controller, PS/2 keyboard/mouse interface, interrupt control, GPIO and many more. "Aeroflex's customers need RadHard products that incorporate high-quality cores for their RadHard processors and cPCI development boards," continued Jordan. "Gaisler Research is a world leader in this field; the choice to center future products around their IP cores was obvious." Future Aeroflex products include the 32-bit RadHard LEON3 processor with cPCI development boards.

Weitere Infos, bzgl. Datenblätter auf der

Aeroflex Web Site: <http://ams.aeroflex.com/ProdFamilyPages/RHfamily.cfm>

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