August 19, 2014

Exar Introduces Ultra-Low Jitter Programmable Clock

The XR81112 Dissipates 60% Less Power than Competing Solutions

FREMONT, Calif., Aug. 19, 2014 /PRNewswire/ -- Exar Corporation (NYSE: EXAR), a leading supplier of high-performance integrated circuits and system solutions, today announced an addition to its family of universal clock products. The XR81112 series offers output frequencies from 10MHz to 1.5GHz with ultra-low phase noise jitter of less than 200fs that makes them ideal for demanding communications, audio/video, and industrial applications. The tiny 3x3mm QFN-12 packaged devices are the smallest on the market with this broad feature set.

The XR81112 clock synthesizer utilizes a flexible delta-sigma modulator and a very wide-ranging VCO in a PLL block that has been optimized to be extremely power efficient. With a core current consumption of just 20mA, these parts dissipate 60% less power than equivalent competitive devices, providing a compelling power efficiency benefit to system designers. The PLL can operate from either an input system clock or a crystal, and incorporates both an integer divider and a high-resolution (<1Hz) fractional divider for increased flexibility to generate any clock frequency. Additionally, up to four different frequency multiplier settings can be stored, allowing for different application configurations and providing BOM savings compared to multiple synthesizers. The XR81112 is configurable for LVCMOS, LVDS or LVPECL outputs.

Exar's Universal Clocks deliver extremely low, sub-200fs, output phase noise jitter as integrated over a 1.875MHz – 20MHz bandwidth. This spans the requirements of most WAN and LAN systems and supports communications standards including: 10GHz Ethernet, 2.5GHz and 10GHz SONET/SDH/OTN, xDSL and PCIe, as well as many other synchronized clock system applications. The XR81112 is available as a pre-configured device or can be optionally programmed by 3rd party programming houses.

"The new tiny XR81112 series of devices adds to Exar's Universal Clock family as the smallest device on the market possessing such a broad range of capabilities. With the ability to configure to CMOS, LVDS or LVPECL outputs as well as up to four selectable output frequencies between 10MHz and 1.5GHz, the XR81112 offers unrivaled flexibility in the smallest form factor," said James Lougheed, Vice President for Communications Products at Exar. "All this capability while consuming less than half of the power of competitors clearly puts the XR81112 in a class of its own."

Product Availability and Pricing
The XR81112 series of products are available now in RoHS compliant, green/halogen QFN12 packages. 1K quantity pricing is $7.00 each.

Additional Information
Additional information on the XR81112 is available at
http://www.exar.com/communications/timing/universal-clocks/xr81112

Additional information on Exar's Timing and Clock solutions is available at
http://www.exar.com/communications/timing

About Exar
Exar Corporation designs, develops and markets high-performance integrated circuits and system solutions for the Communications, High-End Consumer, Industrial & Embedded Systems, and Networking & Storage 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 about Exar, visit http://www.exar.com.

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