

Lattice DIAMOND Design Software named finalist in Elektra Awards competition

An independent panel of judges has named the Lattice Diamond™ design software environment a finalist in Elektra 2010, the European Electronics Industry Awards competition.

FPGAs are increasingly being used in more cost sensitive, high volume applications, and designers need an easy to learn, flexible design environment for exploring different implementations to achieve their cost, power, and performance targets. The Lattice Diamond design environment allows designers to efficiently manage these multiple implementations in one project. In addition, Lattice Diamond software continues to provide industry-leading features specifically developed for low cost and low power applications. These include a very accurate power calculator, pin based simultaneous switching output noise calculator, and proven MAP and PAR FPGA implementation algorithms that help ensure low cost and low power design solutions.



Does your product have to be EnergyStar compliant?



Sumit Microelectronics has announced new programmable power manager (PPM) integrated circuits that will bring sophisticated digital power control and programmability to a much wider range of high-volume consumer applications than previously available. Sumit's new SMB20X family supports advanced power management for "green" and EnergyStar® applications, including digital LCD/LED televisions, cable/satellite/IP set-top boxes, and other multimedia, broadband and small-office-home-office (SoHo) communications equipment.

The new family members include the **SMB207/207A/208/208A/209/209A** single- and dual-output integrated DC-DC buck regulators. The SMB20X family combines Sumit's digital programmability with dense integration, ultra-compact size, and cost-effective bill-of-materials (BoM) necessary for mass-market consumer products.

With a serial digital interface and on-board non-volatile memory, the SMB20X family can be easily configured during development and re-programmed in system by host software. The result is a flexible, digitally controlled power supply design that is easily customizable without tedious hardware design cycles or complex microcontroller-style GPIO-based control. The integration of advanced power control functions eliminates external components and cost, improves functionality and performance, and minimizes development time.



Vitesse adds to Synchronous Ethernet portfolio with Dual-Port Gigabit Ethernet PHY

Vitesse, is addressing the cost and power optimization needs in wireless base station and mobile backhaul markets by offering a two-port version of its popular SimpliPHY™ VSC8664 Quad PHY-layer device. The new VSC8662 is ideal for lower cost, lower power, and lower port count wireless and access equipment requiring Carrier Ethernet features such as

timing synchronization across links. The VSC8662, like all other EcoEthernet™ PHY-layer devices, supports AutoMedia Sense™ to detect and configure ports for fiber or copper; and ActiPHY™ power saving mode, which reduces power on inactive ports by up to 80-percent from a bidirectional full-speed mode.



BC6140 delivers sound clarity like nothing you have heard before!

BC6140 is a Bluetooth chip for low-cost mono headsets that provides high quality 1-mic noise reduction, echo cancellation and speech intelligibility enhancements. BC6140 also supports user convenience features such as audio prompts, advanced multipoint and proximity pairing. BC6140 builds on BC6130's functionality adding CSR's high performance on-chip DSP, support for CVC 5.0 noise reduction, packet and bit error concealment, which restores audio quality in difficult RF environments. Its key features include



- * Fully qualified single-chip Bluetooth v3.0 system
- * Single-chip mono headset solution with advanced echo and noise cancellation
- * Packet loss and bit error concealment which restores audio quality in difficult RF environments
- * Low power consumption: over 13 hours talk time from a 120mAh battery
- * High-performance CVC 1-mic echo and noise cancellation with selectable low power wind noise reduction feature
- * Support for boost charge proving up to 240mA total charge current
- * Green (RoHS compliant and no antimony or halogenated flame retardants)
- * Superior RF performance for improved range and link reliability
- * 8.5 dBm transmit power
- * -91dBm receive sensitivity



Mindspeed's Comcerto 1000 CPU receives INTERNET TELEPHONY Magazine's 12th annual product of the year award



Mindspeed's Comcerto 1000 packet processors enable service providers to deploy triple-play and additional advanced value-added services over their FTTx Next Generation Networks (NGN) using the next generation of broadband home gateways. The Comcerto 1000 family of processors offers a unique combination of high packet performance, low-power consumption and low cost, making it also one of the best choices for small- and medium-sized business (SMB) smart security appliances and voice-over-Internet Protocol (VoIP) for residential, retail and SMB appliances.



Allegro introduces new standard 3 V smoke detector with interconnect, timer and latching alarm indicator



Allegro introduces a new low-current BiCMOS photoelectric smoke detector circuit with ultra-low standby current allowing an average 10-year battery life. Allegro's **A5303** device can be used with an infrared optical chamber to sense light scattered from smoke particles. A networking capability allows units to be interconnected so that if any unit senses smoke all units will sound an alarm. Special features are incorporated in the design to facilitate calibration and testing of the finished detector. This new device is targeted at the consumer smoke alarm market.



New family of Ethernet connected MiniCore processor modules

Rabbit introduces the RCM6700 series of high performance network connected 16-bit processor modules which contain a multitude of device connectivity options. This includes an I2C interface, a flexible interface module, FIM which extends peripheral connectivity like CANbus, 1-Wire and SD/SDIO. 32 Configurable I/O and up to 6 serial ports, the RCM6700 series provides more capabilities from the standard device servers without sacrificing costs. The series is also pin compatible with MMiniCore 802.11 b/g modules. Rabbit's integrated hardware and software solution allows the RCM6700 series to be fully programmable within Dynamic C®, an ANSI C compliant development environment. Complete samples and libraries are included to dramatically reduce development time from months to weeks.



Surface mount current sensor from Allegro Microsystems



Allegro MicroSystems announces a new 120 kHz bandwidth, high-voltage isolation current sensor IC that provides an economical and precise means for current sensing applications in industrial, commercial, and communications systems. The device is offered in a small footprint surface mount package that allows easy implementation in customer applications. Allegro's [ACS710](#) device consists of a precision linear Hall sensor integrated circuit with a copper conduction path located near the surface of the silicon die. Applied current flows through the copper conduction path, and the analog output voltage from the Hall sensor IC linearly tracks the magnetic field generated by the applied current. The accuracy of the ACS710 is maximized with this patented packaging configuration because the Hall element is situated in extremely close proximity to the current to be measured.



CSR μ Energy, a single chip Bluetooth Low Energy platform

CSR recently announced the launch of its first single-mode, single-chip Bluetooth low energy platform, CSR μ Energy, addressing the needs of ultra low power connected devices. The CSR μ Energy platform will provide everything required to create a Bluetooth low energy product with RF, baseband, microcontroller, qualified Bluetooth v4.0 stack, and customer application running on a single chip. The CSR μ Energy platform has been optimised to support only Bluetooth low energy features, allowing products to be tiny, cost-effective and power-efficient. CSR's chips can run for years on a single coin cell battery, and may be used in simple sensors such as a step counting foot pods, heart rate monitors or car keyfobs, as well as in more complex low power devices such as a watch that can control and display information from a mobile phone. The platform offers single-mode chips that complement CSR's dual-mode offerings and provide a complete range of Bluetooth low energy solutions that will drive the development of this new market. The CSR μ Energy platform, with its built-in processor, is designed for use in consumer products and requires no



external processor to run customer applications. It includes four quadrature decoders to enable mouse and pointing devices, three analogue inputs for direct measurement of sensor, and digital serial connectors for external sensors and displays. The chips each have direct antenna connections, can connect directly to a 3V coin cell or a pair of AAA batteries, and come with three pulse width modulation outputs for variable power control in applications such as lighting control or vibration motors. They can run in optimised sleep modes with currents as low as 600nA and chips can "wake" quickly in response to external input signals for applications such as remote controls. CSR μ Energy is available in two package options. CSR1000 comes in a 32-pin 5x5x0.6mm QFN package. CSR1001, in a 56 pin 8x8x0.9mm QFN, provides extra pins for more complex products with a larger number of digital inputs, such as keyboards, remote control products or home information displays. Both CSR1000 and CSR1001 can act as a master or slave using CSR's recently qualified Bluetooth v4.0 host stack providing complete Generic Access Profile (GAP), L2CAP, Security Manager, Attribute Protocol (ATT) and Generic Attribute Profile (GATT). These devices enable customers to run their complete application on chip using the embedded 16-bit microprocessor.



Surface mount ZigBee modules using Ember357 SoC

[Digi International](#) have introduced a new line of [XBee and XBee-PRO ZB](#) embedded ZigBee modules based on the Ember EM357 System on Chip (SoC). The new modules add Surface Mount Technology (SMT) and Serial Peripheral Interface (SPI) to the product family. The [SMT modules](#) are ideal for high-volume applications in the energy and controls markets where manufacturing efficiencies are critical. The addition of Serial

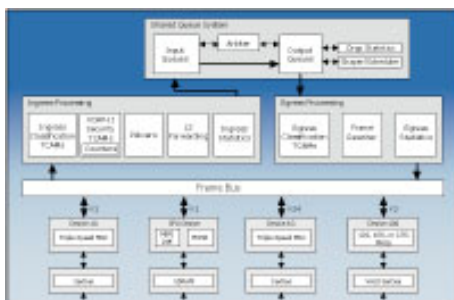
Peripheral Interface (SPI) provides high-speed throughput and optimizes integration with embedded micro controllers lowering costs of development and shortening time to market. XBee and XBee-PRO ZB ZigBee modules feature ZigBee Smart Energy-ready firmware for supporting the implementation of each of the eight devices defined in the ZigBee Smart Energy public application profile.

Products developed with the ZigBee Smart Energy profile will be ideal for metering devices, load controllers, in-home displays and other ZigBee Smart Energy devices.



Vitesse Delivers Lowest Power Carrier Ethernet Functionality for Stackable Enterprise Applications

Vitesse have introduced a simplified low-power solution for high-density Gigabit Ethernet switching with its VSC7432 (E-StaX-III-48™) and VSC7434 (E-StaX-III-68™). When combined with Vitesse's SimpliPHY™ GE PHYs, the E-StaX-III™ GE switch engines set a new benchmark, delivering 30% lower power consumption than competitive solutions in a three-chip design, and making them ideal for cost-effective managed Layer 2 and Layer 3 stackable Enterprise switches. This E-StaX-III switch engine family underscores Vitesse's strategy of bringing cost-effective carrier network features to traditional Enterprise network equipment. Low latency, high security and advanced Quality of Service (QoS) features lend themselves readily to applications such as IPTV, media conferencing, and VoIP. Extensive queuing and traffic statistics provide simplified traffic provisioning, monitoring, and management to meet the performance requirements of next-generation LANs.



VITESSE



Allegro/Sanken

Allegros product portfolio contains halleffekt sensors, motordrivers, latched drivers and general drivers. Allegros products are distributed by Insight Memec



CSR

CSR is a leading provider of multifunction connectivity and location platforms. CSR's technology portfolio includes Bluetooth, GPS, FM, Wi-Fi, UWB, NFC and other technologies to enable silicon platforms that incorporate fully integrated radio, baseband and microcontroller elements.



Digi International

Digi International develops products and technologies to connect and manage local or remote electronic devices over the network or via the web with products like ARM based network enabled processors and core modules as well as the XBee family of OEM point-to-multipoint / Mesh and ZigBee modules.



GE Sensing

Silicon based pressure sensors for air, gas and liquid. The sensor element is the same in all sensors, what differs is how they package it depending on application and what media it will be in contact with. Everything from SO-8 package for simple barometric applications to sensors in stainless steel housing.



Lattice Semiconductor

Lattice manufactures programmable logic devices starting from small, very low power CPLD devices all the way to high density SRAM based platform FPGA's. Lattice is also the key manufacturer of Flash based FPGA devices that don't need an external programming source. Lattice also has some special mixed signal programmable devices for Clock & Power Management applications.



Mindspeed

Mindspeed Technologies designs, develops and sells semiconductor solutions for communications applications such as converged VoIP and data, and broadband optical transmission in enterprise, access, metropolitan and wide area networks. The company's three key product families include high-performance analog transmission and switching solutions, multiservice access products designed to support voice and data services across wireline and wireless networks, and WAN communications solutions including T/E carrier, network processing and traffic management devices.



Quicklogic

QuickLogic offers innovative low power platforms for the portable/handheld markets. QuickLogic's Customer Specific Standard Products or CSSPs, combines the proven functionality of ASSP such as USB 2.0 OTG, PCI, SDI, with the fully customer-specific functionality of ASICs.



Rabbit

Rabbit Semiconductor® Inc., a Digi International® brand, is a global provider of high-performance 8/16-bit microprocessors, core modules and development tools for embedded control, communications, and Ethernet connectivity.



Summit

Summit Microelectronics is the leading supplier of analog power management solutions to the embedded electronics market. Using their programmable technology you can solve all you power issues in growing thru generations of products with different supply powers.



Vitesse

Vitesse combines design of high speed IC's with volume production to supply the market with some of the worlds fastest communication devices. Furthermore, Vitesse offers one of strongest Ethernet family of products in the market. The product portfolio includes SONET/SDH, ATM, IP, Gigabit Ethernet, optoelectronic devices and solutions for backplane communication.