

**Sontec Inc., Ltd.**

*RFID Software & Components Developer*

**Main Contacts:** LPR Global, Inc.

[www.uskoreahotlink.com](http://www.uskoreahotlink.com)

416-423-5590

[info@lprglobal.com](mailto:info@lprglobal.com)

**Introduction**

Sontec Inc., Ltd. (the “Company”) is a high-tech Korean company that specializes in the development and manufacturing of RFID components and middleware. The Company has successfully developed an extensive line of RFID components that supports the deployment of RFID-based solutions in industrial and logistic intensive environments. These components include metal tags, antennas, car-sticker tags, access control/ID-cards, handheld readers, and middleware. With the market for RFID expected to reach \$7.26Bn in 2008 where key volume applications in 2005 have been in markets such as access cards, automotive transport, and smaller miscellaneous applications (*Source: IDTechEx Report: RFID Forecasts, Players & Opportunities 2006-2016, January 2006, <http://www.idtechex.com/products/en/articles/00000169.asp>*), the Company is well-poised to capitalize on this positive trend in the prospective years to come.

**Corporate Profile**

Strategically located at JeonNam, Korea, the Company has grown tremendously over the years to where it is today – a competitive player in the RFID components industry. This phenomenal progress began in 1999 with a supply agreement with POSCON, and in 2000, the Company joined POSPIN. In that same year, the Company became a member of KITA (Korea International Trade Association) and subsequently entered into a partnership with POSDATA. In 2004, the Company began actively engaged in the field of RFID firstly by joining the RFID/USN (Ubiquitous Sensor Network of Korea) and then proceeded to file a patent application on metal mounted tags. Two more patent applications followed subsequently for readers and antennas. In 2005, the Company was awarded with the “Excellent Innovation Company Award”. Later the same year, the Company continued to build on its strategic positioning by entering into a number of agreements with UPM Rafsec of Finland, ThingMagic of USA, and Identec Solutions of Canada. Realizing the potential of value creation through strategic partnerships today with Samsung, LG, and Korea Data, the Company is focused on continually building on positive and mutually beneficial relationships particularly in the areas of auto-ID related system integrators, distribution/logistics related firms, and RFID solution providers specializing in factory automation.

**Metal RFID Tags & Antenna**

One of the major factors hindering the widespread adoption of RFID technology today is the inability to read UHF tags on metallic or liquid objects. It was also discovered that radio waves are not only reflected by metals, but are also weakened by eddy currents

within the range of both the reader and tag antennas that severely reduce signal capacitance. In environments surrounded by metal objects and structures, using RFID effectively becomes a problem. The Company's metal RFID tags overcome this problem effortlessly. Each tag is equipped with a transponder unit and a memory chip and when a RFID antenna equipped with a decoder and transceiver emits a signal, the tag gets activated to either store or retrieve the data. These tags work at the 900MHz spectrum and have a reading range of 10 meters when mounted on metal surfaces. The tags also feature multi-protocol support (EPC Class 0/0+, EPC Class 1, ISO18000-6b/Ucode 1.19, Gen 2) making them flexible enough to be deployed in RFID networks of varying frequencies. Other types of tags featured by the Company include car sticker tags that allow for real-time traffic information suitable for implementation in parking lots, and vehicle logistics applications. The Company also features RFID antennas that function at the 900MHz spectrum as well and long range linear and circular in its characteristics. Aside from that, ceramic patch antennas for RFID handheld readers and printers are also carried by the Company.

### **Access Control/ID Card**

The Company's line of access control and ID cards feature a dual frequency access control card that utilizes the 13.56/900MHz frequency spectrum as well as just the 900MHz. The cards feature a coil and memory chip set on a substrate that can be activated at a relative distance due to the extensive range of the UHF signal. These cards are popularly used in secure access control environments, user-identification, and activity tracking applications.

### **RFID Handheld Reader/Writer**

Complete in a sturdy, compact, and portable form-factor, the Company's RFID handheld reader/writer is the epitome of mobile data management. The handheld reader/writer features a read/write frequency range of 902 – 928MHz, a 12VDC 2A power supply, LAN-compatible networking (to allow for compatibility with enterprise systems), and is firmware upgradeable. The handheld Reader fits comfortably in the palm allowing users greater mobility while looking for specific items such as merchandise, inventory, or other assets to scan and tag. It can also be used to manually scan and program individual tags. Instead of reading all tags in an area at one time, users can selectively read and program only particular items allowing for greater operational flexibility and efficiency.

### **RFID Middleware**

No RFID system is complete without middleware. The Company's middleware allows for the management of RFID readers and the transfer of EPC (Electronic Product Code) from readers to MES (Manufacturing Execution Systems)/ERP (Enterprise Resource Planning) and SCM (Supply Chain Management) systems maintaining compliancy with EPCGlobal standards.