Exar Releases New 40V PowerBlox Family

XR76203/05/08, 40V Regulator Family Simplifies System Design in Industrial Systems

FREMONT, Calif., April 21, 2015 /PRNewswire/ -- Exar Corporation (NYSE: EXAR), a leading supplier of high-performance integrated circuits and system solutions, introduces a new line of 40V switching regulators to add to its popular PowerBlox™ family of DC/DC converter products. The XR76203, XR76205 and XR76208 are synchronous step-down regulators supporting point-of-load (POL) supplies of 3A, 5A and 8A, respectively. The devices are designed to provide a wide 5V to 40V input voltage range while providing excellent transient response and output accuracy over the entire voltage range using Exar's proprietary emulated current mode Constant On-Time (COT) control loop. These devices deliver power to a wide range of industrial and networking equipment typically powered by well regulated 24VDC, classical telecom 18V to 36V or 24VAC supplies.

With a proprietary emulated current mode COT control scheme, the XR76203, XR76205 and XR76208 provide extremely fast line and load transient response using ceramic output capacitors. They require no loop compensation, simplifying circuit implementation and reducing overall component count. The control loop also provides 0.07% load and 0.15% line regulation and maintains constant operating frequency. A selectable power saving mode allows the user to operate in discontinuous mode (DCM) at light current loads, significantly increasing the converter efficiency. A host of protection features, including overcurrent, over-temperature, short-circuit and UVLO, helps achieve safe operation under abnormal operating conditions.

"The new line of 40V PowerBlox regulators follows the recent releases of the 40V XR75100 synchronous controller and XR77129 universal PMIC and shows Exar's commitment to its industrial customer base," said Jon Cronk, Exar's director of marketing for power products. "Exar's proprietary emulated current mode architecture sets it apart from competition in terms of load and line regulation and transient response. The common 5mm x 5mm package size allows designers to easily scale across a wide range of power levels."

The XR76203, XR76205 and XR76208 are available in RoHS compliant, green/halogen free, space-saving 30-pin 5mm x 5mm QFN packages. The XR76203, XR76205 and XR76208 are priced at $1.85, $2.30 and $2.90, respectively in 1,000-piece quantities. For more information, visit www.exar.com/powerblox.

Summary of features:
• Integrated controller, drivers, bootstrap diode and MOSFETs
• Wide 5V to 40V input voltage range
• Patented constant on-time control
• Stable with ceramic output capacitors
• Exceptional line/load regulation

About Exar

Exar Corporation designs, develops and markets high performance integrated circuits and system solutions for the industrial and embedded systems communications, high-end consumer and infrastructure markets. Exar's broad product portfolio includes analog, display, LED lighting, mixed-signal, power management, connectivity, data management and video processing solutions. Exar has locations worldwide providing real-time customer support. For more information, visit www.exar.com.

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