SM2200 Chip Delivers Reliable Communications for Smart Grid Metering Infrastructure

SINGAPORE -- (Marketwire -- Semitech Semiconductor, a provider of power line communications solutions that enable the transformation of the electricity grid into a smart grid, announce the availability of the SM2200 -- an OFDMA (Orthogonal Frequency Division Multiple Access) based power line transceiver.

This next generation OFDMA power line communication transceiver is designed to operate in particularly noise prone smart grid environments, and is targeting networking applications. The SM2200 delivers the highest reliability power line communications, and is designed with an emphasis on Advance Metering Infrastructure (AMI) and Automated Meter Reading (AMR) applications where low cost and high performance features are required.

Due to harsh noise and variations in equipment and differing standards, communications over the power grid are difficult. The SM2200 uses modulation and signal processing technology that is adjustable in speed but also "frequency agile" to deliver highly robust and reliable communications. The SM2200 adapts to the noise environment to choose the most effective transmission frequency. It also employs a Multi Access scheme to provide additional robustness and enables communication with multiple nodes simultaneously -- thus providing the customer with better results in the form of the highest throughput and most reliable communication available.

Applications for the SM2200 include advanced metering infrastructure and automated meter reading, street lighting control, smart energy home area networking, home automation, building automation, and other deployments requiring communications over an existing power line. The technology behind the SM2200 was tested and successfully deployed in over 1000 nodes in China.

The SM2200 contains a complete packet data modem with a simple physical layer protocol. When combined with a microcontroller (MCU), it provides a cost effective solution for data links and point-to-point, star or ad hoc networks.

Source URL (retrieved on *03/11/2014 - 8:15am*):
http://www.wirelessdesignmag.com/product-releases/2010/08/sm2200-chip-delivers-reliable-communications-smart-grid-metering-infrastructure