# RF remote control is a superior alternative to infrared control

March 4 2009

The ZigBee Alliance and the RF4CE Consortium, founded by Panasonic, Philips Electronics, Samsung Electronics and Sony have reached an agreement to deliver a standardized specification for radio frequency-based (RF) remote controls. RF remotes are faster, more reliable and provide more freedom to operate devices from greater distances removing the line-of-sight barrier of today's infrared (IR) remotes. With this agreement, effective today, the ZigBee Alliance will move into the broad consumer products arena as part of its long-term integration and growth plans.

The Alliance will incorporate version 1.0 of the RF4CE specification into its suite of global sensor and control network solutions. This ZigBee RF4CE specification will first be made available to ZigBee members this quarter. It creates an immediate, low-cost, easy-to-implement solution for control of products and a variety of public application profiles. The ZigBee RF4CE specification is designed for a wide range of products, including home entertainment devices, garage door openers, keyless entry systems and many more. In any application, it transforms the consumer experience, enabling advanced features such as non line-of-sight operation and bi-directional communications.

The first public profile specification enables innovative two-way interaction and control of home entertainment equipment. Products like HDTV, home theater equipment, set-top boxes and other audio equipment will benefit from the advanced functionality offered by ZigBee.

"ZigBee is now on the fast track to enter millions more homes around the world because no other technology will be able to deliver what ZigBee can do in this space," said Bob Heile, chairman of the ZigBee Alliance. "We want the world to be RF and we want the world to use ZigBee. This agreement provides us with an evolutionary path to ZigBee everywhere. The Alliance welcomes the members of RF4CE and expects many great things to come from this powerful combination."

"The RF4CE Consortium and the ZigBee Alliance are both based on IEEE 802.15.4 and aligning the two groups was a logical decision," said Bas Driesen, chairperson of the RF4CE Consortium and technology manager at Royal Philips Electronics. "We are extremely pleased to see the completed ZigBee RF4CE specification roll-out to consumer electronics manufacturers because it allows them to begin developing exciting new features that will simplify and enrich how consumers interact with home entertainment equipment."

The agreement will result in the establishment of a new Special Interest Group under the ZigBee Alliance, and it will be a part of the open standardization at the ZigBee Alliance. Non RF4CE members and non ZigBee members are welcome to join the ZigBee Alliance and participate in the newly formed Special Interest Group.

## ZigBee RF4CE: More flexibility and control

The ZigBee RF4CE specification is based on IEEE 802.15.4. MAC/PHY radio technology in the 2.4GHz unlicensed frequency band and enables worldwide operation, low power consumption and instantaneous response time. It allows omni-directional and reliable two-way wireless communication, frequency agility for enhanced co-existence with other 2.4GHz wireless technologies, simple security set-up and configuration. During the next quarter, the Alliance will develop a test program consistent with existing policies for specifications and

public application profiles. Once complete, products using a public application profile based on the ZigBee RF4CE specification can be submitted to an authorized test house for certification.

Provided by Sony