

## Press Release

### **SandLinks Implements Disruptive Active RFID and Sensing Technology Based on Revolutionary SoC Design**

*The SandLinks System provides a cross industry solution for supply chain, asset management, real-time location and remote sensing.*

**April 20, 2009, Dallas, TX** - SandLinks today announced the successful end to end implementation of its UWB Active RFID and remote sensing technology. Since last August, the system has been tested and demonstrated at several customer sites in harsh, concrete and metal-rich environments. Providing sub-meter location precision, typical read/writeranges of 40 meters indoors and 100% read/write reliability and accuracy - SandLinks' lowcost, small form factor smart tags performed perfectly while attached to metal barrels, placed in boxes, or hidden deep inside trailers and metal cages.

"We are proud and excited to introduce to the market a very low cost and highly functional active RFID and sensing system," said Abraham Menkes, co-founder and CEO of SandLinks. "Our technology will allow for mass deployment of active RFID, opening up market segments that previously rejected, or didn't even consider, active RFID due to high cost. Together with very low cost and small form factor, our system is able to handle hundreds of thousands of tags in the same location. This makes it particularly suited to mass deployment in many different types of organizations."

Combining highly advanced RF design, an extremely fast patented A/D converter, and a very sophisticated, two dimensional power management mechanism - the SandLinks SoC tag is truly a technological breakthrough. In addition to a transmitter and three receivers, the tag also includes its own CPU, read/write user memory and temperature and battery-life sensors.

### **Advanced Network Design**

"The SandLinks system was designed with the network in mind," said Dr. Gidi Kaplan, SandLinks co-founder and vice president of R&D. "That's why we gave the tags the ability to communicate not only with our readers but with each other as well - effectively increasing system range, while enhancing robustness and reliability. Our communication protocol enables sophisticated, cross-layer tag addressing, which is both efficient and rich."

The SandLinks System employs a "reader talks first" principle - a specific reader will transmit to a tag or a group of tags only according to the commands it receives from the connectivity layer. Tags will never transmit unless requested. The system protocol includes key-based two-way authentication, employing also time-of-day to prevent message replication.

The use of Ultra Wide band (UWB) for reader-to-tag, tag-to-reader and tag-to-tag communication gives the SandLinks System multi-path and jamming immunity. UWB and the use of ultra short pulses also enable sub meter location accuracy. Tag location is calculated based on its distances from three or more readers - true triangulation based on time of arrival (TOA), and not Time Difference of Arrival (TDOA). As such it does not require special synchronization cabling between the readers and makes deployment easier and less expensive.

The SandLinks system will be available for commercial use in early 2010, and tags will be priced at around US \$5 for volume orders.

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### About SandLinks

SandLinks designs and engineers the next generation of active RFID & sensing network technologies, based on an ultra-low-cost system-on-a-chip (SoC). The SandLinks system includes smart, low-power active RFID (Class 4) and sensing tags, readers and software that communicate over high-performance UWB networks. Founded in 2005 and headquartered in Israel, with offices in North America, SandLinks is backed by prominent international investors. For more information, please visit [www.sandlinks.com](http://www.sandlinks.com)

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