

STEC answers the billion dollar question

Market capitalization hits ten figures

By Chris Mellor • The Register

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Comment Solid state drive supplier STEC has joined the big boys, having attained a billion dollar market capitalization.

In the first quarter of the year its net revenue was \$63.5m, 25 per cent higher than the year-ago quarter. Net profit was up a strong 61 per cent at \$2.9m, driven by higher product shipments. It reckons its second quarter will see revenues of \$68m - \$70m, up from a previous estimate of \$58.2m. STEC is booming in the middle of the worst recession since the Depression.

Its share price, now at \$20.92, was \$4.33 in January and has risen steadily and increasingly steeply since then. It was \$16.73 on June 1st, on the back of STEC's successes in broadening the takeup of its Zeus-IOPS SSDs by enterprise storage array suppliers, and enlarging the number of suppliers adopting its technology. This roster includes the first, EMC, which adopted STEC drives for its high-end Symmetrix enterprise array a year ago, and has since adopted them for its mid-range Clariion arrays. Other enterprise drive array suppliers adopting STEC's SSDs include Fujitsu, HDS, HP, IBM and Sun.

Compellent, the SME drive array supplier, has also voted for STEC, with a UK customer installation expected to be announced soon.

The only other competing drive array supplier with any success is Intel, which has notched up Dell EqualLogic, Panasas and Pillar. Hitachi GST is developing an SSD using Intel technology and HDS has indicated future support of that.

SSDs can output many, many more I/Os per second than hard disk drives and use a lot less electricity than hard disk drives would need in order to produce the same IOPS performance. A recent SPEC storage energy benchmark by IBM showed this. There seems to be no prospect whatever that HDD technology can recapture IOPS leadership. Instead, HDDs face a seemingly inevitable retreat to being used for capacity-centric data storage tiers backing up the high-speed SSD data stores.

STEC's Zeus-IOP SSD is in effect a 3.5-inch Fibre Channel, drop-in hard drive replacement. The company has SATA and SAS interface technology in its locker. Apart from Intel, it faces future competition from Seagate and Western Digital, both of whom are adding SSDs alongside their hard disk drive product ranges. Both will face either becoming second sources to STEC or having to knock it out and displace it.

Additional competition comes from Fusion-io, with its PCIe-connected ioDrive technology, which has notched up impressive demonstrations with both HP and IBM. HP is now shipping IO Accelerator cards for its servers using this technology. There is no sign that Fusion-io wants to compete in the HDD replacement market but it does have a network-connected ioSAN technology under development. With this technology, a server would front-end an ioDrive-based store and serve it up as a shared resource to other servers.

Server and storage SSD leaders

Fusion-io appears to be the potential leader in server SSD use. However STEC is supplying Sun with SSDs for use in Sun's servers, where they store, cache, system software working data. No other server vendor is using STEC SSDs in this way, perhaps because the system software needs specific altering to use such caches.

There is a potential role for SSD technology in storage array controllers but, apart from NetApp with its DRAM-based Performance Acceleration Module (PAM), no storage array vendor is publicly going this route. The exception is Sun which uses its servers to function as controllers in the 7000 series of open storage products.

STEC shows no sign of wanting to have a presence in the net book and notebook SSD markets. It seems content to ride the SSD-replacing-fast-HDD wave in storage arrays, with server SSD use as a sideline. If SSD prices continue declining then we can expect SSDs to start replacing hard drives in the capacity-centric tiers of multi-tiered storage arrays. STEC would be well-placed to capitalize on such a move, with Intel also having potential there.

Basically it seems as if STEC would have to foul up or fall behind in SSD controller technology terms before other HDD-replacement SSD suppliers could get a look in. It's got its first mover rights and aims to keep and build on them. That's bad news for all aspiring storage array SSD suppliers, as they now face an entrenched incumbent. Is STEC the Data Domain of storage array SSD use?

It could well be in that happy situation, and deep-pocketed and aspiring SSD suppliers might well be wishing they had mounted a takeover bid last year, when STEC shares were averaging \$8-\$9. According to Seeking Alpha, STEC management says three or four more customer announcements are coming and its Zeus-IOPS run rate could hit \$100m/year by the end of next year, well up on the current level.

If the SSD and HDD trends are rock solid then STEC could still be a hugely attractive takeover target to a financially strong SSD aspirant. ®