



## FOR IMMEDIATE RELEASE

### **MeshNetics Collaborates with Atmel to Deliver Low Power 802.15.4 OEM Solution** *The New Ultra-Small, Long-Range Zigbee Module for Mesh Networking Applications*

**Moscow, Russia – June 14, 2006** – MeshNetics, a leading ZigBee technology provider, collaborates with Atmel, a world leader in advanced semiconductors, to bring a low power 802.15.4 solution to the market. The ZigBit, an IEEE802.15.4/ZigBee™ OEM module, is based on the industry leading Atmel 802.15.4 hardware platform. Occupying less than a half square inch of space, the ZigBit is less than half the size of other modules available in the market today. Small as it is, the ZigBit module features best-in-class sensitivity, long range and low power consumption. The ZigBit module comes with the comprehensive software package, including a networking stack to enable ZigBee applications.

As the IEEE802.15.4/ZigBee market grows, OEMs fuel demand for IEEE802.15.4/ZigBee modules and single chips. Developers are faced with a choice in wireless connectivity implementation: either add a module to the system, or integrate a single chip to the board circuitry.

The module approach offers numerous advantages. The module already contains the complex RF design with the necessary passive components included, freeing the OEM from the time-consuming development. The manufacturer can instead focus on its core business without the need of having an RF expertise. The single chips offer lower cost and occupy less physical space than modules, allowing more flexibility in product design. With its ultra compact size of only 1.88cm x 1.35cm (0.74" x 0.53"), the ZigBit bridges this gap.

The ZigBit is based on the innovative 802.15.4 hardware platform being developed by Atmel. The Atmel 802.15.4 hardware platform concept allows a superior sensitivity. Combined with an outstanding Tx power without external amplifiers, it accounts for the longer range, due to outperforming link budget. The low power consumption is an important factor for battery-operated devices. Thanks to the Atmel hardware platform's inherent low power consumption and a low part count, the ZigBit module is exceptionally power efficient.

"When developing the ZigBit module, we faced a challenge of finding the right performing hardware platform that would combine the high sensitivity and long range on one hand, and low power and ample memory on the other, while being compact, robust and reliable," said Mr. Vasily Suvorov, Managing Director & CTO of Meshnetics. "Only Atmel's hardware platform was able to meet these tough criteria. Partnering with Atmel enabled us to bring together our expertise in software and reference design with the best-of-breed hardware."

Software is a key in turning a module into an efficient 802.15.4/ZigBee solution. MeshNetics provides a networking stack software called eZeeNet that is based on IEEE802.15.4 MAC layer and is ZigBee network capable. The eZeeNet stack allows the module-based wireless sensor devices to form self-healing, self-organizing mesh networks that are widely used in industrial monitoring, HVAC control, automatic meter reading, and more. The power-management feature, included in eZeeNet stack, is crucial in extending the battery life of wireless devices.

"Combining Atmel's superior 802.15.4 IC hardware platform and MeshNetics excellence in software & design is the right answer to address the diversified market needs in the most suitable manner" said Mr. Thomas Lerm, Wireless Strategic Marketing Director of ATMEL Germany GmbH "We are convinced that this concept allows the customer the fast adaptation of 802.15.4/ZigBee functionality in a seamless fashion including required professional system support & maintenance."

MeshNetics plans on introducing its Evaluation Kits in July of 2006. The ZigBit module general availability is scheduled for early Fall 2006. The ZigBit module will have three antenna options, i.e. integrated chip antenna, antenna connector, and balanced RF output for use with the PCB antenna. The Evaluation Kit will contain interface boards, accessories, and software package, including network configuration tools and a sample data acquisition application. For more information on ZigBit modules please contact MeshNetics at [zigbit@meshnetics.com](mailto:zigbit@meshnetics.com), or visit [www.meshnetics.com](http://www.meshnetics.com). For more information on Atmel 802.15.4 hardware platform please visit [www.atmel.com/products](http://www.atmel.com/products).



## **ZigBee: Wireless Control That Simply Works**

The ZigBee Alliance is an association of companies working together to enable reliable, cost effective, low-power, wirelessly networked, monitoring and control products based on an open global standard. The ZigBee Alliance membership comprises technology providers and original equipment manufacturers worldwide. Membership is open to all.

Additional information can be found at [www.zigbee.org](http://www.zigbee.org).

## **About Atmel**

Atmel is a worldwide leader in the design and manufacture of microcontrollers, advanced logic, mixed-signal, nonvolatile memory and radio frequency (RF) components. Leveraging one of the industry's broadest intellectual property (IP) technology portfolios, Atmel is able to provide the electronics industry with complete system solutions. Focused on consumer, industrial, security, communications, computing and automotive markets, Atmel ICs can be found Everywhere You Are®.

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## **About MeshNetics**

MeshNetics™ is a leading technology provider enabling wireless sensor data integration with customers' enterprise applications. MeshNetics™ has a unique expertise in hardware, firmware and software. The product portfolio includes IEEE802.15.4/ZigBee™ OEM module; ZigBee Developer Kit; networking stack firmware; SensiLink gateway server software; and customization services. MeshNetics™ helps its partners and customers to accelerate time-to-market by providing the tools for development of complete M2M solutions for industrial automation, building automation and utility monitoring and control. MeshNetics™ bases its long-term strategy on open standards, and is a member of the ZigBee Alliance and OPC Foundation. For more information, please visit [www.meshnetics.com](http://www.meshnetics.com).

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