

M.2 2280/22110 PCIe4.0 SSD ASD+E8D Series

M.2 2280/22110 PCIe4.0 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
- 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 M.2 PCIe SSD E8D Series delivers all the advantages of today's flash disk technologies with PCIe Gen4x4 interface, and is fully compliant with the standard M.2 form factor. Capacities of 480GB to 3840GB are available and read/write speeds of up to 7200MB/s and 6500MB/s respectively are supported.

Ordering Information

ASDEM8EIC-480GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 480GB, 0°C to 70°C
ASDEM8EIC-960GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 960GB, 0°C to 70°C
ASDEM8EIC-1920GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 1920TB, 0°C to 70°C
ASDEM8EIC-3840GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 3840TB, 0°C to 70°C
ASDEM8EII-480GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 480GB, -40°C to 85°C
ASDEM8EII-960GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 960GB, -40°C to 85°C
ASDEM8EII-1920GT0	M.2 PCIe SSD ASD+E8D Series, BiCS5 3D TLC, 1920TB, -40°C to 85°C

Specifications

Model		ASD+ E8D Series	
Capacity ¹		480GB to 3840GB	3840GB
Form Factor		M.2 80mm (L) x 22mm (W) x 1.35mm (H)	M.2 110mm (L) x 22mm (W) x 1.35mm (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 6,500 MB/s Random 4K Read: > 800K IOPS Random 4K Write:> 380K IOPS	
Power Consumption		Active mode: <=11W Idle mode: <=2,000mW	
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.
5. M.2 2280 3840GB only has temperature range from 0°C to 70°C