



# Product Datasheet

## Inception TLC830 Pro Series 256GB NVME M.2 42mm 3D TLC



- **Product Code:** OTLC2563DNVMEM.2/42
- **Product EAN:** 5056006194347
- **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

## Power

|                                   |        |
|-----------------------------------|--------|
| <b>Operating Voltage:</b>         | 3.3 V  |
| <b>Power Consumption (read):</b>  | 2.88 W |
| <b>Power Consumption (write):</b> | 2.83 W |
| <b>Power Consumption (idle):</b>  | 0.48 W |

## Operational Conditions

|   |              |
|---|--------------|
| <b>Operating Temperature (T-T):</b>       | 0 - 70 °C    |
| <b>Storage Temperature (T-T):</b>         | -45 - 105 °C |
| <b>Operating Relative Humidity (H-H):</b> | 5 - 98%      |
| <b>Storage Relative Humidity (H-H):</b>   | 5 - 98%      |
| <b>Operating Vibration:</b>               | 16 G         |
| <b>Operating Shock:</b>                   | 1500 G       |
| <b>Maximum Operating Altitude:</b>        | 120000 m     |

## Packaging Data

|  |    |
|--|----|
| <b>Storage Drive Adapter Included:</b> | No |
| <b>Screws Included:</b>                | No |

## Other Features

|                                 |           |
|---------------------------------|-----------|
| <b>Compliance Certificates:</b> | RoHS      |
| <b>Compatible Products:</b>     | Universal |

## Features

|                      |        |
|----------------------|--------|
| <b>SSD Capacity:</b> | 256 GB |
|----------------------|--------|

|   |                 |
|---|-----------------|
| <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>Data Transfer Rate:</b>                | 6 Gbit/s        |
| <b>Read Speed:</b>                        | 2100 MB/s       |
| <b>Write Speed:</b>                       | 1900 MB/s       |
| <b>Random Read (4KB):</b>                 | 102400 IOPS     |
| <b>Random Write (4KB):</b>                | 179200 IOPS     |
| <b>Access Time:</b>                       | 0.2 ms          |
| <b>Seek Time:</b>                         | 0 ms            |
| <b>PCI Express Interface Data Lanes:</b>  | x4              |
| <b>S.M.A.R.T. Support:</b>                | Yes             |
| <b>ECC:</b>                               | Yes             |
| <b>Hot-swap:</b>                          | No              |
| <b>Low-density Parity-check (LDPC):</b>   | Yes             |
| <b>Mean Time Between Failures (MTBF):</b> | 1000000 h       |
| <b>TBW Rating:</b>                        | 100             |

## Origin Storage Limited

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