Silicon Labs Online Power Consumption Calculator Simplifies Isolation Product Selection and System Design

Easy-to-Use Web-Based Utility Eliminates Guesswork and Enables System Power Budget Assessment in Minutes

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AUSTIN, Texas--(BUSINESS WIRE)--Silicon Laboratories Inc. (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today introduced a web-based Isolator Power Consumption Calculator that streamlines the process of assessing system power budgets for applications requiring digital isolation. The free online utility enables developers to define basic information about their isolation set-up and then calculate the power consumption in a matter of minutes.

The power consumption calculator is especially helpful for power-sensitive and thermally constrained designs in small enclosures such as industrial process control modules or programmable logic controllers. In these and similar designs, the developer must understand the power consumption of every component in the system including the digital isolator.

The calculator is intuitively easy to use. The user simply selects the settings that match the design such as total number of channels, VDD supply voltage and individual channel parameters, and then clicks “Get Results” to obtain detailed power and current data.

Without access to such a tool, the developer would need to extrapolate power specifications from data sheets or conduct extensive calculations and then guess at some of the isolation parameters. The calculator tool eliminates the guesswork. Instead of spending hours studying data sheets, picking parameters and making judgment calls based on systems characteristics to determine the impact on the system power budget, the utility speeds up the entire process to just a few minutes.

“System developers are extraordinarily busy, and we developed the Isolator Power Consumption Calculator to help simplify the design process,” said Ross Sabolcik, product line director for Silicon Labs’ digital isolation products. “We believe the power of web-based utilities can be leveraged to make the developer’s job significantly easier, enabling more streamlined system development and faster time to market.”

The Isolator Power Consumption Calculator is available free at www.silabs.com/isolator-power-calculator. It can be used online or downloaded for offline use by developers. The calculator is one of several web-based utilities developed by Silicon Labs to simplify system design: http://www.silabs.com/support/training/pages/default.aspx.

About Silicon Labs Digital Isolators

Silicon Labs’ Si84xx and Si86xx digital isolator families use a novel RF isolation architecture fabricated in a standard CMOS to deliver a highly integrated one-to-six-channel isolator that is one-third the size of optocoupler solutions, reducing the cost of the bill of materials by as much as 50 percent. These digital isolators provide a smaller, faster and more reliable isolation solution than optocouplers without the wear-out mechanisms, aging effects or temperature dependencies that plague optocoupler-based designs. Silicon Labs’ digital isolators employ an RF coupler to transmit digital information across an isolation barrier, enabling very high-speed operation at low power levels. They also offer best-in-class electromagnetic (EMI) immunity among digital isolation solutions.

Silicon Labs’ digital isolators are designed to replace optocouplers in applications requiring robust operation and high levels of insulation protection such as industrial automation and drives, motor control and medical systems. They also provide an ideal isolation solution for systems powered from 220 Vac mains supplies such as isolated ac-dc and dc-dc power supplies, as well as solar panel microinverters, data communications systems and hybrid electric vehicles (HEVs).

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.

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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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Contact:

Silicon Laboratories Inc.
Dale Weisman, +1-512-532-5871
dale.weisman@silabs.com

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