



Exar Introduces Industry's Lowest Power Fault Tolerant Transceivers with Level 4 IEC ESD Protection

XR3070-78X Devices Operate from 3.3V with +/-18V Fault Tolerance

FREMONT, Calif., Nov. 12, 2013 /PRNewswire/ -- Exar Corporation (NYSE: EXAR), a leading supplier of high performance analog mixed-signal components and data management solutions, today announced the XR3070-78X family of ruggedized RS-485/RS-422 transceivers for harsh industrial environments. The analog bus pins can withstand direct shorts up to +/-18V and are protected from ESD events exceeding IEC Level 4. Operating from 3.3V with an industry-leading 300uA idle current, these devices consume half the power of a comparable +/-18V fault tolerant solution. The family of nine devices supports data rates up to 20Mbps in either full or half duplex configurations, and is intended for use in energy metering, building automation, security systems, process control, and other industrial automation applications.

"ESD and over-voltage events are leading causes of field failures and equipment returns in industrial communication applications," said Jack Roan, product marketing manager, Exar. "The XR3070-78X family delivers robust protection in both these areas, providing our customers with an additional measure of safety against installation errors or cable faults and at the same time significantly reducing system power consumption."

Common practice in these applications is to route 15Vdc or 12Vac power in the same cable pack as the RS-485 data lines. Damaged cables or incorrect wiring can expose the transceiver to these voltages, which will permanently damage standard RS-485 devices. The XR3070-78X provides cost effective insurance against wiring faults up to +/-18V, and simultaneously protects against ESD events exceeding IEC Level 4. The IEC standard is significantly more stringent than the Human Body Model (HBM) ESD test commonly referenced by semiconductor device manufacturers, mainly due to the higher currents requirements.

Product Details

XR3070-78X are 1-driver/1-receiver RS-485/422 devices operating from a 3.0V to 3.6V power supply (3.3V +/-10%) and are fully compliant to the TIA/EIA-485 and TIA/EIA-422 standards. The bus pins feature enhanced ESD protection to +/-15kV (+/-15kV IEC 61000-4-2 Air Gap Discharge, +/-8kV IEC 61000-4-2 Contact Discharge, +/-15kV Human Body Model); non-bus pins are protected up to +/-4kV Human Body Model.

Product Availability and Pricing

The XR3070-78X family is available in industry standard 8 NSOIC and 14 NSOIC packages. To request samples please visit Exar's website at www.exar.com, or contact Customer Service at customersupport@exar.com. The suggested retail price for the XR3070-78X family is \$1.25 in 1,000-unit quantities.

Additional Information

Additional Information on the XR3070-78X family is also available[online](#).

Additional information on Exar's Serial Transceiver products is also available[online](#).

About Exar

Exar Corporation designs, develops and markets high performance, analog mixed-signal integrated circuits and advanced sub-system solutions for the Networking & Storage, Industrial & Embedded Systems, and Communications Infrastructure markets. Exar's product portfolio includes power management and connectivity components, communications products, and network security and storage optimization solutions. Exar has locations worldwide providing real-time customer support. For more information about Exar, visit <http://www.exar.com>.

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