Silicon Labs and Vitesse Announce PoE+ Reference Designs for Energy Efficient PSE Switches

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AUSTIN, Texas, Nov 09, 2009 (BUSINESS WIRE) -- Silicon Laboratories Inc. (NASDAQ: SLAB) and Vitesse Semiconductor Corporation (Pink Sheets: VTSS.PK) today announced the availability of multiple reference designs to enable easy upgrades for Vitesse-based Gigabit Ethernet switches to support the recently ratified IEEE 802.3at Power over Ethernet (PoE+) standard. Two new reference designs combine Silicon Laboratories' highly integrated, energy-efficient PoE Power Sourcing Equipment (PSE) controllers and the Vitesse E-StaX(TM) and SparX(TM) Gigabit Ethernet switching chipsets for 24-port stackable and 5- to 24-port workgroup and desktop switches, respectively.

The first joint design is a PSE daughtercard for E-StaX(TM) and SparX-II(TM) switches. The plug-in daughtercard features an isolated I2C interface, self-contained operation from an isolated PoE supply (54 V nom.) and efficient thermal profiling. The design supports 24 ports at up to 30 W each with full IEEE 802.3at compliance. Multiple daughtercards can interoperate on a single I2C host interface for high port count scalability. Switch host software integration and an independent PoE power supply enable a single switch motherboard design appropriate for PoE and non-PoE SKUs.

The second design is a single motherboard implementation for the SparX-G8e(TM) switch. Supporting eight ports of PoE (15.4 W) or PoE+ (30 W) capability and Vitesse's Web-based configuration and power management GUI, this complete PoE-enabled switch is intended for applications such as desktop switches, VoIP telephony, wireless access points, industrial networking, video surveillance and security systems.

Both reference designs include schematics, bill of materials, and comprehensive PCB layout files for fastest time-to-market and design success. Silicon Labs' Power Manager Software Development Kit (SDK) is available to enable system developers to quickly develop highly differentiated PSE systems with sophisticated power management features to minimize power supply costs and maximize energy efficiency.

Based on Silicon Labs' Si345x PoE+ PSE controller family, designers can take advantage of real-time power measurement capabilities. The Si345x incorporates high-precision current and voltage measurement capability to monitor the power consumed by each port, enabling systems to maintain tighter control of power allocation, which translates to smaller power supplies and lower supply overhead and gives system administrators visibility into how much power is allocated to and consumed by each port in their network. Link layer discovery protocol (LLDP) power management algorithms are implemented at the system level, enabling dynamic power allocation.

Vitesse's E-StaX products feature its VStaX(TM) cabling technology, a scalable high-speed 24+4 port configuration, a performance-driven architecture and a rich integrated feature set to deliver low-cost Gigabit Ethernet for OEM and ODM customers. The SparX unmanaged and smart Web-managed switches eliminate the need for external processing and memory found in fully managed switches, allowing developers to deliver a smart switch with advanced Layer-2 capabilities at a fraction of the cost for a fully managed switch. SparX switches also include Vitesse's award-winning EcoEthernet(TM) technology that delivers green savings equivalent to more than 400 mW per port. Both product families are ideal for Carrier Ethernet applications as they support Synchronous Ethernet with SSM according to ITU-G.8264/Y.1362 and offer fast protection switching with switching times significantly below the 50 ms telecom requirement.

Availability

The design databases and Power Manager SDK are available by request to qualified customers through authorized Silicon Labs sales representatives and distributors:

- Si3452V1-RD: 24-port PSE daughtercard for E-StaX switches
- Si3452V2-RD: 8-port SparX-G8e PSE switch

Visit https://www.silabs.com/buysample/pages/salesreps.aspx for your local sales representative. For more information on Silicon Labs' PoE solutions, visit www.silabs.com/pr/PoE.

For Vitesse switch information, see http://www.vitesse.com/products/productLine.php?id=16.

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 highly integrated, easy-to-use products offers customers significant advantages in performance, size and power consumption. These patented solutions serve a broad set of markets and applications including consumer, communications, computing, industrial and automotive.

Headquartered in Austin, TX, Silicon Labs is a global enterprise with operations, sales and design activities worldwide. The company is committed to contributing to our customers' success by recruiting the highest quality talent to create industry-changing innovations. For more information about Silicon Labs, please visit www.silabs.com.

About Vitesse

Vitesse designs, develops and markets a diverse portfolio of high-performance, cost-competitive semiconductor solutions for Carrier and Enterprise Ethernet networks worldwide. Engineering excellence and dedicated customer service distinguish Vitesse as an industry leader in Gigabit Ethernet Ethernet-over-SONET, Optical Transport, and other applications. Additional company and product information is available at www.vitesse.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

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