



Comparison table between SSD & HDD

| Attribute            | SSD (Solid State Drive)   | HDD (Hard Disk Drive)   |
|----------------------|---|---|
| <b>Definition</b>    | SSD (solid-state drive) is a type of <u>nonvolatile</u> storage media that stores persistent data on solid-state flash memory. Two key components make up an SSD: a <u>flash controller</u> and <u>NAND flash memory</u> 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.      |
| <b>Price</b>         | Expensive, roughly \$0.20 per gigabyte (based on buying a 1TB drive)  | Only around \$0.03 per gigabyte, very cheap (buying a 4TB model)  |
| <b>Capacity</b>      | 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  |
| <b>Size</b>          | SSD dimension between 1.8 inch to 3.5 inch  | HDD is around 2.5 inch – 3.5 inch   |
| <b>Speed</b>         | Generally above 200 MB/s and up to 550 MB/s for cutting edge drives   | The range can be anywhere from 50 – 120MB / s   |
| <b>Advantages</b>    | <ul style="list-style-type: none"><li>-SSD run way more faster than HDD</li><li>-Better fragmentation</li><li>-Better Durability</li><li>-Quiet</li><li>-Less power requier</li></ul>   | <ul style="list-style-type: none"><li>-HDD is cheaper than SSD</li><li>-More capacity</li></ul>   |
| <b>Disadvantages</b> | <ul style="list-style-type: none"><li>-Expensive</li><li>-Less capacity</li></ul>   | <ul style="list-style-type: none"><li>-Slower than SSD</li><li>-spinning drive made a lot of noises</li><li>-More power requirement</li></ul> |
| <b>Picture</b>       |    |   |