Macroeconomic Market Conditions Drive HDD Market

Despite a challenged economic environment and a historically slow period, today's storage market is showing increased levels of activity driven by consolidation and technological advancements. These changes have led to product mix issues; resulting in price increases, and shortages since the first of the year.

Both Western Digital and Seagate have cut costs and capacity to reduce their overhead in response to the global financial crisis. However, actual demand has unexpectedly exceeded anticipated demand and as a result both have raised prices. Consolidation such as Toshiba acquiring Fujitsu's Hard Drive Division and adding enterprise class to their portfolio has created an air of uncertainty. The long dormant 1.8" market dominated by Apple products, has demonstrated tightness in the market, as small form factor laptops have started to integrate the 1.8" form factor HDD into their platforms. Finally, solid state drives are becoming more widely accepted as most laptops are expected to start shipping with this once unaffordable technology.

Desktop Market

The desktop market has finally completed the transition from PATA to SATA. This time last year the desktop market was predominantly PATA driven; today that very same market is near exclusively SATA. Tier 1 hard drive manufacturers have had difficulty responding to recent spikes in demand. The layoff sprees and cutbacks made during Q4 2008 and Q1 2009 have only exasperated the issue. This has caused Western Digital and Seagate to resort to putting much of their portfolio of desktop products on allocation, and have done so with unprecedented price increases.

Dropping pricing for 250 GB and 400 GB and demand for increased storage has pushed these capacities towards the trailing edge; making 500 GB and 1 TB the two dominant drives in the market. The 2 TB is still too early in production to have had an impact on the open market. Further defining the desktop market is the cost of mobile drives having reached parity with the cost of desktop form factors, which is causing materials directors to ask "how much longer should desktop production in the 500 GB and lower production continue?"

The external storage space continues to be a large user of the 3.5" form factor. In an extremely competitive market we are seeing interesting moves like EMC purchasing Iomega to gain access to the retail channel. Today Iomega is shipping a 1 TB solution at $80 with free shipping.

Mobile

With not enough supply to fill demand for 160 GB capacities we have seen the mobile market heat up. The 160 GB seems to be the new entry point as demand diminishes for 120GB capacities. Horizon Technology's Trading Managers have received plenty of feedback confirming delivery issues on 160 GB and small price increases. Demand for increased storage has made the 500 GB capacity the most widely used 2.5" drive. Similar to the PATA/SATA conversion that the desktop market went through, the mobile drive market has flip flopped and the PATA drive has now become hard to come by, thus driving up the market price for PATA interfaced drives.

1.8" Market

Demand for slimmer & lighter laptop drives has significantly driven up demand for small form factor storage once held captive by Apple's IPOD. As is the case with mobile drives, SATA product has started to become the dominant drive. We are seeing a substantial shortage on 1.8" PATA drives for both 80GB and 120GB capacities. Horizon Technology sees this segment expanding significantly during the coming year. It provides a cheaper solution than solid state and it offers the smallest form factor with the highest capacity.

Enterprise

The enterprise market for SAS and the fifteen thousand RPM HDD product lines has been well supported. It's the EOL and trailing edge technologies such as SCSI and Fiber Channel that have been very active in the open market. The EOL announcement from Seagate on their 10K and 15K SCSI/Fiber Channel drives has caught many OEM's off guard. Additionally, the consolidation of Fujitsu and Toshiba has many OEM's speculating on the future of Fuji Enterprise and its impact on their supply chain. One has to ask if the market can afford to rely solely on Hitachi as their enterprise 10K SCSI product source. And how long will they continue to own this market? You will see a lot of system tear downs filling up OEM demands for EOL technology.

Consider this…

The 21st century market trend lends itself to small form factor, larger capacity, and faster technology. The solid state market shall become the standard as the cost of this new technology becomes more manageable. The hard questions being asked during the second half of 2009 will revolve around the lifecycle of the desktop computer market? We may be witnessing the decline stage of a market that reached maturity nearly 20 years ago. And what role will Seagate play in this evolving market? Hopefully Seagate's dismantling of their top executives will bring leadership back to a company that was once the industry leader.