



OBJECTIVE ANALYSIS

Semiconductor Market Research

OBJECTIVE ANALYSIS DETAILED REPORT

INTEL'S BRAIDWOOD: DEATH TO SSDs?

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Abstract:

In 2010 Intel will introduce Braidwood technology, placing NAND on the mother board and threatening SSDs in the PC, assuming that this is not a repeat of the Vista Turbo Memory debacle, that is. Purchasers of this study will understand Braidwood, its potential market, competing technologies, and how the NAND, PC, HDD and DRAM markets will be impacted.

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Executive Summary

What is Braidwood?

Elements of a Standard HDD

- The DRAM Cache

- Limitations of DRAM Caches

- A NAND Alternative

- NAND's Nonvolatile Advantage

NAND in the Memory Hierarchy

- Memory Hierarchy

- Hybrid HDDs

- Intel's Robson or Turbo Memory

- What Went Wrong?

- Windows 7 Enhancements Incremental

The Braidwood Approach

- Why Braidwood Makes Sense when SSDs Don't

- Benefits of a NAND Layer

 - Power Consumption

 - Access Speed

 - Reliability

 - Shock Tolerance

- Where the Truth Lies

The Role of Software Support

- Why a Cache Needs Software Support

- The "Instant-On" Myth

- Issues with Legacy

- Why will Support Take so Long to Materialize?

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 - The Impact of Braidwood on the NAND Market
 - A Forecast for NAND Cache Shipments
 - Net Benefit to the NAND Market
 - How Braidwood Could Harm the DRAM Market