RFID News Roundup

Topics/Verticals: RFID Channel

Marubeni Chemix introduces aviation-grade tags made with Tego chips; Murata, Kathrein partner on UHF RFID for use in electronics production; AeroScout closes $16 million investment; Cissoid, Instrumentel intro high-temp, passive RFID telemetry chip; IDTronic unveils EaZy aXXess access-control products; Buenos Aires toll operator selects TransCore's technology.

Nov. 11, 2010—The following are news announcements made during the past week.

Marubeni Chemix Introduces Aviation-grade Tags Made With Tego Chips

Tego has announced the worldwide availability of new aviation-grade RFID tags developed by Marubeni Chemix, using TegoChip technology. The TegoChip, a passive RFID IC compliant with the EPCglobal Gen 2 and ISO 18000-6c standards, offers up to 32 kilobytes of secure, tamper-proof memory. Tego first unveiled its passive RFID technology in early 2009 (see Tego Launches 32-kilobyte EPC RFID Tag). According to the company, the extra memory enables users to permanently encode large amounts of information to the chip, as well as access that data directly from the chip, without the need for battery power and using a standard EPC Gen 2 interrogator. Tokyo-based Marubeni Chemix is a provider of ultrahigh-frequency (UHF) RFID tags for large industries. Marubeni's new TAGAT tags, part of a full product line based on TegoChip technology, are now available with the 4-kilobyte (32-kilobit) TegoChip XL inside, which Marubeni has purchased in wafer-scale quantities to meet global demand. "The Asian market has been demanding tags like this for quite a while, and we see many opportunities for these products," said Yoshihiko Tsujimoto, Marubeni Chemix's RFID tag development leader, in a prepared statement. "The combination of Marubeni's advanced tag technology and Tego's chip technology opens the door to new solutions worldwide that help companies cut costs and improve operational effectiveness." The TAGAT design addresses global interest in high-memory RFID solutions for storing the life history of parts, the two companies report. With the TegoChip, Marubeni's TAGAT tags are designed to improve maintenance and repair operations by streamlining a part's service-history management, inventory tracking and regulatory compliance. The ruggedized TAGAT tags are tested to the SAE AS5678 standards for flyable parts, are compatible with Air Transport Association (ATA) Spec 2000 specification for RFID tagging, and are interoperable with all standard UHF EPC Gen 2 readers. The tags can withstand gamma sterilization/radiation, and can be used in smart cards. An I2C interface supports other devices, including sensor applications. TAGAT tags are fully interoperable with the Tego Launch Kit, an out-of-the-box solution employed by aviation suppliers for tagging parts to the ATA standard. Tego will include the TAGAT tags in its launch kits, and Marubeni will sell and support Tego's full line of products to help customers rapidly deploy high-memory RFID solutions. Earlier this year, Tego announced that MAINtag, a French provider of RFID solutions, would supply Airbus with RFID tags made with Tego chips, as part of a multi-year program to tag parts across Airbus' A350 XWB fleet (see Airbus Signs Contract for High-Memory RFID Tags).

Murata, Kathrein Partner on UHF RFID for Use in Electronics Production

Murata a Japanese manufacturer of electronic components, has teamed up with antenna maker Kathrein to offer a solution designed to simplify the implementation of RFID in electronics production. The solution, the companies indicate, removes obstacles to RFID's adoption in the electronics production

sector, and incorporates Murata's MagicStrap RFID module technology—a system for joining an EPC Gen 2 chip to a tag antenna by means of inductive coupling—and Kathrein's customized ultrahigh-frequency (UHF) antenna technology. "Kathrein have been active in the area of RFID for 25 years and possess comprehensive knowledge and experience in the area of UHF antennas, making them a perfect partner for this project," said Murata's Alexander Schmoldt, the project's leader, in a prepared statement. "Implementation of RFID in electronics production now has an optimum solution, made possible by the co-operation between Murata and Kathrein." With the new electronics production solution, MagicStrap RFID tags can be glued to a printed circuit board (PCB) at the first stage of the process, so that traceability is available from start to finish. Process parameters can be written to and read from the user memory in MagicStrap at any point along the production cycle, and Kathrein's customized antenna ensures that each single PCB is correctly addressed. MagicStrap is also compliant with the lead-free reflow process. According to the two companies, the jointly developed solution is currently on display at Kathrein's RFID demonstration center in Germany, where the use of MagicStrap on PCB and Kathrein readers in a real production-line environment can be shown.

AeroScout Closes $16 Million Investment

Real-time location system (RTLS) provider AeroScout has announced that it has secured $16 million in venture financing to capitalize on the strong demand for its Wi-Fi-based RFID tags and readers and RTLS software, in order to continue accelerating the adoption of its solutions. New investor Evergreen Venture Partners led the round, and all of AeroScout's existing investors—Cisco, Greylock Partners, Intel Capital, Menlo Ventures, Pitango Venture Capital and Star Ventures—participated in the current round of funding. The proceeds will be used for market expansion, AeroScout reports, including sales and marketing growth, as well as to continue broadening and enhancing the firm's solutions portfolio. "This latest investment in AeroScout reflects the high level of confidence the entire investor group has in AeroScout's ability to execute and in the market opportunity," said Doug Carlisle, Menlo Ventures' managing director, in a prepared statement. AeroScout reports that it has more than 600 customers worldwide, and that organizations across targeted industries—including health care, manufacturing, logistics and transportation, among others—currently utilize its RTLS solutions.

Cissoid, Instrumentel Intro High-Temp, Telemetry Passive RFID Chip

Cissoid, a manufacturer of high-temperature semiconductor solutions, and Instrumentel, a supplier of wireless telemetry solutions, have jointly announced a partnership to provide the Merlin integrated circuit—a high-temperature passive RFID chip for sensing tags. The Merlin IC, an inductively coupled telemetry transponder that can support a variety of sensors, incorporates a programmable unique 48-bit identifier and a set of general-purpose I/Os that can be monitored and controlled remotely. Data transmission operates with a data rate of up to 200 kilobits per second. The entire functionality of Merlin is available without any direct power supply, the two companies explain, since it retrieves power from the 13.56 MHz electromagnetic field generated by a remote reader. The chip is designed to operate in temperatures ranging from -55 degrees to +225 degrees Celsius (-67 degrees to +437 degrees Fahrenheit). This, the companies report, makes the solution suitable for scenarios in which sensors must be located in extreme environments, in places where no power supply or battery replacement is available. It is designed for industrial applications, including explosion metrology and nuclear waste

monitoring, as well as for use in aeronautics, space, industrial, medical and automotive applications. Instrumentel will sell a demonstration kit incorporating Merlin tags, a reader and a software interface, and can provide specialist design services and integrated solutions made with the Merlin chip. Cissoid, meanwhile, will sell standalone Merlin chips in high volumes directly to end users.

IDTronic Unveils EaZy aXXess Access-Control Products

IDTronic, an RFID hardware provider based in Germany, has introduced a new RFID-based access-control solution known as EaZy aXXess, which includes three different products. Based on the Linux platform, the EaZy aXXess System delivers all components for creating a real-time access-control systems. Up to 64 EaZy aXXess door readers can be attached and managed by the EaZy aXXess Web server via an RS485 interface. The EaZy aXXess System includes a wide range of readers and devices to fully automate access control for up to 10,000 users. The EaZy aXXess Terminal is a Linux-based interactive, multimedia terminal with a display, an integrated 13.56 MHz RFID interrogator, a sound card and two speakers. Available with TCP/IP or a Wi-Fi interface, the EaZy aXXess Terminal is suitable for access-control and building-automation applications, and can also be used for other applications, including information, communication and personal messaging, IDTronic reports. The EaZy aXXess Lock, a professional electronic cabinet lock with integrated ISO 14443 RFID technology, is intended for facilities with season-pass holders, memberships or employee lockers, the firm adds. With a simple wave of a wrist, IDTronic explains, a guest can access a locker. Depending on the type of initialization of the RFD tag used, the EaZy aXXess Lock allows single or multiple entries to the locker. A user can occupy any free locker that is not reserved; once that locker is occupied, no other users can access it.

Buenos Aires Toll Operator Selects TransCore's Technology

Ausol Autopistas del Sol, an Argentine toll operator that supports a 120-kilometer-long (75-mile-long) network of roads and accommodates more than 900,000 vehicles daily, has selected an RFID-enabled electronic toll system from TransCore to update its existing system, in use since 1996. The system will leverage TransCore's eGo Plus sticker, which contains a 915 MHz windshield-mounted passive RFID tag. Using an RFID tag-on-a-chip application-specific integrated circuit (ASIC), TransCore reports, the eGo Plus sticker tag offers a read range of up to 31.5 feet (9.6 meters) and 2048 bits of read/write memory, and provides the capability to read, write, rewrite or permanently lock individual bytes. The Argentine system will also leverage TransCore's Encompass 6 reader, an integrated high-speed, multiprotocol 915 MHz RFID interrogator that includes an RF transceiver board and a processor in a single assembly. According to TransCore, Encompass 6 is suitable for high-speed, multi-lane installations with a requirement to read or write to two tag protocols, or to provide a migration path from an existing tag protocol. The contract includes 150 Encompass 6 readers, as well as the potential over the next three years of more than 200,000 eGo Plus stickers. Initial system installation and integration are expected to be completed by the first quarter of 2011. TransCore's technology will now be interoperable with all nine of the separately owned toll roads throughout Buenos Aires.