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CEL Accelerates High-End ZigBee™ Development



New Apex LT Module Enables Customers to Rapidly Develop Systems that Utilize the Full ZigBee Application Suite

Santa Clara, CA - December 17, 2008 - California Eastern Laboratories (CEL) is now shipping a high end ZigBee radio module, adding to its rapidly growing line of ZigBee/802.15.4 transceiver solutions. Based on Ember Corporation's EM260 transceiver platform, the Apex LT Module runs the entire ZigBee suite of applications and profiles as specified by the ZigBee Alliance. While many devices claim association with ZigBee, few have enabled the extensive set of applications and profiles required for ZigBee and ZigBee Pro certification. The Apex LT module supports both ZigBee and ZigBee Pro Certified software stacks and full mesh networking as well as the ZigBee Alliance Smart Energy profile. It is FCC, CE, and IC certified eliminating costly and time consuming regulatory testing. The module is a complete hardware and software solution that helps customers to get to market much faster than raw ICs or hardware modules that are neither certified nor support ZigBee profiles.

Enabling Key Applications

The Apex LT module is ideal for applications such as automated heating, lighting, air conditioning and ventilation systems in commercial and residential buildings. A system deployed with the Apex LT can enable simple and low cost installations of sophisticated security, irrigation, and other building systems. The module fits well into Automated Meter Reading and Automated Meter Infrastructure (AMR/AMI) systems, making it an ideal choice for electrical and gas utilities to install devices that monitor and reduce energy use, saving ratepayers money by taking advantage of off-peak utility rates while reducing the burden on already-stretched electrical grid systems.

Cutting Edge Engineering Design Delivers Range and Flexible Output Power in a Small Form Factor

The Apex LT module features +20dBm output power and over 4,000 feet of range in a typical deployment. Inside is an EM260 network co-processor IC that combines a transceiver with a flash-based network processor. The module's native low power processor handles the radio and network management functions, off loading these tasks from the host controller.

The Apex LT features an onboard power amplifier with software-configurable output from 1mW to 100mW. At 100mW, power consumption is only 170mA, making it a good choice for battery-powered applications. It is designed to deliver constant RF output across its full 2.1 to 3.6V voltage range, ensuring consistent performance over the entire life of its battery.

Apex LT modules have a small footprint of just 25 x 33 mm. An integrated antenna helps to reduce system size and cost while an interface for an external antenna allows various antenna options.

Availability and Pricing

The Apex LT is part of broad family of CEL ZigBee products, including integrated radio modules, System-on-Chip transceivers, and MMIC power amplifiers, LNAs and switches for range extension.

Pricing is under \$15 per module in volume quantities.

CEL offers Apex LT evaluation kits which provide two modules mounted on self-contained interface boards. These boards can be battery-powered enabling developers to create and test network connections under real-world environmental conditions. Enabling evaluation software is included which makes it simple to configure the module's settings, send and receive packets, and determine packet error rates. These software functions enable the user to easily test module range and RF performance in their own operating environment.

For more information, please visit the California Eastern Laboratories website at www.cel.com

Detailed information on the new Apex LT module can be found at:

<http://www.cel.com/static.do?command=ZALM301&group=5>

Editors please contact David Cohen at david.cohen@cel.com.

About CEL

California Eastern Laboratories (CEL) develops ZigBee / IEEE 802.15.4 Radio Modules and System-on-Chip (SoC) Transceivers and is a member of the ZigBee Alliance (www.zigbee.org). CEL is also NEC Electronics' exclusive sales, marketing and development partner in the Western Hemisphere for products made by their Compound Semiconductor Device Division. CEL has sales offices throughout the country, plus a network of independent representatives and distributors throughout the world.