

A solid-state drive (SSD) (also known as a solid-state disk or electronic disk though it contains no actual "disk" of any kind, nor motors to "drive" the disks) is a data storage device using integrated circuit assemblies as memory to store data persistently. SSD technology uses electronic interfaces compatible with traditional block input/output (I/O) hard disk drives.

SSDs have no moving mechanical components. This distinguishes them from traditional electromechanical magnetic disks such as hard disk drives (HDDs) or floppy disks, which contain spinning disks and movable read/write heads

Compared with electromechanical disks, SSDs are typically more resistant to physical shock, run more quietly, have lower access time, and less latency. However, while the price of SSDs has continued to decline in 2012... SSDs are still about 7 to 8 times more expensive per unit of storage than HDDs.

Many SSDs use I/O interfaces developed for hard disk drives, thus permitting simple replacement in common applications

As of 2010, most SSDs use NAND-based flash memory, which retains data without power. For applications requiring fast access, but not necessarily data persistence after power loss, SSDs may be constructed from random-access memory (RAM). Such devices may employ separate power sources, such as batteries, to maintain data after power loss.

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