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# Boston Laser moves to upstate NY

By Tim Whitaker

Earlier this year, Boston Laser, a manufacturer of high-power laser diodes and subsystems, acquired the assets of the bankrupt laser maker Semiconductor Laser International (SLI). Since the deal closed at the end of March, Boston Laser has vacated its plant in the Boston area and has relocated to the SLI facility in Binghamton, NY.

After accumulating at least \$20 million in losses as a public company (see box), SLI was under Chapter 11 bankruptcy protection for about two years. After inviting other bids, the bankruptcy court approved the sale of SLI's assets to Boston Laser for a fee of \$1.5 million. Financial backing was provided by a group of European investors.

Boston Laser acquired all of SLI's assets, including its building, equipment, technology and product lines. Perhaps more importantly, says Boston Laser's CEO Aharon Meytahl, the company hired many of the people that had previously worked for SLI. "We now have about 30 people; about 20 are former SLI employees and the others are senior people that moved from Boston," he said.

Boston Laser was founded by Meytahl in early 2000, and acquired Polaroid's laser diode business. Since then it has been housed in a facility rented from Polaroid in Norwood, MA.

Meytahl says that there were two main reasons for the acquisition of SLI's assets. "Aside from this being a good business deal, we don't have to pay rent in Binghamton, while the rent in Boston was very high." The second reason, he says, is the availability of a large pool of talent in the Binghamton locality, including former SLI employees and staff of a large IBM facility that is now closed.

The processing and packaging lines in Binghamton, which have already been re-qualified, primarily use equipment transferred from Boston Laser's former facility. "Boston Laser is an industrial company, whereas SLI was more like a laboratory," said Meytahl.

The one significant addition to Boston Laser's capabilities is an MBE machine. The company uses external epitaxial vendors, primarily IQE, for its production requirements, and Meytahl says that outsourcing will continue as it offers significant economic advantages. However, the in-house MBE capability will allow the company to design and grow test wafers with a very short turnaround time, which will assist development efforts.



The Litening II pod, shown mounted beneath an F-15 fighter, contains infrared and CCD detectors to identify targets and a laser designator for precise delivery of munitions.

As part of the acquisition, Boston Laser took over an exclusive license to certain patents relating to Al-free lasers owned by Northwestern University. "We believe in time this will become an important technology," said Meytahl. "However, any Al-free product will have to match standards for reliability and lifetime of lasers that contain aluminum."

### Products and markets

Boston Laser makes high-power lasers in the wavelength range of 635–1550 nm, with key products at 660, 808, 915, 980 and 1100 nm. The company specializes in high-power, high-brightness multimode lasers and offers single emitters at 808, 915 and 980 nm rated at 8 W. As well as pigtailed modules, Boston Laser also manufactures Milon modules, which combine the output of six multimode lasers into fiber with a coupling efficiency of 75%.

Polaroid originally set up a laser diode manufacturing capability to supply components for a printing product. Today, printing is one of Boston Laser's principal markets; the company supplies lasers to Heidelberg, the world's largest printing press manufacturer, and various Japanese companies.

The military market is also important for Boston Laser. The company recently announced that its lasers made in Binghamton had been re-qualified by Northrop Grumman and Rafael for use in the Litening II laser des-

ignator pod (see photo).

Following the SLI acquisition, Meytahl says that Boston Laser hopes to achieve sales of about \$10 million in the next 12 months. He believes that SLI was unsuccessful for the same reason that a number of small companies in the industry struggled. "It's a very long road from making 100 pieces to full industrial production," he said. "SLI probably didn't spend its money very intelligently and also lacked industrial experience, which Boston Laser certainly has."

### The inglorious history of SLI

SLI was founded in 1993 to manufacture high-power diode lasers. In 1996, the company went public and also received a license to make and sell lasers based on Northwestern University's patents relating to Al-free material. SLI's share price peaked at over \$10 in mid-1996, but fell steadily to below \$1 in mid-1998. The company was delisted from the Nasdaq exchange in May 1999 and was investigated for possible violations of securities regulations. SLI applied for bankruptcy protection in 2001. As a public company, it failed to make significant revenues, never had a profitable quarter, and generated cumulative losses of at least \$20 million.