

**Wireless Dynamics debuts RFID reader-writer for iPhones; STMicroelectronics intros new 13.56 MHz RFID IC with 2-kilobit memory; CenTrak announces new AlerTrak Alarm for RTLS; Nestlé Waters North America expands active RFID initiative to manage fleet; Ultimo's Maintenance and Facility Software integrates with AeroScout's RTLS; CipherLab's RFID handheld certified with Star Micronics printers.**

Nov. 26, 2009—The following are news announcements made during the past week.

### **Wireless Dynamics Debuts RFID Reader-Writer for iPhones**

[Wireless Dynamics](#), a Canadian provider of Near-Field Communication (NFC) and RFID Secure Digital (SD) products, has announced the iCarte 110, an RFID reader-writer that plugs into an [Apple](#) iPhone and supports NFC-based contactless payment. Essentially, the iCarte 110 is designed for consumers who want to use their iPhone for secure contactless payments, transit fare, loyalty rewards, checking balances, accessing smart posters or kiosks, and exchanging information with other NFC phones. The iCarte 110 is an MFi (Made for iPod/iPhone) accessory that can attach to the bottom connector of the iPhone, transforming it into an NFC phone as well as an RFID reader-writer (it supports multiple RFID protocols). The iCarte also contains an embedded chip, [Wireless Dynamics](#) reports, that can be configured as a debit, credit, prepaid and loyalty card, turning the iPhone into an electronic wallet. RFID tag information can be read and written by the iCarte, and communicated in real time to enterprise databases through the iPhone's Wi-Fi or 3G connections. According to the company, business users can utilize the iPhone and iCarte for such commercial applications as asset tracking, document tracking, health care, security and access control. The iCarte operates at 13.56 MHz and supports tags complying with the ISO 14443A/B or ISO 15693 standards, as well as tags made with [NXP Semiconductor's](#) Mifare and I-CODE SLI chips or [Texas Instruments'](#) Tag-it HF-I inlay. The iCarte is capable of peer-to-peer communications utilizing the NFC IP-1 and ISO 18092 standards, and the embedded secure access module (SAM) is compliant with the Java Card Open Platform (JCOP) operating system. The iCarte works with iPhone 3G and 3GS, using OS version 3.0 or higher, and has a mini-USB connector that can be used to charge the iPhone and sync with iTunes, according to [Wireless Dynamics](#).

### **STMicroelectronics Intros New 13.56 MHz RFID IC With 2-Kilobit Memory**

Chipmaker [STMicroelectronics](#) has introduced the SRi2K, a new 2-kilobit RFID integrated circuit (IC) designed to enable contactless tickets to manage access to multiple services. For example, the company reports, a single e-ticket leveraging the SRi2K could be used for multiple transport modes, such as a bus, train, tram or taxi. The IC is also suitable for access control, event ticketing, vending machines and theme-park applications. The SRi2K features integrated RFID circuitry operating at 13.56 MHz, and complies with international standards, including ISO 14443-2/3. The IC also allows the implementation of security schemes, based on its unique 64-bit ID, as well as lockable memory blocks. In addition, according to [STMicroelectronics](#), an eight-bit anticollision mechanism based on the chip ID enables large numbers of contactless tickets to coexist without interfering. The chip's memory-access time and 106-kilobit-per-second data rate enable rapid communication between the ticket and reader, in order to speed up each transaction. For optimum reliability, the company indicates, the SRi2K features

dual 32-bit decrementing counters to prevent data loss, known as ticket tearing, in the event of power failure while the ticket is being debited. The SRi2K is certified for 1 million erase-rewrite cycles and 40-year data retention. Mass production began this month, and the ICs are being delivered as bare die for embedding directly in smart tickets, or in unsingulated wafer form, priced at \$0.15 per IC for quantities of 100,000 units or more.

### **CenTrak Announces New AlerTrak Alarm for RTLS**

Real-time location system (RTLS) provider [CenTrak](#) has unveiled its new AlerTrak active RFID alarm for hospitals and health-care facilities. The device is designed to notify hospital personnel via an audible alert if specified individuals or assets leave or enter a restricted area. The IT-150 AlerTrak device triggers alerts when hospital-designated tags come within a predefined zone. It can be placed at egress and ingress points, or at other critical locations. The alarm is remotely programmable and can be set to trigger within 50 feet of approaching tags. Normally, the alerts will continue as long as a tag is within the specified zone. However, CenTrak reports, the duration of the audible sound and electronic alert is configurable, and multiple AlerTrak devices can be connected to the network simultaneously. The alarm works with CenTrak's hybrid RFID-infrared RTLS, which employs the company's DualTrak tags that combine infrared technology to determine a tag's location, and 900 MHz active RFID technology. With the hybrid system, each room's infrared transmitter emits an infrared signal encoded with location data, and that signal is received by all tags within that room. Each tag, in turn, transmits a 900 MHz RF signal encoded with the location, as well as its own unique ID number, to an RFID interrogator (see [Wake Forest Med Center Launches Vaccine-Tracking RTLS](#)). "A challenge for many hospitals is retention—keeping people and assets where they are supposed to be at all times," said Ari Naim, CenTrak's president and CEO, in a prepared statement, adding that "the device can be used to create local audible alerts if a quarantined patient leaves a designated area, and hospital personnel can be notified immediately to correct the situation."

### **Nestlé Waters North America Expands Active RFID Initiative to Manage Fleet**

Bottled-water company [Nestlé Waters North America](#) is expanding its implementation of PowerFleet VMS, an RFID-enabled system from [I.D. Systems](#). PowerFleet VMS leverages active RFID tags known as Vehicle Asset Communicators (VACs) to help a company manage its fleet of industrial trucks. Each VAC has a GPS unit attached to it, in order to track a vehicle's location. That location is then communicated via a 900 MHz signal to I.D. Systems' interrogators and antennas, which can be affixed to buildings (a reader is typically installed indoors, with the 6-inch-wide, external antenna mounted outside, on a facility's exterior). The VACs offer a read range of between a half-mile and a mile, I.D. Systems reports. Nestlé Waters' is purchasing additional equipment to track its fleets of industrial trucks at six plants in the United States. The company initially deployed the system at two sites during the second and third quarters of 2009 (see [Nestlé Waters North America Manages Fleet With Active RFID](#)). The implementation also includes PowerFleet Vision, a software suite that provides visibility and control of industrial vehicles, including real-time vehicle location tracking, a range of management tools and on-demand or automated data reporting.

### **Ultimo's Maintenance and Facility Software Integrates With AeroScout's RTLS**

[Ultimo Software Solutions](#), a European software firm, has announced that it has partnered with [AeroScout](#), a Redwood City, Calif., provider of a Wi-Fi-enabled RFID real-time location system (RTLS). Ultimo has integrated its Maintenance and Facility Management Software—which includes inventory and work order administration—with AeroScout's Wi-Fi RFID solution. According to the companies, the combination enables organizations to streamline operations by providing real-time equipment location updates from AeroScout's tracking technology. Biomedical engineers, for example, will now be able to locate equipment from within the Ultimo application, via real-time location updates provided by AeroScout that appear in the asset-location field within Ultimo. By selecting the corresponding hyperlink, the engineers can automatically log into MobileView and see the asset's current location displayed on a map. What's more, the Ultimo asset-management database provides updated equipment information to AeroScout's MobileView, including the hospital asset number and serial number. Ultimo and AeroScout can now provide hospital employees with one central system for the management, location and maintenance information they require for medical equipment and assets, Ultimo reports, thereby optimizing maintenance and facility-management processes. Ultimo Facility Management Software and Ultimo Maintenance Management Software are already in use at more than 100 hospitals across the Netherlands and Belgium, according to the company.

### **CipherLab's RFID Handheld Certified With Star Micronics Printers**

[CipherLab](#), a provider of automated identification and data capture (AIDC) products and systems headquartered in Taipei, Taiwan, has announced that [Star Micronics America](#) has certified CipherLab's 9471 handheld mobile computer as compatible with its TSP800 point-of-service (POS) thermal printer. Star Micronics America is a subsidiary of Star Micronics Company Ltd., a producer of small printers, audio components, high-precision machine tools, and precision parts headquartered in Japan. The 9471 handheld uses the Windows CE operating system and can encode 13.56 MHz labels that support the ISO 14443A and ISO 15693 standards, as well as [Texas Instrument's](#) (TI) Tag-It specification. The TSP800 from Star Micronics works with the thermal labels with black timing marks printed on the back, and can accommodate labels up to 3.25 inches in width (also called reflective sensor labels). The dual mobile printing solution—which includes CipherLab's 9471 and Star Micronics' TSP800 printer—is available through [Blue Star](#), a distributor of point-of-sale, bar-coding, data-collection, RFID, security and wireless mobility products. By wirelessly pairing a CipherLab mobile computer with a TSP printer, the company indicates, workers can enter data immediately and print information while on the go, without the need to haul laptops or larger devices—thereby saving time and, ultimately, money. For instance, a police officer could issue a citation on the spot, saving the need for a back-and-forth trip to his or her patrol car. And when the officer returns to the vehicle, a paper citation would already be printed and ready to go. According to the companies, the certification means resellers have a pretested, turnkey, integrated mobile computer and printer solution available to them.