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| **Attribute** | **SSD (Solid State Drive)** | **HDD (Hard Disk Drive)** |
| **Definition** | SSD (solid-state drive) is a type of [nonvolatile](https://searchstorage.techtarget.com/definition/nonvolatile-memory) storage media that stores persistent data on solid-state flash memory. Two key components make up an SSD: a [flash controller](https://searchstorage.techtarget.com/definition/flash-controller) and [NAND flash memory](https://searchstorage.techtarget.com/definition/NAND-flash-memory) chips. | An HDD uses magnetism to store data on a rotating platter. A read/write head floats above the spinning platter reading and writing data. |
| **Price** | Expensive, roughly $0.20 per gigabyte (based on buying a 1TB drive) | Only around $0.03 per gigabyte, very cheap (buying a 4TB model) |
| **Capacity** | Typically not larger than 1TB for notebook size drives; 4TB max for desktops | Typically around 500GB and 2TB maximum for notebook size drives; 10TB max for desktops |
| **Size** | SSD dimension between 1.8 inch to 3.5 inch | HDD is around 2.5 inch – 3.5 inch |
| **Speed** | Generally above 200 MB/s and up to 550 MB/s for cutting edge drives | The range can be anywhere from 50 – 120MB / s |
| **Advantages** | -SSD run way more faster than HDD  -Better fragmentation  -Better Durability  -Quiet  -Less power requier | -HDD is cheaper than SSD  -More capacity |
| **Disadvantages** | -Expensive  -Less capacity | -Slower than SSD  -spinning drive made a lot of noises  -More power requirement |
| **Picture** |  |  |

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Comparison table between SSD & HDD