Exar Introduces Smallest Multiprotocol Transceiver

SP335 Features Internally Switched Termination in 5x5mm² Package

FREMONT, Calif., Feb. 10, 2014 /PRNewswire/ -- Exar Corporation (NYSE: EXAR), a leading supplier of high performance analog mixed-signal components and data management solutions, today announced the SP335 advanced multiprotocol transceiver supporting RS-232, RS-485, and RS-422 serial standards. At 5x5mm², the SP335 is less than half the size of a comparable discrete design, doubling the number of serial interface channels that can be assembled in the same board space and allowing system designers to easily combine multiple serial protocols over the same connector. Programmable end-of-line termination and multiple configuration modes allow all three protocols to be used interchangeably over a single cable or connector with no additional switching components.

The SP335’s bus pins are protected against severe ESD events exceeding +/-15kV IEC 61000-4-2 Air Gap Discharge, and +/-8kV IEC 61000-4-2 Contact Discharge, and can tolerate direct shorts to DC or AC voltages as high as +/-18V. These rugged devices are intended for use in software programmable serial ports for industrial PCs and single board computers, process control, point-of-sale, embedded systems, HVAC controls, building automation networking, and security systems. The SP335 also features a separate supply voltage for the logic interface pins, allowing the part to directly interface with low voltage UARTs and MCUs without needing voltage translators or level shifters. The logic supply voltage can be as low as 1.65V.

"Electronic systems are constantly being redesigned to be smaller, cheaper, and faster," said Jack Roan, product marketing manager, Exar."Integrating multiple serial protocols with ancillary functions like end-of-line termination control and logic voltage level shifters enables our customers to create more cost effective and flexible serial controllers that are easily reconfigured in the field."

Product Details

The SP335 is the smallest of Exar's industry leading dual protocol devices:

- SP335 – 2-driver/2-receiver RS-232 – 1-driver/1-receiver RS-485/422
- SP336 – 4-driver/4-receiver RS-232 – 2-driver/2-receiver RS-485/422
- SP337 – 3-driver/5-receiver RS-232 – 2-driver/2-receiver RS-485/422
- SP338 – 3-driver/5-receiver RS-232 – 2-driver/4-receiver RS-485/422
- SP339 – 3-driver/5-receiver RS-232 – 1-driver/1-receiver RS-485/422

The SP335 supports data rates up to 20Mbps in RS-485/422 modes (1Mbps in RS-232)
and can be slew limited to 250kbps in any mode by toggling a single control pin. The on-board charge pump generates the RS-232 bipolar voltage levels from a single supply (3.0V to 5.5V) with only four external capacitors, and does not require any inductors or magnetic components.

Product Availability and Pricing

The SP335 is available in a 5x5mm 32 pin QFN package. 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 SP335 is $4.35 in 1,000-unit quantities.

Additional Information

Additional Information on the SP335 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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