

U.2 PCIe SSD ASD+E2D Series

U.2 PCIe Gen3 x4 SSD for Industrial
Embedded 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:
C-grade 0°C to 70°C
I-grade -40°C to 85°C
- MTBF of more than 2,000,000 hours
- Vibration and shock resistance
- RoHS compliant

Introduction

ADLINK's industrial U.2 PCIe SSD Series delivers all the advantages of today's flash disk technologies with PCIe Gen3 x4 interface, and is fully compliant with the standard U.2 (SFF-8639) form factor. Capacities of 480GB to 7680GB are available and read/write speeds of up to 3,300 MB/s and 1,000 MB/s respectively are supported.

Ordering Information

ASDU25ECC-2TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 2TB, 0°C ~ 70°C
ASDU25ECC-4TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 4TB, 0°C ~ 70°C
ASDU25ECC-8TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 8TB, 0°C ~ 70°C
ASDU25ECI-2TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 2TB, -40°C ~ 85°C
ASDU25ECI-4TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 4TB, -40°C ~ 85°C
ASDU25ECI-8TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, Decoder, 8TB, -40°C ~ 85°C
ASDU25ECC-512GT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, 512GB, 0°C ~ 70°C
ASDU25ECC-1TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, 1TB, 0°C ~ 70°C
ASDU25ECI-512GT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, 512GB, -40°C ~ 85°C
ASDU25ECI-1TBT0	U.2 PCIe SSD ASD+E2D Series, BiCS5 3D TLC, 1TB, -40°C ~ 85°C

Specifications

Model	ASD+E2D Series	
Capacity ¹	480GB to 7680GB	
Form Factor	U.2 (SFF-8639) 100.00mm(L) x 69.85mm(W) x 7.00mm(H)	
PCIe Interface	PCIe Gen3 x4 PCI Express Base 3.1 NVMe 1.3d	
Flash Type	BiCSS 3D TLC	
Performance ⁴	Read: up to 3,300 MB/s Write: up to 1,000 MB/s Random 4K Read: up to 600K IOPS Random 4K Write: up to 200K IOPS	
Power Consumption	Active mode: < 7.5W Idle mode: < 2.3W	
MTBF	More than 2,000,000 hours	
Advanced Flash Management	Advanced Wear Leveling Bad Block Management TRIM S.M.A.R.T. Over Provision Firmware Update	
Advanced Device Security	Secure Erase Crypto Erase Physical Presence SID (PSID)	
Temperature Range ²	Operating ³	C-grade: 0°C to 70°C I-grade: -40°C to 85°C
	Storage	-40°C to 85°C
Environment	Vibration: 20Hz to 80Hz / 1.52mm 80Hz to 2000Hz / 20Gp-p Shock (operation/non-operating): 1500G @0.5ms	
RoHS compliant	Yes	

Notes:

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