



## Product Datasheet

### Inception TLC830 Pro Series 1TB PCIe 4.0 NVME M.2 80mm 3D TLC



- **Product Code:** OTLC1TB3D NVME4M.2/80
- **Product EAN:** 5059902030313
- **Warranty:** 3 Year Advanced Replacement

The Inception TLC830 Pro range of SSD Solutions are manufactured by Origin using the highest quality Tier 1 NAND and the latest generation of controllers which enables us to provide both high performance and strong reliability. All of our Inception SSDs come with 3 years advanced replacement warranty alongside free, in-house pre and post sales technical support. We can supply the TLC830 Pro in form factors of 2.5", 3.5" & M.2 with either SATA or NVME interfaces, whilst being available in a range of capacities designed to increase the performance & extend the lifecycle of any laptop or desktop.

# Technical Specifications

## Weight & Dimensions

|                |       |
|----------------|-------|
| <b>Width:</b>  | 22 mm |
| <b>Depth:</b>  | 80 mm |
| <b>Height:</b> | 2 mm  |
| <b>Weight:</b> | 6.5 g |

## Power

|   |       |
|---|-------|
| <b>Operating Voltage:</b>                 | 3.3 V |
| <b>Average Power Consumption (read):</b>  | 3.5 W |
| <b>Average Power Consumption (write):</b> | 3.5 W |

## Operational Conditions

|   |             |
|---|-------------|
| <b>Operating Temperature (T-T):</b>       | 0 - 70 °C   |
| <b>Storage Temperature (T-T):</b>         | -45 - 95 °C |
| <b>Operating Relative Humidity (H-H):</b> | 5 - 98%     |
| <b>Operating Vibration:</b>               | 15 G        |
| <b>Operating Shock:</b>                   | 1500 G      |

## Other Features

|                                 |      |
|---------------------------------|------|
| <b>Compliance Certificates:</b> | RoHS |
|---------------------------------|------|

## Features

|                         |      |
|-------------------------|------|
| <b>SSD Capacity:</b>    | 1 TB |
| <b>SSD Form Factor:</b> | M.2  |

|   |                          |
|---|--------------------------|
| <b>Interface:</b>                           | PCI Express 4.0          |
| <b>NVMe:</b>                                | Yes                      |
| <b>Memory Type:</b>                         | 3D TLC                   |
| <b>Component For:</b>                       | PC/Laptop                |
| <b>Hardware Encryption:</b>                 | No                       |
| <b>NVMe Version:</b>                        | 2.0                      |
| <b>Security Algorithms:</b>                 | 128-bit AES, 256-bit AES |
| <b>M.2 SSD Size:</b>                        | 2280 (22 x 80 mm)        |
| <b>Read Speed:</b>                          | 5100 MB/s                |
| <b>Write Speed:</b>                         | 4400 MB/s                |
| <b>Random Read (4KB):</b>                   | 4000 IOPS                |
| <b>Random Write (4KB):</b>                  | 3200 IOPS                |
| <b>Access Time:</b>                         | 0.2 ms                   |
| <b>Seek Time:</b>                           | 0 ms                     |
| <b>M.2 Key ID:</b>                          | M                        |
| <b>PCI Express Interface Data Lanes:</b>    | x4                       |
| <b>S.M.A.R.T. Support:</b>                  | Yes                      |
| <b>TRIM Support:</b>                        | Yes                      |
| <b>ECC:</b>                                 | Yes                      |
| <b>JEDEC Standard:</b>                      | Yes                      |
| <b>End-to-End Data Protection:</b>          | Yes                      |
| <b>Mean Time Between Failures (MTBF):</b>   | 1500000 h                |
| <b>Windows Operating Systems Supported:</b> | Yes                      |
| <b>Mac Operating Systems Supported:</b>     | Yes                      |
| <b>Linux Operating Systems Supported:</b>   | Yes                      |
| <b>TBW Rating:</b>                          | 560                      |

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**Use Conditions:**

PC/Client/Tablet, Workstation

**SSD Usage Tag:**

Consumer

## Logistics Data

**Export Control Classification Number  
(ECCN):**

4A994

## Origin Storage Limited

2-4 Rutherford Centre, Rutherford Road, Basingstoke, Hampshire, RG24 8PB UK

**Tel:** [+44 \(0\)1256 351500](tel:+44(0)1256351500) | **E-Mail:** [sales@originstorage.com](mailto:sales@originstorage.com) | **Web:** [www.originstorage.com](http://www.originstorage.com)

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