

# PRESSEMITTEILUNG

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## **RadHard 3-VOLT LVDS QUAD DRIVER AND RECEIVER FEATURES COLD SPARING**

COLORADO SPRINGS, CO – Aeroflex UTMC, (NASDAQ:ARXX), announces the production of a 3-volt, cold spare input/output (I/O) buffer LVDS (low voltage differential signaling) quad driver and quad receiver for spaceborne applications. Cold sparing is required to implement redundant system architectures or subsystems electrically connected without power supplied. Representing leading-edge technology for higher bandwidth data communication, UTMC's 3-volt LVDS products address an increasing demand to move large amounts of data quickly between systems or components within a satellite.

The decision was made to design in cold spare capable I/O buffers on all new LVDS and interface products, including the 3-volt LVDS quad driver and quad receiver. The trick to cold sparing is that the spare must present a high-input impedance (i.e., in excess of 1MW) to the system with no power supplied. We implemented the cold spare I/O buffers initially in our RadHard MSI transceiver product offering, and are applying similar circuit design technologies with enhanced ESD structures to our 3-volt LVDS products. Aeroflex UTMC is one of the few vendors to offer cold sparing on all their LVDS products.

Transmission of large amounts of data on satellites requires a high performance solution that consumes low power, generates low noise and has high immunity to noise. 3-volt LVDS products from Aeroflex UTMC are higher performance (400 Mbps), low power, low noise, and cost effective solutions offered to solve interface problems commonly found in satellite and satellite launch vehicle applications. They are compatible with industry standard IEEE 1596.3SCI LVDS.

“We have been shipping customers our 5-volt LVDS quad driver and quad receiver since early 2000,” said Anthony Jordan, Director-Standard Products. “Customers came to us with requirements for a 3-volt LVDS solution; our response was development of the UT54LVDS31LV quad driver and UT54LVS32LV quad receiver. Customers also wanted cold sparing allowing for the use of multiple LVDS receiver architectures.”

Aeroflex UTMC's RadHard LVDS products operate from 3-volt power and are RadHard to 100K rad(Si), with a single event latchup (SEL) LET threshold of >111MeV-cm<sup>2</sup>/mg. A 1E6 rad(Si) product offering is available for strategic systems. The QML compliant parts are offered in a 16-lead flatpack.

“Higher serial data rates for intra-satellite communication is required and Aeroflex UTMC is developing cost-effective solutions to meet these requirements,” continued Jordan. “Our LVDS products are important to the industry as they are allowing customers to move data quickly with low power consumption. We stated last year we planned to leverage the LVDS technology into highly integrated serial data bus products. Forthcoming in late 2001 will be a LVDS serializer and deserializer allowing for 1Gbps data transfer, a LVDS quad crosspoint switch and an octal bus LVDS repeater, all operating on a single 3-volt supply with cold spare I/O buffers.”

Aeroflex UTMC’s UT54LVDS031LV/032LV will be available to a Standard Microcircuit Drawing procurement. The SMD greatly simplifies the procurement and allows us to deliver product off-the-shelf, eliminating the costly paperwork of source control drawings.

The UT54LVDS-EVB evaluation board is available and includes an LVDS driver and receiver and allows customers to analyze the operation and performance of the LVDS products. The board supports the measurement of signal integrity over different media, bus configuration, and data toggle rates.

Aeroflex UTMC is a supplier of semicustom and standard VLSI circuits and custom circuit card assemblies. Aeroflex UTMC has received Qualified Manufacturer List (QML) certification for Class Q, Class T and Class V. Additionally, Aeroflex UTMC has received a letter of compliance for ISO 9001 from the Defense Supply Center Columbus.

Weitere Informationen bei:

PROTEC GMBH  
Vertrieb elektronischer Bauelemente  
Laurinweg 1, 85521 Ottobrunn  
Tel. (0 89) 6602923  
Fax. (0 89) 6098170  
Email: [protec.semi@t-online.de](mailto:protec.semi@t-online.de)  
Web: [www.protec-semi.de](http://www.protec-semi.de)