

# 2.5" SATA Enterprise SSD ASD+SDC12 Series

2.5" SATA SSD for  
Enterprise Applications



## Features

- Advanced Flash Management including static and dynamic wear leveling, bad block management, TRIM, SMART, over-provision, and firmware update
- Thermal Throttling to keep the optimal performance in the safe range of the temperature
- TCG OPAL 2.0 with Physical Presence SID (PSID)
- Operating temperature range: 0°C to 70°C
- MTBF of more than 1,500,000 hours
- Vibration and shock resistance
- RoHS compliant

## Introduction

ADLINK's enterprise 2.5" SATA SSD Series delivers all the advantages of today's flash disk technologies with SATA 6Gb/s interface, and is fully compliant with the standard 2.5" 7mm form factor.

Capacities of 480GB to 7680GB are available and read/write speeds of up to 530 MB/s and 500 MB/s respectively are support.

## Ordering Information

|                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| ASDXS25SMC-480GTF | 2.5" SSD ASD+SDC12 Series, BiCS5 3D TLC, 1 DWPD, 480GB, 0°C to 70°C  |
| ASDXS25SMC-960GTF | 2.5" SSD ASD+SDC12 Series, BiCS5 3D TLC, 1 DWPD, 960GB, 0°C to 70°C  |
| ASDXS25SMC-1920TF | 2.5" SSD ASD+SDC12 Series, BiCS5 3D TLC, 1 DWPD, 1920GB, 0°C to 70°C |
| ASDXS25SMC-3840TF | 2.5" SSD ASD+SDC12 Series, BiCS5 3D TLC, 1 DWPD, 3840GB, 0°C to 70°C |
| ASDXS25SMC-7680TF | 2.5" SSD ASD+SDC12 Series, BiCS5 3D TLC, 1 DWPD, 7680GB, 0°C to 70°C |

## Specifications

| Model                          |                        | ASD+SDC12 Series                                                                                                   |
|--------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------|
| Capacity <sup>1</sup>          |                        | 480, 920, 1920, 3840, 7680GB                                                                                       |
| Form Factor                    |                        | 2.5" SATA<br>100.00mm(L) x69.85mm(W)x 7.00mm(H)                                                                    |
| SATA Interface                 |                        | SATA Revision 3.2<br>SATA 1.5Gb/s, 3Gb/s, and 6Gb/s interface                                                      |
| Flash Type                     |                        | BiCS5 3D TLC                                                                                                       |
| Performance <sup>2</sup>       |                        | Read: up to 530 MB/s<br>Write: up to 500 MB/s<br>Random 4K Read: up to 98K IOPS<br>Random 4K Write: up to 50K IOPS |
| Power Consumption              |                        | Active mode: < 3.8W<br>Idle mode: < 1.6W                                                                           |
| MTBF                           |                        | More than 1,500,000 hours                                                                                          |
| DWPD                           |                        | 1                                                                                                                  |
| Advanced Flash Management      |                        | Advanced Wear Leveling<br>Bad Block Management TRIM<br>S.M.A.R.T<br>Over Provision<br>Firmware Update              |
| Advanced Device Security       |                        | Secure Erase<br>Crypto Erase<br>Physical Presence SID (PSID)                                                       |
| Temperature Range <sup>3</sup> | Operating <sup>4</sup> | 0°C to 70°C with specified airflow                                                                                 |
|                                | Storage                | -40°C to 85°C                                                                                                      |
| Environment                    |                        | Vibration:<br>20Hz to 80Hz/1.52mm<br>80Hz to 2000Hz/20Gp-p<br>Shock (operation/non-operating): 1500G @0.5ms        |
| RoHS compliant                 |                        | Yes                                                                                                                |

### Notes:

- 1.Other capacities may be supported in the future.
- 2.Performance benchmarked by CrystalDiskMark.
- 3.As measured by SMART temperature. Active airflow is recommended within the system for maintaining proper device operating temperature on heavier workloads.
- 4.Actual operating temperature specification may vary by model.