

## 802.15.4—A New Sense of Energy

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## Report Summary

Wireless sensor networks are making some headway in smart energy, industrial control, and other applications through IEEE802.15.4 technologies. While ZigBee, through its impressive marketing efforts in the US, has owned the largest mind share in the wireless sensor networking space for the past several years, a whole host of proprietary software stacks are being used in applications where ZigBee is more than what is required by the specific applications. This is resulting in a large number of technologies being used for countless applications, and ZigBee usage has become more focused on a single, yet fast growing application—smart energy.

In addition to proprietary standards, other consortia are building industry standards on 802.15.4 for other applications, including industrial, building, and home automation. These technologies will help drive volume and lower chip costs for 802.15.4 components.

### What's in the Report?

- Overview of 802.15.4 overlay technologies
- Discussion on applications where 802.15.4 is used
- Forecasts of units and revenue for 802.15.4 and ZigBee
- Geographical forecasts
- 802.15.4 forecast by application
- Vendor profiles

### Who Will be Interested in This Report?

- Semiconductor vendors—microcontroller and RF component vendors

### HIGHLIGHTS

- 802.15.4 node and chipset units will reach 292 million in 2012, up from 7 million in 2007.
- 802.15.4 is emerging in consumer electronics markets through efforts by RF4CE.
- ZigBee has emerged as the winning technology in the smart energy/automated meter Infrastructure market in the US.

**Whose Needs Does This Report Address?**

- Vendors of low-powered wireless connectivity semiconductors
- Systems developers for home automation, industrial automation, and commercial automation
- Utility providers and those interested in the automated meter infrastructure market
- Financial and investment community

**What Questions Does This Report Answer?**

- What is the size of the 802.15.4 market?
- What is the growth of the 802.15.4 market by application?
- Who are the major players in the low-powered wireless connectivity market?
- Which standards are used over 802.15.4?
- What are the five-year forecasts for nodes, chipset units, bill-of-materials, and revenue?

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## Methodology

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This report examines the emerging market for 802.15.4. The report presents shipment units, ASPs, and revenue forecasts from 2007 through 2012 for 802.15.4 chipsets and modules, and ZigBee chipsets and modules.

This report includes information gathered from interviews with significant companies in the field and consideration of product specifications and data sheets. Companies from all parts of the 802.15.4 infrastructure were interviewed, including vendors of complementary and competing standards (from a technology and applications perspective). Interviews took place throughout October and November 2008. Silicon IC vendors, MCU manufacturers, systems integrators, and distributed software writers were among the key categories of companies consulted. Secondary research was collected from company websites, financial reports, product brochures, and white papers.

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