



## Product Datasheet

### Inception TLC830 Pro Series 256GB NVME M.2 80mm 3D TLC



- **Product Code:** ZP250CM3A001-OS
- **Product EAN:** 5056006196433
- **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

|         |        |
|---------|--------|
| Width:  | 80 mm  |
| Depth:  | 22 mm  |
| Height: | 2.2 mm |
| Weight: | 7 g    |

## Power

|                              |        |
|------------------------------|--------|
| Operating Voltage:           | 3.3 V  |
| Power Consumption (read):    | 2.84 W |
| Power Consumption (write):   | 3.22 W |
| Power Consumption (max):     | 3.22 W |
| Power Consumption (average): | 3.03 W |
| Power Consumption (idle):    | 0.47 W |

## Operational Conditions

|                                    |              |
|------------------------------------|--------------|
| Operating Temperature (T-T):       | 0 - 70 °C    |
| Storage Temperature (T-T):         | -45 - 105 °C |
| Operating Relative Humidity (H-H): | 5 - 98%      |
| Storage Relative Humidity (H-H):   | 5 - 98%      |
| Operating Vibration:               | 16 G         |
| Operating Shock:                   | 1500 G       |
| Maximum Operating Altitude:        | 36576 m      |

## Packaging Data

|                                 |    |
|---------------------------------|----|
| Storage Drive Adapter Included: | No |
|---------------------------------|----|

|                         |         |
|-------------------------|---------|
| <b>Screws Included:</b> | No      |
| <b>Package Type:</b>    | Blister |

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 3.0 |
| <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>                  | 1.3             |
| <b>Data Transfer Rate:</b>            | 640 Gbit/s      |
| <b>Read Speed:</b>                    | 2100 MB/s       |
| <b>Write Speed:</b>                   | 1900 MB/s       |
| <b>Random Read (4KB):</b>             | 179000 IOPS     |
| <b>Random Write (4KB):</b>            | 102000 IOPS     |
| <b>Sequential Read Speed (ATTO):</b>  | 2100 MB/s       |
| <b>Sequential Write Speed (ATTO):</b> | 1900 MB/s       |
| <b>Access Time:</b>                   | 0.2 ms          |
| <b>Seek Time:</b>                     | 0 ms            |
| <b>S.M.A.R.T. Support:</b>            | Yes             |

|                                      |           |
|--------------------------------------|-----------|
| TRIM Support:                        | Yes       |
| Hot-swap:                            | No        |
| Mean Time Between Failures (MTBF):   | 1000000 h |
| Windows Operating Systems Supported: | Yes       |
| Linux Operating Systems Supported:   | Yes       |
| TBW Rating:                          | 100       |

Logistics Data

|                              |          |
|------------------------------|----------|
| Harmonized System (HS) Code: | 84717070 |
|------------------------------|----------|

Origin Storage Limited

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

**Tel:** [+44 \(0\)1256 351500](tel:+441256351500) | **E-Mail:** [sales@originstorage.com](mailto:sales@originstorage.com) | **Web:** [www.originstorage.com](http://www.originstorage.com)

Copyright 2025 - Origin Storage Limited | All trademarks are the property of their respective owners, E&OE.