



Ramtron International: Tough little memory chips with a big future

Richard Brandt | May 14, 2008 6:20am EDT | User Rating N/A

Nobody is quite sure who first expressed the thought (attribution has been given to Robert Heinlein, Mark Twain, Winston Churchill and Paul Saffo at the Institute for the Future, among others), but someone once noted that we tend to overestimate the short-term impact of a new technology and underestimate its long-term impact.

There are few examples that epitomize that adage more than **Ramtron International Corp.** (Nasdaq: [RMTR](#)) in Colorado Springs, Colo. The company was founded in 1984 as a research and development company to develop a new memory chip to exploit a phenomenon known as ferroelectricity. That phenomenon, discovered in 1921, is one in which certain materials can be made to exhibit electric polarization — plus or minus — and maintain that state indefinitely. It's similar to ferromagnetism, in which materials such as iron can become magnetized and remain that way.

The promise of FRAM (ferroelectric random access memory) chips looked exciting. By applying an outside electrical field, the polarity of the ferroelectric material can be reversed. That theoretically made it possible to create a ferroelectric chip that could be programmed with the binary language of today's electronics but with no danger of being erased by magnetic interference.

Ramtron succeeded by late 1992, and between 1993 and 1997 it built and operated a manufacturing plant to make ferroelectric memory chips. The chips are very fast, with extraordinarily high endurance — they can be written and re-written over a trillion times.

Based on that promise, the company went public in early 1993 at \$7 per share; the stock doubled by August 1995. But, as with many new inventions, the marketplace was slow to adopt it. Four years later it was a penny stock, and instituted a 1:5 reverse-split in October 1999.

It's proving to be a long road back. In the last six years, the stock has mostly hovered between \$2 and \$4. But Ramtron, which gave up trying to manufacture the chips itself in 1998 in favor of hiring outside manufacturers to do the expensive work, has been steadily building up the business. It designs and sells memory chips and products for automotive electronics, copiers and printers, metering devices, and scientific and medical devices that require fast and enduring memory. It even makes event data recorders to record information about what happens to a car in a crash. Data is continually rewritten every few seconds until a crash, preserving the data even if the recording device itself is destroyed. Ramtron is the only supplier.

"What I love about Ramtron is that they built up this beautiful market and they own it," says Joel Achramowicz at MBD Capital Group. "It's a wonderfully run company. Very rarely do we see companies like this."

In the first quarter ended March 31, 2008, Ramtron's revenues rose 29% to \$14.3 million, with pro-forma net income tripling to \$1.1 million. Growth in most of its markets was impressive: revenues in industrial applications soared 104% to \$2.7 million, automotive rose 43% to \$2.9 million (driven by strong demand from Hyundai, which is using the chips in automotive "infotainment" systems), while computing ticked up 33% to \$4.9 million (led by demand from third-party printer cartridge makers, which use the chips to help fool the printers into thinking it's a brand-name cartridge.)

Revenues beat the expectations of John Vinh at Collins Stewart by a half-million dollars, while pro-forma EPS of \$0.04 beat his estimates by a penny. "These guys are doing a great job of executing," says Vinh.

There was one disappointment. Revenues in metering applications declined 3% to \$3.9 million, and have declined sequentially in each of the last three quarters. The reason is not clear, since Ramtron is "probably two steps removed from its end customers," says Vinh, but he thinks it may just be a timing issue as new end products prove slow to ramp up, and adds that the company is well-positioned in the space.

The disagreement is over what the stock is worth. At \$4.28, it's trading at 23 times Vinh's 2008 pro-forma earnings estimate of \$0.19, compared with 10- to 15-times forward earnings for most chipmakers. For that reason, Vinh has a "hold" rating on the stock, feeling it's fairly valued. Achramowicz, however, thinks the long-term potential is enormous, and has set a \$10 target price, based on a multiple of 22 times 2009 earnings. "This stock could very easily double," says Achramowicz. "It's only a matter of time."

Its 52-week high was \$5.09 and the low was \$2.46. Its market cap is \$114 million.

Ramtron has also announced that it expects to increase annual top line growth to 30% to 35%, or 10 percentage points higher than its current range. And if the second half of the adage about the impact of new technology is true, the long-term prospects of Ramtron's FRAMs may offer a significant upside surprise.