

## Life Cycle Assessment: Sandisk PC SN5000S Solid State Drive (SSD)

### Product Description:

|                         |                                  |
|-------------------------|----------------------------------|
| <b>Model</b>            | SDFPTSM-1T00-1012                |
| <b>Product Type</b>     | Client SSD                       |
| <b>Product Weight</b>   | 3.32gm                           |
| <b>Packaging Weight</b> | 6.63gm                           |
| <b>Storage Capacity</b> | 1 Terabyte                       |
| <b>Technology</b>       | BiCS6                            |
| <b>Form Factor</b>      | M.2                              |
| <b>Application</b>      | Support everyday computing needs |



### LCA Calculation Basis:

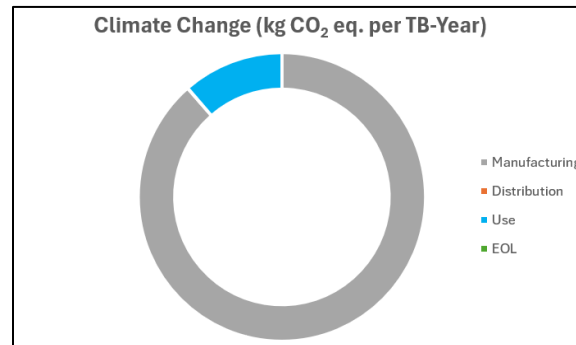
|                                 |                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standard</b>                 | ISO 14040:2006 and 14044:2006                                                                                                                                                                                                                                                                                                                                                              |
| <b>LCA Software</b>             | Sluicebox (v2026)                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Impact Assessment Method</b> | Life cycle impact assessment classification and characterization factors according to Environmental Footprint method version 3.1 (EF 3.1) was used as the LCIA method. The characterization factors applied correspond to a 100-year time horizon for climate change impacts.                                                                                                              |
| <b>Database</b>                 | ecoinvent v3.10                                                                                                                                                                                                                                                                                                                                                                            |
| <b>System Boundary</b>          | <p>The system boundaries include:</p> <ul style="list-style-type: none"> <li>• Manufacturing (extraction of raw materials, upstream material preparation, electronic component manufacturing, subassembly manufacturing and final assembly of product)</li> <li>• Distribution to customer located in USA</li> <li>• Four years of product use</li> <li>• End-of-life treatment</li> </ul> |
| <b>Validation of Study</b>      | Validated through 3rd party critical review (EarthShift Global)                                                                                                                                                                                                                                                                                                                            |

i One Gigabyte (GB) is equal to one billion bytes. Actual user capacity may be less due to operating environment.

ii \*Absolute climate change impact values & contribution details for each phase will be available upon request

## Breakdown of Carbon Footprint by Life Cycle Stages<sup>ii</sup>:

The Manufacturing phase has the highest contribution [89%], driven by product assembly and sub-assembly processes. The Use phase has the second highest impacts [11%], which is mainly attributed to energy consumed by the product during usage. The Distribution phase & End-of-Life phase of the products constitutes <1% of the total impact.



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