

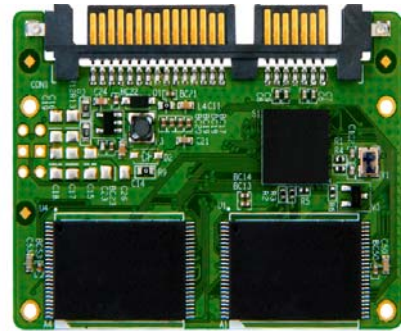
AS297-Half Slim SATA SLC & MLC SSD Flash Disk

PRELIMINARY

Photon series
AS297-SATA

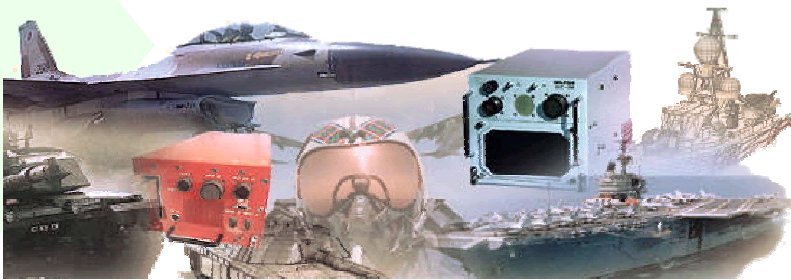
Product Overview

The *Photon series* presents SATA interfaces in a standard JEDEC mechanical specification MO-297A Form Factor SLC and MLC Flash Solid State Disk. Asine AS297-SATA SSD delivers performance and proven reliability for data and mission critical systems. Added benefits of flexibility are built into Asine's AS297-SATA SSD storage systems, including expandable storage capacity as flash disk capacities increase. The AS297-SATA SSD support OEM application specific features such as **industrial and commercial Temperatures**, optional **conformal coating** per MIL and other standards, *sanitize fast erase*, *Avionic* certified material & workmanship, optional configuration freeze and more.



Applications

- Military & airborne systems
- Rugged storage, Military tactical recorder
- High-speed flight data recording
- Cockpit voice & data recording, MIL 1553 / Arinc monitoring
- Video surveillance, Video/JPEG2000 capture
- Telecommunications
- Factory automation
- Automotive
- Testing instrumentation
- Mission-critical applications
- JBOD, NAS, SAN, RAID
- Data acquisition systems



Features

- High quality *Photon series* SLC and MLC Flash technology
- Up to 160 GB of non-volatile MLC or up to 45GB SLC (per model) Flash memory.
- SATA1 (1.5GHz) & SATA2 (3GHz)
- Fast sanitize erase for entire media (in seconds) capacity dependent.
- Operating temperature – Commercial 0°C to +70°C, Industrial -40°C to +85°C
- Storage temperature -55°C to +95°C
- Humidity 5 to 95% relative, non-condensing
- Altitude (operating & non-operating) 0 to 80,000 feet
- Less than 20 µsec access time
- High data transfer rate: Up to 220 MB/Sec Burst R/W, 160/130 MB/Sec Sustained Read/Write (model dependent) with limit to interface speed.
- IOPS 4KB random Read: 5,000, random Write: 4,000 (overall capacity & flash technology dependant)
- Reliability - MTBF - 1,500,000 hours MIL-HDBK271F
- Embedded EDC/ECC, based on 48-bit Reed Solomon Algorithm for Error Correction Code
- Built-in power-up self test, Manual and automatic self-diagnostics
- Bad Block Mapping and Managment
- Wear-Leveling Algorithm: Dynamic wear- leveling
- 0.36 W – 1.5 W max. power dissipation (depending on capacity). 0.36W on Idle
- 3,000,000 Write/Erase cycles with SLC technology; Read unlimited
- No special drivers - uses existing Windows, Linux, VxWorks®, and SATA drivers
- Conduction cooled ready for harsh and rugged applications
- Conformal coating 1B31 standard option. Optional – Space, Military and Medical applications coating
- SSD unit per MIL-STD 810F
- Shock - Half Sine, 50G peak, 11ms; Half Sine, 1500G (3 axes)
- Vibration - 16.3G RMS (Random, 20Hz to 2000 Hz, 3 vibrations axes)

The AS927-SATA is a top reliable high performance mass storage Solid State Drive with no moving parts, ideal to meet the reliability requirements of the military and aerospace, video and audio servers, as well as broadcasting systems and enterprise computing. The AS927-SATA SSDs are designed to withstand extreme shocks, vibrations and harsh environmental conditions while operating without compromising on data integrity.

Physical dimensions:

For commercial and industrial:
54 L X 39 W X 4.5 H (mm)

Ordering Information: P/N Structure: AS927-SATA-[cap]-[t][f][h][m]

P/N Prefix	SATA I/F	capacity	t	f	h	m
AS927-SATA	SATA I/F	0008 8 GB 0016 16 GB 0030 30 GB 0045 45 GB	C 0°C to 70°C	F Conformal Coating	W S/W Sanitize Erase	S SLC Flash M MLC Flash
Additional Options:		0060 *60 GB 0120 *120 GB 0160 *160 GB	Z -40°C to 85°C*			
• Made in the USA (for F M F)		*MLC only	*For MLC - No start at -40°C			
• Made In India (For Offset)		Net capacity could be depended by system				
• Customization available						

Ordering Example:
AS927-SATA-0060-ZFS is an SSD SLC 60 GB, SATA, conformal coated, operating at -40°C to 85°C

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