



Flash Memory Backgrounder

Flash Memory Summit Description

The Flash Memory Summit program provides attendees with practical information on the current state of solid state memory and its applications.

Summit themes include: Solid State Drives (SSDs), Flash Memory Based Architectures, Enterprise Storage, Controllers, Enterprise Applications, PCIe/NVMe SSDs, new non-volatile memory technologies, persistent memory, standards, testing, and applications.

The Summit Program consists of a day of pre-conference seminars, followed by three days of panel discussions, keynotes, forums, paper sessions, tutorials, updates, and special sessions.

Flash Memory Defined

Flash Memory is a type of nonvolatile memory that can be erased in blocks and rewritten in subunits of blocks called pages. Flash is rugged, small, low-cost, low-power, and fast; it enables the design of compact systems with simple operation and low power consumption.

It is ideal for consumer applications such as cell phones, digital cameras and camcorders, and music players, and is also useful to store bootstrap code and as high-speed storage in computers, communications systems, and military/defense applications.

It is replacing hard disks for storage in client, enterprise and embedded applications where its higher cost is balanced by its

faster speed, smaller size, greater ruggedness, and lower power consumption.

Market Size

NAND flash is the fastest-growing product in the history of the semiconductor market, reaching annual revenues of more than \$10 billion within 10 years of its introduction (according to industry analyst Jim Handy of Objective Analysis). Current market size estimates (2016) are:

- NAND flash - \$41 billion
- SSDs - \$16 billion
- Emerging non-volatile memory technologies - \$500 million