

Pliant Looks To Bring Flash To Data Center

Milpitas, Calif.

By Scott Denne

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Flash memory has been a staple of consumer devices, but the technology has made little headway into the data center. Pliant Technology Inc. hopes to change that with the help of \$15 million in Series C financing.

New investor Menlo Ventures led the round, with participation from existing investors Arcturus Capital, Divergent Ventures and Lightspeed Venture Partners. The company declined to disclose the valuation.

Pliant has spend the last three years developing flash storage drives that are built for corporate data centers. It plans to use the proceeds of the round to bring its disks into production, said Amyl Ahola, the company's chief executive.

CPU performance has been increasing rapidly every year, but hard disk drives have been unable to keep up. This has led to corporations buying many more disks than they need in an attempt to avoid input-output bottlenecks.

Using Pliant's disks, corporations can create a tiered storage system, using Pliant's flash drives, which can retrieve information much faster than hard disks, for the most frequently used files, and cheap hard drives for less-used data. Doing so decreases the number of disks that must be purchased, but also lowers energy costs. Flash memory uses less energy because, unlike hard drives, it has no moving parts, Ahola said.

The company looks to sell its drives to makers of storage and server equipment, such as Hewlett-Packard Co., International Business Machines Corp. and EMC Corp., Ahola said, though he declined to say whether the company has landed any customers past the testing phase.

Flash memory has been used in consumer devices, such as digital cameras, mobile phones and MP3 players, for years, but the technology has gotten little serious attention in data centers until recently.

Flash has faced a couple of hurdles in getting into the data center. For one, it was too expensive, but the cost has continued to come down, especially recently. Also, it was unreliable because it would wear out faster than a hard disk after being rewritten multiple times, but Pliant has overcome that issue by making enhancements to the drive controller, which manages the flow of information to and from the device, said Barry Eggers, a managing director of Lightspeed Venture Partners, which led the company's Series A round.

The company faces potential competition from several established vendors. Intel Corp. sells a 64-gigabit flash drive that it claims can be used in servers and storage devices and has entered a joint development agreement with Hitachi Global Storage Technologies to build another. Other companies that have announced their intentions include Seagate Technology, Sun Microsystems Inc. and EMC, though it is possible that some of those companies could be customers of Pliant, rather than competition.

Other start-ups such as Fusion-io Inc., Gear6 Inc. and Violin Memory Inc. are using flash memory in different ways to cure some of the input-output bottlenecks that occur when using traditional drives.

Several companies have recently developed flash drives for use in laptop and desktop computers, but those weren't built to run in data centers, where they would be used 24 hours a day, Ahola said.

Pliant last raised financing with an undisclosed Series B round in the first half of 2008, Ahola said. Prior to that, it had raised \$8 million in Series A financing.

Mark Siegel, a managing director at Menlo Ventures, has taken a seat on the company's board.