Silicon Labs Introduces the Industry's Smallest, Lowest Power Customizable Clock ICs

Tiny Si512xx Clock Generators Ideal for Space- and Power-Sensitive Portable, Consumer and Embedded Designs

"Like the rest of our timing device family, these clock generator ICs offer customers the industry's shortest lead times for custom clocks to help streamline development cycles."

AUSTIN, Texas--(BUSINESS WIRE)--Silicon Laboratories Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today introduced the industry's smallest and lowest power customizable clock generators. Available in a tiny 1.7 mm-squared package, Silicon Labs' new Si512xx clock generator family offers up to 60 percent lower power than competing solutions and is ideal for space-limited, cost-sensitive embedded and consumer electronics such as portable media players (PMPs), industrial metering and monitoring, portable navigation devices (PNDs), handsets, digital cameras and hundreds of other handheld, power-sensitive products.

As part of Silicon Labs' comprehensive, programmable timing portfolio, the Si512xx clocks are highly customizable devices. The Si512xx clock generators support up to three LVCMOS clock outputs from 3 to 200 MHz in a single device, providing developers with maximum flexibility while simplifying supply chain management. Each output has four levels of output strength setting, which can be configured individually to match the load and the trace length condition of the board. This is more than twice the configurability of the closest competing product.

The ultra-small Si512xx clocks typically use up to 80 percent less board space than competing clock generator ICs and provide cost-saving replacements for sub-200 MHz LVCMOS oscillators. By supporting multiple LVCMOS outputs, the single-chip Si512xx clock generators replace multiple surface-mounted crystals and oscillators with one economical device, further reducing board space and BOM cost.

In addition to unparalleled cost and space savings, these ultra-small clock generators also support green initiatives by reducing power consumption up to 60 percent compared to competing solutions. This 2x low-power advantage offers noteworthy benefits such as longer battery life in power-sensitive applications ranging from smart meters to handheld devices. The Si512xx clocks also provide output enable (OE) functionality to achieve even lower power modes in standby or sleep states.

The Si512xx clock generators provide customizable spread spectrum clocking technology to minimize electromagnetic interference (EMI). This frequency modulation technique enables system designers to reduce EMI by spreading clock energy over a wider frequency range, consequently reducing peak emissions at the fundamental frequency and every harmonic. The Si512xx further reduces EMI and increases system margin for data integrity through an innovative approach to edge-rate slew customization. The Si512xx clock family's highly flexible architecture can be factory-customized to support specific spread spectrum and edge-rate slewing profiles, percentages, modulation types and/or rates to meet customer specifications for output frequencies, control inputs and drive strength.

"No other small-footprint clock solution today offers the high level of integration, power efficiency and configurability of the Si512xx clock family," said Mike Petrowski, general manager of Silicon Labs' timing products. "Like the rest of our timing device family, these clock generator ICs offer customers the industry's shortest lead times for custom clocks to help streamline development cycles."

Pricing and Availability

Production quantities of Silicon Labs' Si512xx clock generator products are available now in a choice of 1.4 mm x 1.2 mm 6-pin TDFN, 1.4 mm x 1.6 mm 8-pin TDFN and 8-pin TSSOP package options. Pricing in 50,000-unit quantities begins at $0.32 (USD) for 2-output clock generators. The Si51210-EVB evaluation board for 6-pin TDFN clocks, the Si51211-EVB for 8-pin TDFN clocks and the Si51219-EVB 8-pin TSSOP clocks are each priced at $50 (USD MSRP). For more information about the Si512xx clock family and to order samples and evaluation boards, visit www.silabs.com/pr/clocks.

Silicon Laboratories Inc.

Silicon Laboratories is an industry leader in the innovation of high-performance, analog-intensive, mixed-signal ICs. Developed by a world-class engineering team with unsurpassed expertise in mixed-signal design, Silicon Labs' diverse portfolio of patented semiconductor solutions offers customers significant advantages in performance, size and power consumption. For more information about Silicon Labs, please visit www.silabs.com.

Cautionary Language

This press release may contain forward-looking statements based on Silicon Laboratories' current expectations. These forward-looking statements involve risks and uncertainties. A number of important factors could cause actual results to differ materially from those in the forward-looking statements. For a discussion of factors that could impact Silicon Laboratories' financial results and cause actual results to differ materially from those in the forward-looking statements, please refer to Silicon Laboratories' filings with the SEC. Silicon Laboratories disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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