

NEC to Sell Gen 2 Readers in Japan

The Japanese electronics firm plans to market the interrogators, based on Impinj's Speedway design, for use in Japan.

By Mary Catherine O'Connor

Apr. 26, 2006—Japanese electronics firm NEC Tokin says it plans to sell EPC Gen 2 RFID interrogators based on Impinj's Speedway platform. Impinj, a Seattle-based semiconductor manufacturer, has already adapted its RFID reader design for the Japanese market. NEC Tokin is a subsidiary of electronics giant NEC Corp. and a manufacturer of integrated circuits and RFID devices.

Impinj says the agreement will be deployed in two phases. In the first phase, now in effect, NEC Tokin will buy Speedway Gen 2 interrogators from Impinj, modified to operate under Japan's radio frequency regulations. The firm will then resell them to its customers, along with its RFID Manager middleware. The two companies have not disclosed how long the terms of the agreement are set to last.

Japanese radio frequency regulations require that interrogators read tags transmitting between 952 and 955 MHz at low power (10 milliwatts or less) and between 952 and 954 MHz at high power (1 watt). In the United States, the Speedway reader operates according to FCC regulations, which stipulate that readers operate at 902 to 928 MHz, at no more 1 watt per channel. The Speedway design allows for the use of frequency oscillators and filters specific to the regulatory region in which the interrogator will be utilized.

Impinj is evaluating a number of contract manufacturers to make the readers. Until now, however, it has only indicated publicly that it is working with Hong Kong-based contact manufacturer Convergence Systems Limited (CSL), located in Hong Kong.

The second phase will begin once NEC Tokin experiences adequate demand for the readers. During this phase, the firm will license the Speedway interrogator design and manufacture readers based on that platform. It will then sell them, along with its middleware, as part of its systems integration business offerings in Japan.

At least one other RFID hardware provider reportedly offers Gen 2 interrogators that conform to Japanese RFID regulations. Symbol Technologies says it has already adapted its Gen 2 readers and deployed them in Japanese customer trials, though the company has declined to provide any details about those deployments.

The first deployment of the new Impinj Speedway RFID interrogator has begun at the manufacturing facility of NEC's Personal Products Co. subsidiary, based in Yonezawa. The factory, which makes personal computers, will use the interrogators for such supply chain applications as products traceability and inventory management, NEC reports.

Impinj's Speedway reader received the EPCglobal Gen 2 standard certification last fall. Impinj says the interrogator has been installed in large North American retail and distribution environments for companies just beginning to use RFID, but Impinj has not yet named any of these customers. The company says the interrogator it developed for the Japanese market will not be subject to its own test to qualify for certification.

"We are making no changes to the reader that would Impact Speedway's ability to pass an EPCglobal certification test," says Dimitri Desmons, Impinj's vice president of marketing for RFID products.

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