

## SSD Story: Slow on the Uptake

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## Report Summary

With decreasing flash memory prices and the shift to mobile computing, SSDs are finally moving from the data center to the PC as many had predicted over a decade ago. This transition, however, will not happen overnight owing to a number of issues, including drive density limitations, cost per megabyte compared to HDDs, and performance. This report examines the rise of the SSD market, the challenges that remain ahead and which segments of the market will experience growth. Among the key findings are the following:

- The greatest growth in PCs will come from the high-performance and low-density/price sensitive segments of the market.
- The most cost effective SSD solutions for PCs are currently around 16GB and below, but that will approach 256GB by 2013.
- SSDs in enterprise servers will experience the highest CAGR of 155% through 2013.
- The worldwide SSD market will approach 43 million units by 2013.

### HIGHLIGHTS

- SSDs can save money in low-end mini-notes and enterprise servers.
- The higher price of an SSD, compared to the same density HDD, will limit its acceptance in mainstream notebook and desktop markets.
- At most price points HDDs will continue to offer significantly more storage than will SSDs.

## What's in the Report?

- Forecasts are provided on a global basis by:
  - Units, revenues, and ASPs for servers, desktop PCs, notebook PCs, and mini-note PCs
  - Pricing trends for SSDs and HDDs
  - Pricing trends for NAND flash relative to other types of memory solutions
- A detailed analysis of the advantages and limitations of SSDs relative to HDDs
- Vendor profiles for the major SSD vendors, including Samsung, SanDisk, Intel, Micron, BitMICRO, STEC, SMART Modular/Adtron, and SiliconSystems
- The report details what segments of the market SSDs will experience the greatest growth and why, as well as the progression of the density competitiveness relative to HDDs over time.

**Whose Needs Does This Report Address?**

- SSD vendors
- NAND chip vendors
- Makers of NAND controllers
- PC and server OEMs

**What Questions Does This Report Answer?**

- Why will SSDs replace some HDDs and not others?
- How big will the SSD market become, when, and why?
- Who are the leading suppliers in this market?
- What factors will limit SSD growth?

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## Methodology

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This report has been assembled from input gathered over the past three years using telephone and face-to-face interviews performed with the leading vendors in the SSD and HDD markets; with proponents of hybrid drives and other flash cache architectures; with PC and other OEMs; and with Microsoft. Financial data were assembled using pricing from brokerages and distributors; financial statements from the Securities and Exchange Commission; and certain data collected from newspaper articles.

Forecasts are based upon standard In-Stat forecasts, along with input from the various sources listed above. Projections have been made with consideration of semiconductor manufacturers' road maps and other technical input.

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