

# SAMSys to Unveil RFID Reader Platform

After 18 months of intense R&D, the company says it has developed a flexible new interrogator architecture that will enable it to bring products to market more quickly.

By Mark Roberti

Mar. 21, 2006—[SAMSys Technologies](#), a Durham, N.C., maker of radio frequency identification interrogators (readers), says it will soon unveil a new architecture for its interrogators. This architecture will enable the company to create products for original equipment manufacturers and itself, and to expedite bringing them to market.

"We've taken a platform approach to our products," says Tom Dziersk (pronounced Dursk), who assumed the roles of president and CEO at SAMSys in December. "The perfect analogy is when the car industry came out with a common chassis and a common engine and common wheelbase; all they had to do was change the body and the interior. The cost to develop new models was reduced dramatically. More important, the quality improved because they didn't have to reengineer everything from the ground up."

SAMSys plans to unveil the first interrogator product based on this platform architecture at [RFID Journal LIVE!](#) in early May. The new platform approach represents a radical shift in SAMSys' approach to the market. Previously, the company sold mainly high-end readers under its own brand.

Dziersk says SAMSys' future lies primarily in selling fixed interrogators and reader modules to OEMs, with only about 20 percent of its product sold under its own brand. Making modules for OEMs, however, has required the company to change its approach.

"Today, companies are selling one-size-fits-all modules," Dziersk says. "If I sell my module to several companies that make RFID label printers, they have a problem. They have to compete against each other, but they can't differentiate on the reader [because the modules inside are identical]."

The same would be true if SAMSys licensed its fixed interrogator to an OEM that wanted to market it under its own brand. The OEM would be competing with SAMSys in such a scenario, and would have a limited ability to differentiate its product because it would be the same interrogator.

In late 2004, SAMSys hired Michael Koch as vice president of engineering. Koch used the platform approach to revamp the firm's interrogator line completely. He started with six engineers and now has a team of more than 20. The team took every major element of the interrogator—the main circuit board, the input/output (I/O) ports, the firmware and so on—and turned each into a separate component that could be swapped out for another component to create a new reader.

"We've componentized the frequency so that if you need to change from UHF to HF, you can swap out the components without changing the device management, IO processing or anything else," says Dziersk. "Or I can sell a fixed reader to an OEM, and the OEM can use its own device-management capability with our I/O and RF processing, and we wouldn't have to reengineer that. I could provide a turnkey reader to an OEM, and

because the reader is based on the Intel XScale architecture, they could put their own Java applications on that reader, so it feels like it has different functionality, even though it's the same architecture."

Dziersk believes SAMSys is the first RFID interrogator company to adopt the platform approach, and that this will be a big competitive advantage. "The strength of the platform is that it lowers costs and improves quality," he says. "It takes time to create [the platform] because you have to do a lot of the engineering on the front end, but you can create derivative products quickly. And every time you create a new product, you lower your overall cost basis."

Dziersk used the same concept to turn around ClearOrbit, a company that provides supply chain execution and collaborative supply management software. He became ClearOrbit's CEO in 2000, when the firm was struggling, and left in late 2005 after successfully transforming and growing the company's profits.

"When I took over, the company had some great products, but it had no consistency," he says. "We reengineered the software products to use a common software architecture based on standards. That let us create derivative products at a rapid pace and low cost. When I met Cliff Horwitz [SAMSys' chairman], he was taking the same type of approach for the next-generation reader. What we're announcing in May, at RFID Journal LIVE!, is the platform technology and the first reader in the family."

Dziersk also wants to change SAMSys' image in the marketplace. He says the company has been known for engineering products that work, but on the negative side, those products have been perceived as fairly expensive. The goal now is not to be the lowest-cost provider, but rather to provide "high-end functionality at an aggressive price performance."

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