

# Keeping track of products drives hand-held innovation

CSL helps companies monitor the movement of goods more accurately with its pioneering and convenient designs, writes **Ana Wang**

**R**ecognised for its excellence in technology, contribution to society, and the company's impact in the industry, Convergence Systems Limited (CSL), a member company of Chung Nam Corporation, was awarded the Technological Achievement Award for two of its products – the radio frequency identification device (RFID) hand-held reader and its real-time locating system (RTLS).

"I was shocked and humbled," says Jerry Garrett, managing director, Convergence Systems Limited. "We are actually very small in terms of the size of our product development team. I would say we have less than 20 engineers who are based in Hong Kong or Shenzhen."

He says the award and recognition will help motivate technical staff working at CSL in recruitment, benefits the company when working with suppliers and when the company participates in large projects with the government or large corporations.

The company's introduction of a breakthrough CS101 RFID hand-held reader that is able to perform as well as a fixed reader and twice as well as similar hand-held readers available in the market has brought multiple awards for the company since its launch last year.

On the other hand, CSL's RTLS product is designed to take a different approach to its competitors. "We used what is called time-of-arrival, so it's a lot more like indoor GPS," says Garrett. "The advantages are that we can handle complicated indoor environments with much better accuracy, finding a person or object within plus or minus one metre, with virtually no need for calibration and minimal installation time."

The company has designed and



A wristwatch-style radio frequency identification device from CSL

developed the whole wireless protocol stack for its products to go with the time-of-arrival and thus produces innovative products with minimal latency and greater adaptability to various business processes, thus improving the end customer's experience.

"Beyond technological achievement, we were able to provide the customer with a lot of value," says Garrett. "Both products have many features and are competitively priced, so the end customer can quickly appreciate the value."

Established in 2000, CSL is one of the leading engineering companies in the world that manufactures passive RFID products, including fixed, integrated and hand-held readers, antennas, tags, cables, development kits, accessories and product model numbers matrix, and active RTLS RFID products that include readers, tags and development kits.

Active RTLS RFID products require battery power, whereas passive RFID tags use reflected energy when it is placed in proximity to a transmitting reader.

"By designing passive and active products, it makes us pretty unusual in the industry," said Garrett.

The company was established to deliver a broad portfolio of RFID products to distributors and system integrators in logistics management, supply chain, manufacturing, pharmaceutical, access control, asset and security management, transportation, and retail industries to corporations and individuals around the world.

As a company established in Hong Kong that employs local engineers, CSL is able to gain easier access when it comes to the vast mainland market. "I think because we are located here and so many applications of RFID will actually be in China and Hong Kong, we are very well positioned. Because we are



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JERRY GARRETT  
MANAGING DIRECTOR  
CONVERGENCE SYSTEMS

vertically integrated, we have our own factory while many people in our industry sub-contract."

"The fact that we are completely home-grown [helps us] take on not only this type of software, but also the RF [radio frequency], the physics, the electrical engineering and the mechanical engineering," says Garrett. "It's quite an achievement."

CSL has devoted a great amount of effort to advancing its products into a new era of technological achievement. The next stage of development is the implementation of facial recognition software combined with RFID.

"We are combining our high-performance RFID products with facial recognition software for security and personnel management. We are doing testing in one of the Chung Nam Group factories right now, so I would say in the later part of 2010, we should be shipping our first revenue products of facial recognition."

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