

Digital frame uses NFC to receive photos from mobile devices; U.S. customs agency completes RFID implementations at Washington and Arizona border crossings; Infineon adds PJM Light RFID chip to its product portfolio; Army hospital gets RTLS to track assets; Awarepoint raises \$13.3 million in VC funding; Indian RFID vendor intros active UHF RFID tag.

Nov. 27, 2008—The following are news announcements made during the past week.

Digital Frame Uses NFC to Receive Photos from Mobile Devices

[Parrot](#), a Paris-based manufacturer of wireless mobile telephone accessories, has announced a new digital frame that leverages Near Field Communications (NFC) RFID technology so customers can transfer images instantly from NFC-enabled mobile phones to the digital frame without the need for physically connecting the two devices. The front of the Parrot Specchio digital frame (cocreated by French artist Martin Szekely) has [Innovision Research & Technology's](#) Topaz NFC RFID tag built into it, and by sliding the mobile phone against the back of the digital frame, the photos will be transferred. Topaz, an NFC chipset, is built for applications requiring a small amount of memory (1 to 2 kilobytes), such as smart poster or one-touch setup applications. Topaz can also accommodate RFID-enabled payments using the ISO 14443A air-interface protocol. In addition to the NFC tag, the frame also offers other connection options, including Wi-Fi, Bluetooth, a mini-USB port, and an SD card reader. According to Parrot, the frame can display not only digital photos, but also other visual information as well, such as recipes, to-do lists, articles scanned from newspapers and magazines, and children's drawings. When turned off, the frame becomes a mirror, then reverts back to a photo frame when activated. Available now at a suggested retail prices of \$500, the frame can store up to 1,500 pictures.

U.S. Customs Agency Completes RFID Implementations at Washington and Arizona Border Crossings

[U.S. Customs and Border Protection](#) (CBP) has announced that it has completed RFID implementations at Pacific Highway and Peace Arch border crossings with Canada, and at the Mariposa and DeConcini ports of entry in Nogales, Ariz. The RFID readers in the passenger vehicle crossings at the border should help to reduce congestion and long lines by enabling quicker processing at border crossings for travelers using new RFID-enabled travel documents. Such documents include a passport card (a wallet-sized alternative to traditional passports), enhanced driver's licenses being produced by several states (see [Washington Driver's Licenses to Carry EPC Gen 2 Inlays](#)), and CBP's Trusted Travelers Cards (Nexus, Fast and Sentri). These documents are the result of a new requirement, the [Western Hemisphere Travel Initiative](#) (WHTI), a Congressional mandate passed in 2004. The requirement went into effect for air travel in January 2007, with full implementation of WHTI for land and sea travel set to go into effect on June 1, 2009. [Unisys](#), which was awarded the WHTI contract in January 2008, supported the new implementations and will continue working with CBP as WHTI RFID solutions are rolled out at 37 additional high-volume land ports of entry by June of next year. The agency's goal is to deploy the technology for 354 vehicle primary lanes in Northern and Southern border ports that account for 95 percent of all cross-border travel into the United States, the agency reports. Unisys was contracted to design, install and manage the WHTI license plate reader and RFID infrastructure. The vendor's solution includes a series of RFID antennas and cameras, which capture WHTI-compliant

RFID-enabled travel documents, as well as vehicle license plate information. Unisys also designed the technical architecture that integrates data from the various sensors and cameras with external databases—delivering information to CBP officers via a centralized dashboard. Additionally, Unisys is providing help-desk services, and is also managing and maintaining the solution and its various components to ensure system availability.

Infineon Adds PJM Light RFID Chip to Its Product Portfolio

German semiconductor company [Infineon](#) has added another RFID chip to its product portfolio. The company's new PJM Light chip, based on phase-jitter modulation (PJM) technology created by and licensed from [Magellan Technology](#), offers 1 kilobit of memory and features privacy mechanisms designed to prevent unauthorized access to the chip's data. PJM technology operates at 13.56 MHz and complies with the ISO 18000-3 Mode 2 standard. According to Infineon, PJM chips are suitable for the simultaneous contactless electronic identification of up to 1,500 objects per second. The objects may be closely stacked (so-called "zero-separation") or on very fast-moving conveyor belts with speeds of 4 meters (13 feet) per second (15 kilometers—or 9.3 miles—per hour). The PJM Light chip is scheduled to become available as samples in early 2009, with volume production slated to begin in the second quarter of 2009. In addition to the new PJM Light chip, Infineon will continue to provide PJM chips with 10 kilobits of memory. Infineon and Magellan has also announced the expansion of their license agreement and ongoing collaboration in order to further develop the growing PJM global reader infrastructure. In addition to the existing license for PJM chips, Infineon has taken a license from Magellan for its patented PJM reader technology.

Army Hospital Gets RTLS to Track Assets

The [Blanchfield Army Community Hospital](#) at Fort Campbell, Ky., home of the 101st Airborne, is deploying a real-time location system (RTLS) from [Ekahau](#), a provider of Wi-Fi-based RTLS solutions, to track medical assets. [GTSI](#), an IT enterprise infrastructure solutions and services provider to government, is serving as the project's systems integrator. The Ekahau RTLS will be employed to wirelessly track and manage medical assets at the 241-bed facility, enabling staff members to continually monitor the locations of mobile medical equipment, such as IV pumps, hospital beds, wheelchairs and other clinical assets. Ekahau's RTLS solution will work with the hospital's current wireless infrastructure. Initially, GTSI plans to install 200 Ekahau Wi-Fi tags to track critical patient-care equipment throughout the entire campus.

Awarepoint Raises \$13.3 million in VC Funding

Real-time location system (RTLS) provider [Awarepoint](#) has announced that it has raised \$13.3 million in a Series D round of venture capital financing led by [Cardinal Partners](#) and joined by [Venrock](#) and existing investor [Avalon Ventures](#). The funds will be used to help Awarepoint expand and take advantage of demand for RTLS in both domestic and international markets, according to Awarepoint. The company's solution employs 2.48 GHz active RFID tags that employ the 802.15.4 (ZigBee) communications protocol to transmit their unique IDs to small receivers (which Awarepoint refers to as sensors) that plug directly into standard 120-volt AC wall outlets. These tags and sensors also function as transceivers, employing the ZigBee protocol to forward a tag's ID number and signal strength to a

bridge, along with its own ID number and the time it reads the tag and the ID of the transceiver that may have previously picked up the tag's signal. The bridges link, via an Ethernet cable, to a central Awarepoint server that calculates the locations of all tagged assets. Awarepoint utilizes a proprietary algorithm to determine asset locations, based on the tags' RF signal strength. As a result of this financing round, Brandon Hull, a managing partner at Cardinal Partners, and Brian Ascher, a general partner at Venrock, will join Awarepoint's board of directors.

Indian RFID Vendor Intros Small Active UHF RFID Tag

[Orizin Technologies](#), headquartered in Bangalore, India, has introduced a new active ultra-high frequency (UHF) RFID tag designed for tracking assets over long ranges. The new tag has a read-range of 20 meters (65.6 feet) and measures 26 millimeters by 23 millimeters by 7.3 millimeters (1 inch by 0.9 inch by 0.28 inch). The manufacturer of RFID hardware and software says the new tag is priced at \$8 apiece for orders of more than 5,000 in quantity. According to the company, the small size, longer range and lower price of the new tag is the result of 18 months of research and development, and is being deployed at a telecom company in India (which Orizin declines to identify) for managing internal assets. Orizin also offers passive UHF RFID tags that comply with the EPC Gen 2 standard. Last year, Sakhi Enterprises, a women's clothing boutique in Bangalore, began utilizing the passive tags on all of its garments to improve security and inventory processes (see [Indian Retailer Uses RFID on Garments](#)).