

IN BRIEF

**Nordic shortlisted for GSA Award**

Nordic is one of three finalists for the prestigious Global Semiconductor Alliance (GSA) 2010 Outstanding EMEA Semiconductor Company Award. The GSA award nomination formally recognizes semiconductor firms with HQs in Europe, the Middle East, and Africa, that demonstrate strength in market leadership and competitiveness, product lines, innovation, and corporate management (including culture, vision, talents, and leadership), and overall likelihood of long-term success. "We are sincerely grateful to receive such prestigious, independent industry recognition," says Nordic's CEO Svann-Tore Larsen. "The award recognizes how in order to become and stay a leader in the fiercely competitive semiconductor industry today you need a unique combination of commercial and technical people, skills, talent, market vision, and product technology."



NEW PRODUCT PREVIEW

**Chip scale package options of Nordic 2.4GHz products unveiled**

Nordic is to expand its existing 2.4GHz RF and ANT product line-ups in Q1 2011 with a new set of ultra miniaturized, wafer level chip scale package (WLCSP) options as small as 2.6 by 2.7mm in size and occupying up to five times smaller footprints than competing devices.

The WLCSP devices will meet the highly space-constrained needs of existing and emerging sports, fitness, and health applications including sports watches, bike computers, sensors, hearing aids, and other devices designed to be worn on or near the body.

Sampling in Q1 2011 and available for volume orders in Q2 2011 will be the nRF24AP2 WLCSP (1- and 8-channel) and nRF24LE1 WLCSP (flash or OTP) options.

The new 1- and 8-channel nRF24AP2 WLCSP options will represent the world's small single chip ANT devices and will be 400µm pitch (regular array) 32-ball BGAs with a thickness of 0.5mm and a footprint of just 7mm<sup>2</sup>. That is over five times smaller than the footprints of competing 6 by 6mm (36mm<sup>2</sup>) packaged products.

The nRF24LE1 WLCSP option (flash or OTP) will also feature a 400µm (regular array) 32-ball pitch BGA with a



The new Nordic nRF24AP2 WLCSP option will occupy 3.6x less footprint area than the standard 5x5mm nRF24AP2 1- and 8-channel (pictured here) versions

footprint of 7.3mm<sup>2</sup> for the flash version and 7mm<sup>2</sup> for the OTP version. Both devices are 0.5mm thick.

"In a lot of existing and emerging health, fitness, and medical applications size is quickly becoming a key differentiating factor," says Thomas Embla Bonnerud, Nordic's Product Manager for Ultra Low Power Wireless.

"This is because the products are often carried on or near the body and so need to be as light and small as possible so they are discrete and comfortable to wear."

TELEHEALTH

**First ANT+ telemedical remote monitoring system could cut health care costs**

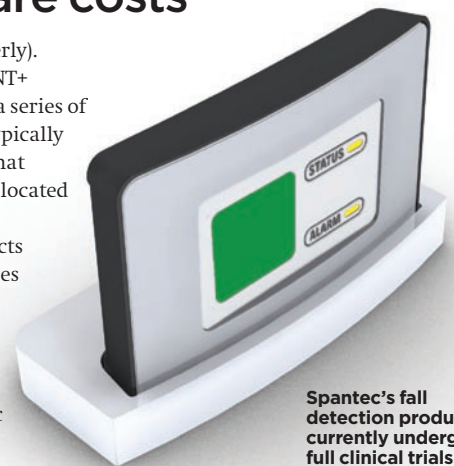
The i-Residence telemedical and telehealth system is the world's first fully comprehensive ANT+ telemedical remote monitoring system.

Based on Nordic nRF24AP2 8-channel 2.4GHz ANT transceivers and developed by Austrian company, Spantec, the i-Residence is said to eliminate the need for costly human-based health care monitoring. The unit is capable of automatic fall detection, remotely monitored disease management, and medically prescribed exercise monitoring using ANT+ compatible wireless health or fitness sensors.

The i-Residence uses an ANT+ ultra low power (ULP) wireless network to detect medical emergencies in nursing homes, hospitals, and private households

(particularly for the elderly). The network employs ANT+ compatible devices and a series of wireless relay bridges (typically one per room or ward) that connect to an ANT+ hub located in a GSM-based modem.

In use, the system detects and classifies emergencies on a rising scale according to various application-dependent measurement options. These include automatic fall detection using a wireless hip worn device developed by Spantec (currently undergoing full clinical trials in one of Austria's largest hospitals); automatic alert to rescue center control desks, relatives or neighbors by phone, Short Message Service (SMS or 'text



Spantec's fall detection product is currently undergoing full clinical trials

message'), or visual interface; and full compatibility with any third party ANT+ medical, health or fitness device (such as monitors for blood pressure, blood glucose, mobile electrocardiogram (ECG), weight or heart rate).



Suunto's sports watch and footpod wireless link is powered by ANT+ technology

PHOTO: COURTESY SUUNTO

**Correction**

In the last issue of *ULP Wireless Quarter* we used a picture of a Suunto sportswatch and footpod to illustrate a use case for Bluetooth low energy wireless technology (see *ULP Wireless Quarter, Autumn 10, page 14*). While this is a target use case for this technology we should not have used this particular picture because the product shown uses ANT+ technology. ANT+ is a proven wireless connectivity technology used in millions of products across the globe. The Editor of *ULP Wireless Quarter* is happy to put the record straight.