

E1.S PCIe SSD ASD+E8D Series

E1.S PCIe SSD for Industrial Embedded



Features

- Advanced Flash Management including static and dynamic wear leveling, bad block management, TRIM, SMART, over-provision, and firmware update
- Low Power Management including DEVSLP mode (optional) and DIPM/HIPM mode
- 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 E1.S PCIe SSD Series delivers all the advantages of today's flash disk technologies with PCIe Gen4x4 interface, and is fully compliant with the standard E1.S form factor. Capacities of 480GB to 8TB are available and read/write speeds of up to 7200MB/s and 6300MB/s respectively are supported.

Ordering Information

ASDEM8EIC-480GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 480GB, 0°C to 70°C
ASDEM8EIC-960GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 960GB, 0°C to 70°C
ASDEM8EIC-1920GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 1920TB, 0°C to 70°C
ASDEM8EIC-3480GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 3480TB, 0°C to 70°C
ASDEM8EIC-7860GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 7860TB, 0°C to 70°C
ASDEM8EII-480GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 480GB, -40°C to 85°C
ASDEM8EII-960GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 960GB, -40°C to 85°C
ASDEM8EII-1920GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 1920TB, -40°C to 85°C
ASDEM8EII-3480GT0	E1.S PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 3480TB, -40°C to 85°C

Specifications

Model		ASD+ E8D Series
Capacity ¹		480GB to 7680GB
Form Factor		E1.S 118.75mm(L) x 33.75mm(W) x 9.5mm(H)
PCIe Interface		PCIe Gen4 x4 PCI Express Base 4.0 NVMe 1.4
Flash Type		BiCS5 3D TLC
Performance ⁴		Read: up to 7,200 MB/s Write: up to 6,300 MB/s Random 4K Read: > 650K IOPS Random 4K Write:> 1,200K IOPS
Power Consumption		Active mode: <=11,500mW Idle mode: <=3,100mW
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
Low Power Management		DEVSLP Mode (Optional) DIPM/HIPM Mode
Temperature Range ²	Operating ³	0°C to 70°C / -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.