



# Product Datasheet

1TB TLC SSD SATA 2.5in



- **Product Code:** NB-1000SSD-TLC
- **Product EAN:** 5055146594888
- **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>	5 V
<b>Power Consumption (read):</b>	2.8 W
<b>Power Consumption (write):</b>	4.26 W
<b>Power Consumption (max):</b>	4.26 W
<b>Power Consumption (average):</b>	3.53 W
<b>Power Consumption (idle):</b>	0.54 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>	36576 m

## Packaging Data

<b>Storage Drive Adapter Included:</b>	No
<b>Screws Included:</b>	No
<b>Package Type:</b>	Blister

## Other Features

<b>Internal:</b>	Yes
<b>Internal Memory Type:</b>	TLC

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

<b>Compatible Products:</b>	Universal
-----------------------------	-----------

---

## Features

<b>SSD Capacity:</b>	1 TB
----------------------	------

<b>SSD Form Factor:</b>	2.5"
-------------------------	------

<b>Interface:</b>	Serial ATA
-------------------	------------

<b>NVMe:</b>	No
--------------	----

<b>Memory Type:</b>	QLC
---------------------	-----

<b>Component For:</b>	PC/Laptop
-----------------------	-----------

<b>Hardware Encryption:</b>	No
-----------------------------	----

<b>Security Algorithms:</b>	256-bit AES
-----------------------------	-------------

<b>Data Transfer Rate:</b>	6 Gbit/s
----------------------------	----------

<b>Read Speed:</b>	550 MB/s
--------------------	----------

<b>Write Speed:</b>	500 MB/s
---------------------	----------

<b>Random Read (4KB):</b>	53760 IOPS
---------------------------	------------

<b>Random Write (4KB):</b>	56320 IOPS
----------------------------	------------

<b>Access Time:</b>	0.1 ms
---------------------	--------

<b>Seek Time:</b>	0 ms
-------------------	------

<b>S.M.A.R.T. Support:</b>	Yes
----------------------------	-----

<b>TRIM Support:</b>	Yes
----------------------	-----

<b>Hot-swap:</b>	No
------------------	----

<b>Mean Time Between Failures (MTBF):</b>	1000000 h
-------------------------------------------	-----------

<b>Windows Operating Systems Supported:</b>	Yes
---------------------------------------------	-----

<b>Linux Operating Systems Supported:</b>	Yes
-------------------------------------------	-----

<b>TBW Rating:</b>	100
--------------------	-----

---

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.