



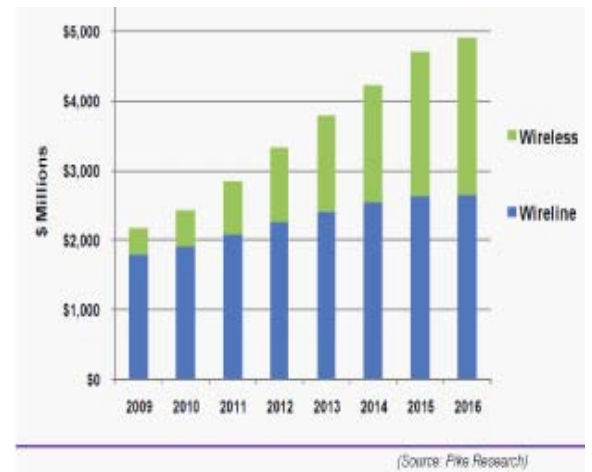
MARKET OVERVIEW

Power Line Communications Devices - A Billion Dollar Opportunity

Market Overview

PowerLine Communication (PLC) semiconductor devices transform the electricity grid into a smart grid connecting utilities to their customers, making homes energy aware “smart homes” that react to conditions on the grid and enabling a worldwide communications network over the existing power grid. This includes connected smart meters, smart grid monitors and street lighting. Direct government “green energy” investment worldwide (\$50B in China and the U.S. alone in 2009) are driving deployment of PLC systems to enable communication infrastructure to measure and control the elements of the grid. There are over one billion electricity meters worldwide and planned Automated Meter Reading (AMR/AMI) rollouts of 100 million meters per year. Each of these meters requires communications and the most natural medium is the power line to which they are already connected. Such energy directives and smart grid funding dollars are driving hundreds of power line communications initiatives worldwide. Per smart grid market researcher PikeResearch:

- Smart Grid Communication Device annual forecast raised from 15 Million in 2009 to 55 Million in 2016
- Revenue is forecast to grow at 20% CAGR over the next three years from about \$1.7B to over \$3.0B
- Device Shipment will comprise diverse set of technology. Power line is one of the largest



Market Drivers

Market adoption of Power Line Communications is driven by the world’s needs to better manage energy and water resources. The PLC market is now ramping driven by:

- Availability of low cost solutions that enable robust communications in noisy power line environments.
- Requirement to do multiple daily remote meter readings, reliably in noisy/difficult environments
- Direct government investment worldwide in green” initiatives
- Cities and individual demanding ability to measure and control energy and water use.

The Semitech Unfair Advantage: Reliable Communications in Noisy Power App’s

Using an innovative patented architecture, Semitech enables more reliable and flexible power line communications than existing approaches. Semitech’s products use a programmable modulation and signal processing technology that is adjustable in speed but is also “frequency agile” to deliver highly robust and reliable customer solutions. Semitech products are programmable at both the application and communication layers, which means that the same system-on-a-chip can be programmed to operate in different modes, environments and applications.