Silicon Laboratories Introduces Point of Load Reference Design for Digital Power Applications; Complete Solution Eases Digital Power Design

July 17, 2006 11:00 AM EDT

This reference design is a 20 A POL suitable for packaging as a stand-alone power supply module or can be implemented directly on the end application circuit board by the OEM. Included in the POL reference design is a pre-configured software kernel that features active dynamic dead time control for maximum operating efficiency, non-linear control response for fast transient response, and SMBus port capable of supporting industry-standard communication protocols.

The reference design kit is shipped with a complete development tool suite enabling users to modify the POL application code as desired. This tool suite consists of a powerful GUI-based application builder that initializes the switch timing, loop compensation filter and processor set-up without writing application software. Also included is an Integrated Development Environment (IDE) that contains an editor, macro assembler, demo C compiler and a special online debugger which allows for manual inspection and adjustment of system parameters during power supply operation.

The POL reference design kit includes full schematics and layout (Gerber) files that facilitate fast time to market and greatly reduce design time and effort. The total area occupied by the POL is only 615 mm2 and delivers a maximum of 20 A for a complete 20 A/100 W power converter. The POL reference design utilizes a 4-layer PCB and is available with all necessary connectors and switches for complete evaluation of the product. Also included in the POL is a USB debug adapter, USB to SMBus communications adapter, USB cable and 2 Ohm load resistor. The only external hardware required to evaluate the kit is an external input power supply.

Pricing and Availability

The POL reference design is based on the Si8252 digital power controller in a 32-pin QFP package. The POL reference design, part number SINGLEPHSPOL-RD, is now available for $149.

Silicon Laboratories Inc.

Silicon Laboratories Inc. is a leading designer of high-performance, analog-intensive mixed-signal integrated circuits (ICs) for a broad range of applications. Silicon Laboratories' diverse portfolio of highly integrated, patented solutions is developed by a world-class engineering team with decades of cumulative expertise in cutting-edge mixed-signal design. The company has design, engineering, marketing, sales and applications offices throughout North America, Europe and Asia. For more information about Silicon Laboratories 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.

CONTACT: Silicon Laboratories Inc., Austin
Kirstan Ryan, 512-532-5349
kirstan.ryan@silabs.com

SOURCE: Silicon Laboratories Inc.