

April 8, 2014



Exar's PowerBlox™ DC-DC Regulators Offer 0.1% Line Reg

XR76108/12/15, High Power Regulators, Reduce Solution Size and Simplify System Design

FREMONT, Calif., April 8, 2014 /PRNewswire/ -- Exar Corporation (NYSE: EXAR), a leading supplier of high performance analog mixed-signal components, and video and data management solutions, today introduced a new line of high-power switching regulators to add to its popular PowerBlox™ family of DC-DC converter products. The XR76108, XR76112 and XR76115 are Synchronous Step Down Regulators supporting point-of-load (POL) supplies of 8A, 12A and 15A, respectively. The XR761xx family is designed to achieve excellent transient response and output accuracy using Exar's proprietary emulated current mode Constant On-Time (COT) control loop. These devices deliver core voltage rails for ASICs, FPGAs, DSPs and Network Processors in communications, networking and industrial markets.

The XR761xx family is specified with a wide input voltage range of 4.5V to 22V and delivers an adjustable output voltage from 0.6V to 18V. With its exceptional 0.1% line regulation across the entire input voltage range and 1% output accuracy over full temperature range, XRP761xx provides increased headroom to engineers for easier design implementations. The emulated current mode COT control scheme has the fast transient response of conventional COT control loops without any of the compromises. Exar's COT control loop enables operation with ceramic output capacitors, eliminating loop compensation, which simplifies system design and reduces overall component count. Additionally, the XR761xx offers a host of supervisory and protection features for proper sequencing, safe operation under abnormal operating conditions and light load operation.

With a proprietary emulated current mode Constant On-Time (COT) control scheme, the XR76108, XR76112 and XR76115 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 0.25% load and 0.1% 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, thereby significantly increasing the converter efficiency. A host of protection features, including over-current, over-temperature, short-circuit and UVLO, helps achieve safe operation under abnormal operating conditions.

"The new line of XR761xx PowerBlox™ converters delivers a market leading solution size and regulation performance combination that designers are looking for," said James Loughheed, vice president, power management products, Exar. "Exar's proprietary emulated current mode architecture sets it apart from the competition in terms of load and

line regulation and transient response. The 5x5 and 6x6mm package sizes with no loop compensation required delivers a compact total solution size for designers as they face ever decreasing system form factors."

Product Availability and Pricing

The XR76108 and XR76112 is available now in a RoHS compliant, green/halogen free space-saving 30-pin 5x5 QFN package and is priced from \$2.50 and \$2.70 respectively in 1000 piece quantities. The XR76115 is available now in a RoHS compliant, green/halogen free space-saving 30-pin 6x6 QFN package and is priced from \$3.50 in 1000 piece quantities.

Additional Information

Additional information on the XR76108, XR76112 and XR76115 is also available online. <http://www.exar.com/power-management/power-conversion#powerblox>

Additional information on Exar's DC-DC power conversion products is also available online. <http://www.exar.com/power-management>

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>.

SOURCE Exar Corporation