

Release No. CEL142

CEL Expands Its ZigBee Portfolio by Offering the World's First +110°C Compatible Module and the Industry's Smallest +20dBm USB Stick

Santa Clara, CA — November 18, 2013 — California Eastern Laboratories (CEL) announces the production release and availability of its new MeshConnect™ EM357 High Temperature Mini Modules and MeshConnect™ EM357 USB Sticks, both powered by the premier ZigBee® PRO stack from Silicon Labs. These new products provide additional ways to link into and control ZigBee network environments within the Connected Home, Lighting, Building Automation and Industrial Markets.



MeshConnect™ High Temperature ZigBee Mini Modules

CEL's High Temperature Mini Modules were specifically designed to address the thermal challenges associated with heat-intensive applications. LED lighting implementations within the Connected Home are especially daunting since the bulbs are often housed in recessed cans. These cans are typically insulated, and they tend to prevent the wicking away of heat from the light socket. In addition, the can itself acts like an RF containment vessel, making it imperative that the highest module output power of +20dBm is used to overcome the can's RF propagation limitations. CEL's High Temp ZigBee modules overcome these challenges by supporting a maximum operating temperature of +110°C, a 29% improvement over the closest competitive product. The module can also deliver +20dBm of output power despite the elevated temperature state. Competing modules with maximum ratings of +85°C will experience significant 'power droop' at elevated temperatures, and RF range will suffer as a result.

These modules are FCC, IC and iControl certified, and they operate with the industry's premier ZigBee PRO Stack from Silicon Labs (EmberZNet PRO™).

MeshConnect™ ZigBee USB Sticks

The MeshConnect™ EM357 USB Sticks also utilize Silicon Lab's EmberZNet PRO™ stack, enabling monitoring and control for devices with USB 2.0 port connectivity. The USB Sticks are ideal for retrofitting existing products like satellite set top boxes, hubs, gateways, and white goods. They can also be used as Sniffers for Over-The-Air (OTA) Network logging. Each stick includes an additional 1MB of Flash memory that can be used for OTA upgrades or additional programming space. The USB Sticks are available in standard or long range options (+8dBm and +20dBm, respectively) to allow designers to choose the radio performance that best suits their link budget requirements. Among comparable ZigBee USB sticks that support +20dBm of output power, the MeshConnect™ USB stick excels in terms of having the industry's smallest form factor.

The USB Sticks and the High Temperature Mini Modules are targeted for ZigBee markets that include connected homes (Energy Management, Smart Home, Lighting Control and more) and other Machine-to-Machine applications.

The CEL Advantage

CEL's 54 years of RF design experience includes hardware, software and sub-system development across a wide range of applications. CEL's development support teams provide design services to accelerate projects and reduce time-to-market.

Availability

CEL's MeshConnect™ EM357 High Temperature Mini Modules are available as Engineering Samples. Part numbers are ZICM357SP2-1-HT (for PCB Antenna) and ZICM357SP2-1C-HT (for RF Port for External Antenna).

CEL's MeshConnect™ EM357 USB Sticks are now in production. Part numbers are ZM357S-USB (for standard range) and ZM357S-USB-LR (for long range).

Contact Us

For more information on these new products, please visit

www.cel.com/USB

www.cel.com/HT

The EM357 High Temperature Mini Modules and USB Sticks are an integral part of CEL's MeshConnect™ ZigBee portfolio. For additional details on CEL's complete product offerings, Visit <http://www.cel.com/meshconnect>

Editors, please contact Sam Yacoub at sam.yacoub@cel.com or 408-919-2241 for further information or to arrange a technical briefing.

About CEL

California Eastern Laboratories (CEL) designs and manufactures the MeshConnect™ line of IEEE 802.15.4/ZigBee professional grade wireless solutions and is a member of the ZigBee Alliance. With over 50 years experience, CEL is ideally positioned to provide its customers with hardware and software products that greatly simplify design and reduce time to market. CEL supports customers through sales offices, sales representatives and distributors worldwide. Visit us at: www.cel.com.