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Assignment Computer Organization and Architecture

Make Comparison HDD and SSD

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|  | Definition | Max Capacity | Speed | Size | Advantage | Disadvantage | Price | Picture |
| Harddisk | a non-volatile computer storage device containing magnetic disks or platters rotating at high speeds. | Typically around 500GB and 2TB maximum for notebook size drives; 10TB max for desktops | Slower than SSD | as 5.25-inch, 3.5-inch, 2.5-inch or 1.8-inch. The largest size, 5.25-inch, is not widely used, except for special-purpose appliances, such as backup devices. | More affordable than SSD,  Higher storage capacity than SSD,  HDD is easier to buy in most stores | HDD is slower than SSD,  Higher power consumption,  Produces noise while in operation | Only around $0.03 per gigabyte, very cheap (buying a 4TB model) |  |
| SSD | a storage device containing nonvolatile flash memory, used in place of a hard disk because of its much greater speed. | Typically not larger than 1TB for notebook size drives; 4TB max for desktops | Up to 30% faster than HDD | 2.5-inch and 3.5-inch. These sizes refer to the size of the data platters, not the size of the hard drive mechanism. Traditionally, 2.5-inch drives are used for laptops while 3.5-inch drives are used for desktop computers. | Faster than hard disk drives,  Low power consumption, Durable than hard disk drives,  No noise while in operation | No noise while in operation,  Limited storage capacity,  Poor availability | Expensive, roughly $0.20 per gigabyte (based on buying a 1TB drive) |  |