



Product Datasheet

500Gb TLC SSD Opt. 780/980 MT 3.5in SATA



- **Product Code:** DELL-500TLC-F14
- **Product EAN:** 5055146593409
- **Warranty:** Advanced Replacement - 3 Years

Origin Storage Ltd manufactures a full range of Matched SSD Solutions for most major branded Servers, laptops and desktops, such as Dell, HP, Toshiba, and Lenovo. All of our Matched SSD Solutions come with up to 5 years advanced replacement warranty and also come with free pre and post sales technical support. We can supply replacements or upgrades in form factors of 2.5" or 3.5", M.2 & AIC with either SATA, SAS or PCIe interfaces respectively, available in a range of capacities and drive write endurances for laptop, desktop or Server. All our Matched SSD Solutions are just that, matched to the system you have for 100% compatibility, right first time, every time!

Technical Specifications

Weight & Dimensions

Width:	69.8 mm
Depth:	100.5 mm
Height:	7 mm
Weight:	45 g

Power

Operating Voltage:	5 V
Power Consumption (read):	3.1 W
Power Consumption (write):	4.55 W
Power Consumption (max):	4.55 W
Power Consumption (average):	3.825 W
Power Consumption (idle):	0.54 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
Non-operating Vibration:	20 G
Operating Shock:	1500 G
Non-operating Shock:	1500 G
Maximum Operating Altitude:	36576 m

Packaging Data

Storage Drive Adapter Included:	No
Storage Drive Adapter Type:	2.5" - 3.5"
Screws Included:	No
Package Type:	Blister

Other Features

Internal:	Yes
Internal Memory Type:	TLC
Compliance Certificates:	RoHS
Compatible Products:	Universal

Features

SSD Capacity:	512 GB
SSD Form Factor:	3.5"
Interface:	Serial ATA
NVMe:	No
Memory Type:	3D TLC
Component For:	PC/Laptop
Hardware Encryption:	No
NAND Flash Type:	TLC (Triple Level Cell)
Security Algorithms:	256-bit AES
Data Transfer Rate:	6 Gbit/s
Read Speed:	550 MB/s
Write Speed:	500 MB/s
Random Read (4KB):	53760 IOPS

Random Write (4KB):	56320 IOPS
Access Time:	0.1 ms
Seek Time:	0 ms
Controller Type:	Samsung MGX
S.M.A.R.T. Support:	Yes
TRIM Support:	Yes
Hot-swap:	No
IEEE 1667:	Yes
Mean Time Between Failures (MTBF):	1000000 h
Windows Operating Systems Supported:	Yes
Opal SSC 2.0:	Yes
Linux Operating Systems Supported:	Yes
TBW Rating:	100

Logistics Data

Harmonized System (HS) Code:	84717070
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Origin Storage Limited

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