



# Product Datasheet

## 256GB PCIE M.2 NVME SSD



- **Product Code:** NB-256M.2/NVME
- **Product EAN:** 5056006104735
- **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

|                              |        |
|------------------------------|--------|
| 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      |
| Screws Included:                | No      |
| Package Type:                   | Blister |

## Other Features

|                          |      |
|--------------------------|------|
| Internal:                | Yes  |
| Compliance Certificates: | RoHS |

|                      |           |
|----------------------|-----------|
| Compatible Products: | Universal |
|----------------------|-----------|

## Features

|                                      |                 |
|--------------------------------------|-----------------|
| SSD Capacity:                        | 256 GB          |
| SSD Form Factor:                     | M.2             |
| Interface:                           | PCI Express 3.0 |
| NVMe:                                | Yes             |
| Memory Type:                         | 3D TLC          |
| Component For:                       | PC/Laptop       |
| Hardware Encryption:                 | No              |
| Data Transfer Rate:                  | 640 Gbit/s      |
| Read Speed:                          | 2100 MB/s       |
| Write Speed:                         | 1900 MB/s       |
| Random Read (4KB):                   | 179000 IOPS     |
| Random Write (4KB):                  | 102000 IOPS     |
| Access Time:                         | 0.2 ms          |
| Seek Time:                           | 0 ms            |
| S.M.A.R.T. Support:                  | Yes             |
| TRIM Support:                        | Yes             |
| RAID 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:+44(0)1256351500) | **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.