

RSI ID Making Millions of Gen 2 Labels

The company says it is keeping smart label costs down through in-house inlay production and converting.

By Mary Catherine O'Connor

Aug. 30, 2005—RSI ID Technologies, an RFID systems integrator and inlay manufacturer located in Chula Vista, Calif., says it is currently producing EPC Gen 2 labels at a rate of 2 million per month and will begin shipping these to customers immediately. According to RSI's CEO, Wolf Bielas, the firm sells its smart labels for approximately 30 cents each when purchased in volume.

With current Gen 1 smart labels priced between 50 cents and \$1 each (depending on volume), and with Gen 2 chips costing more than their Gen 1 counterparts, RSI's pricing claims are significant. According to Bielas, RSI is able to keep its Gen 2 smart label price low because the company manufactures its own RFID inlays, using Gen 2 chips manufactured by Impinj. When RSI moves to a new, patent-pending inlay design early next year, the price for its Gen 2 labels will fall to around 20 cents each when purchased in volume, he says.

At present, RSI is manufacturing its inlays using an antenna it prints with silver-based ink. The firm attaches a Gen 2 chip to the antenna, forming a Gen 2 inlay, which it converts into a label. Starting next year, however, RSI will switch to an antenna that is etched, rather than printed. While most etched antennas are made of copper, RSI will use aluminum since etched aluminum antennas cost less and are easier to recycle than those made with silver ink or solid copper.

Bielas says RSI has a patent-pending process for assembling tags using an etched aluminum antenna and a fast-curing adhesive (to attach the chip to the antenna). This method will enable the company to manufacture more inlays, more quickly, than is possible with its current printed-antenna process.

RSI tests each inlay before embedding it into a label, Bielas says, then tests it again once the label is converted, to ensure each smart label shipped to an end user functions properly. RSI also provides a help desk and other support services to its customers he says, and promises 100 percent functional smart labels. "If you order 500 smart labels," says Bielas, "we send you 500 functioning smart label."

Starting next month, RSI plans to add to its smart label manufacturing capacity. The company estimates this additional capacity will bring production to almost 9 million Gen 2 smart labels per month. RSI expects to ramp up production to approximately 300 million labels per year by 2007.

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