GP510: The First Dedicated ZigBee RF4CE Chip For Set-top Box and Gateway

GreenPeak Technologies announces the general availability of its GP510 communication controller chip, supporting all communication between ZigBee RF4CE enabled devices and the set-top box or gateway. The GP510 is GreenPeak's answer to the increasing market demand for making the set-top box the ZigBee RF4CE hub for the home.

Facilitating the transition from traditional IR for the set-top box to ZigBee RF4CE communication technology, the GP510 system-on-chip has been developed as a low cost RF4CE solution designed for the new generation ZigBee set-top boxes. The GP510 combines GreenPeak's unique competitive advantages and is optimized for low cost BOM while providing superior range and reliability.

Superior Wi-Fi interference robustness in combination with patented antenna diversity technology results in approximately twice the reliable range (compared to similar systems with only one antenna) in a crowded wireless 2.4 GHz environment, enabling full home coverage. The integrated RF filtering simplifies the RF design complexity which enables low cost single layer applications using simple PCB antennas requiring no shielding and a minimum number of external components.

The MAC and network layer are integrated for efficient data communication management and the embedded ZigBee RF4CE network layer enables fast and simple integration. The chip is fully compliant with the IEEE 802.15.4 standard, providing robust spread spectrum data communication with a highly secure encrypted data flow.
A complete suite of interfaces to the main processor is available (SPI, TWI or UART-based).

"The market for ZigBee RF4CE is ramping quickly and we see the remote control/set-

top box market now growing into the millions per month. The GP510 is GreenPeak's answer to this increasing demand and delivers an optimized architecture for the new generation set-top box. The set-top box is increasingly becoming the internet gateway into the home, combining the distribution of entertainment content as well as management data from sense and control applications for the smart home." says Cees Links, Founder and CEO of GreenPeak Technologies.

GP510 development kits are available to assist OEMs to evaluate the GP510, to facilitate their integration and to allow a simple implementation of ZigBee RF4CE technology in the set-top box for a quick time to market.

ZigBee and ZigBee RF4CE are trademarks of the ZigBee Alliance. GreenPeak is committed to ZigBee standard offerings as the superior solution for the rapidly evolving "Internet of Things" market. ZigBee is the open communication standard for sensor and control networks driven and adopted by major operators in the market and is complementary to both Wi-Fi (because of its ultra-low power and long battery life) as well as to Bluetooth (because of its better range and networking capabilities).

For more information, please visit www.greenpeak.com [1].

July 5, 2012

Source URL (retrieved on *07/24/2014 - 1:30am*):
http://www.wirelessdesignmag.com/product-releases/2012/07/gp510-first-dedicated-zigbee-rf4ce-chip-set-top-box-and-gateway?qt-digital_editions=0&qt-blogs=0

Links:
[1] http://www.greenpeak.com