

U2 High Capacity to 8TB
3D TLC NVMe Gen3
PCIexpress Flash Disk

UP TO
8TB
U.2
2.5"

Photon series
NVMe

Product Overview

The *Photon series* U.2 SSD device presents NVMe interface small package **TLC** Flash Disk. Asine U.2 flash drive delivers performance and proven reliability. Added benefits of flexibility are built into Asine's U.2 storage systems and expandable storage capacity as flash disk capacities increase. The U.2 drives support also other specific features such as AES-256 bit hardware encryption, fast sanitize erase, high grade industrial certified metal & workmanship.

U.2



Photos for ref. only

Applications

- Industrial & Commercial PC/Tablet systems
- Server and IT storage
- Enterprise storage
- Medical MRI, CT, data media
- Security, HLS-Home Land Security
- Infrastructure fabric storage over fiber
- JBOD, NAS, SAN, RAID
- Navigation, Infotainment
- Autonomous car



Features

- Highest quality 3D TLC Flash technology
- 960GB to 7.68TB at TLC of non-volatile Flash memory type 2.5" U.2 (SFF-8639) form factor Interface PCIe Gen3 x4 lane NVMe 1.3 compliant
- Security: AES256; compliant NVMe Secure Erase support
- Operating temperature: Commercial 0°C ~ +60°C
- Storage temperature -40°C to +85°C
- Humidity 5% to 95% relative, non-condensing
- High data sustained transfer rate: TLC Sequential Read up to 3300MB/Sec sequential Write up to 3000MB/Sec
- Random 4KB block size - Read: Up to 600K IOPS. Write: Up to 500K IOPS
- Reliability – MTBF 1,500,000 hours
 - Embedded EDC/ECC Bad Block Mapping and Management
 - Built-in power-up self test and automatic self-diagnostics
 - Wear-Leveling Algorithm: Dynamic & Static wear leveling
 - Moderate SPOR / PLP
- Power Consumption: up to 6.5 W (Active), 0.06W (Idle)
- TBW by JESD218 standard 4KB random write workload – up to 840TBW @ 8TB; DWPD 0.2 to 1.1 (usage profile dependant).
- No special drivers - uses compliant NVMe Windows, Linux, VxWorks® drivers
- SSD unit sustain environmental – Operating and non-operating:
 - Shock (non-operating) 1,000 G/0.5ms
 - Vibration - Operating: 10-2000Hz, 16.3G GRMS
 - Fall – 70 cm free fall on each axis

The Asine **U.2** is a top reliable high performance storage Solid-State Disk with no moving parts, ideal to meet the reliability requirements for, video and audio applications, as well as bootloader or Firmware / BIOS and embedded high reliability storage. The Asine **U.2** component is designed to withstand harsh environmental conditions, while operating without compromising on data integrity.



Photos for ref. only

Physical dimensions:

U.2 max 100.35 L X 70.1 W X 7.1 H mm
Weight-max: 80 gr.

Ordering Information: P/N Structure: ASCN8025-[cccc]NAET2nnn

nnn
nnn Factory code

P/N	Description
ASCN8025-0960NAET2	U.2-NVMe Gen3 TLC 960GB AES256 Commercial temperature
ASCN8025-1920NAET2	U.2-NVMe Gen3 TLC 1.9TB AES256 Commercial temperature
ASCN8025-3840NAET2	U.2-NVMe Gen3 TLC 3.84TB AES256 Commercial temperature
ASCN8025-7680NAET2	U.2-NVMe Gen3 TLC 7.68TB AES256 Commercial temperature

Options for U.2

Conformal coated (-00F)

The information contained in this document is subject to change without notice