Add-on Card AOC-S3908L-H8IR (-16DD/-32DD), AOC-S3916L-H16IR (-32DD)

Add-on Card

Supermicro 12Gb/s Multi-Port SAS PCIe Gen 4.0 Internal RAID Adapter

The Supermicro MegaRAID Low Profile **AOC-S3908L-H8iR** features 8 internal SAS connectors and **AOC-S3916L-H16iR** features 16 internal SAS connectors for high-performance storage connectivity. These RAID cards are built on the Broadcom SAS IC technology and proven MegaRAID technology. They address the growing demand for increased data throughput and scalability requirements across the enterprise-class server platforms. With high performance RAID architecture, including hardware RAID 5 and 6, these new RAID controller cards support high capacity storage applications. They deliver **cost-effective** storage solutions using SATA drives and **maximum performance and reliability** with SAS drives.
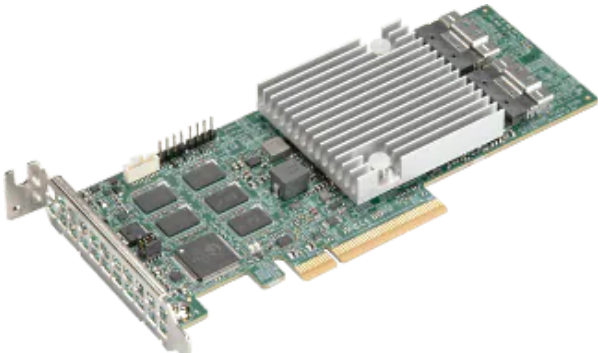
With the option of the **BTR-CVPM05** SuperCap/TFM unit, it provides **cached data protection** and allows system builders to protect cached data even during the most catastrophic system failures.

Using expander backplanes, they support up to **16, 32 & 240 drives** (depending on SKU) w/ RAID 0, 1, 5, 6, 10, 50 and 60.

AOC SKU	Description
AOC-S3908L-H8iR	**8** internal SAS3 ports, Supports up to **240** physical devices w/ expander, **1x** SlimSAS x8 black (100-Ohm) connector
AOC-S3908L-H8iR-16DD	**8** internal SAS3 ports, Supports up to **16** physical devices w/ expander, **1x** SlimSAS x8 black (100-Ohm) connector
AOC-S3908L-H8iR-32DD	**8** internal SAS3 ports, Supports up to **32** physical devices w/ expander, **1x** SlimSAS x8 black (100-Ohm) connector
AOC-S3916L-H16iR	**16** internal SAS3 ports, Supports up to **240** physical devices w/ expander, **2x** SlimSAS x8 black (100-Ohm) connectors
AOC-S3916L-H16iR-32DD	**16** internal SAS3 ports, Supports up to **32** physical devices w/ expander, **2x** SlimSAS x8 black (100-Ohm) connectors

AOC-S3908L-H8iR

AOC-S3916L-H16iR

Compatible with Supermicro motherboards only.

Compliance

RoHS	▪ RoHS Compliant 6/6, Pb Free

Key Features

- Low profile x8 PCIe Gen 4.0 root complex interface
- Supports RAID 0, 1, 5, 6, 10, 50, 60
- 8GB DDR4 onboard cache memory – 2666MHz
- Power consumption: 14 Watts for AOC-S3908L-H8iR & 18 Watts for AOC-S3916L-H16iR
- Supports 3.0, 6.0 and 12.0 Gb/s SAS data transfer rates and 3.0 & 6.0 Gb SATA
- Support for MCTP over PCIe
- Cachevault to protect onboard cache memory
- Supercap - BTR-CVPM05 (Optional)
- TFM – Included on-board
- Supports advanced software Encryption - included
- Supports in LSA Storage Authority Software WebGUI
- Secure boot
- UEFI Configuration utility
- OS Support: Windows/Linux
- Dimensions: 2.71" x 6.6" (H x L)
- Thermal operating range: System dependent (55°C or higher w/ enough airflow)

Dimensions

L x W	2.7" x 6.6"

Validated Platforms

Servers/Serverboards	AS-1114S-WN10RT
	AS-2024S-TR
	AS-2124GQ-NART
	SYS-110P-WTR
	SYS-120U-TNR
	SYS-220BT-DNTR
	SYS-220U-MTNR
	SYS-220U-TNR
	SYS-420GP-TNR
	SYS-510P-M
	SYS-510P-WTR
	SYS-520P-WTR
	SSG-6049SP-DE1CR90
	SSG-6049SP-E1CR60
	SYS-620BT-DNTR
	SSG-620P-ACR12H
	SYS-620U-TNR
	SYS-740GP-TNRT
	SYS-F610P2-RTN
	SYS-F620P3-RTBN
	H12DSU-iN
	H12DSU-iNR
	H12SSFF-AN6
	M12SWA-TF
	X11SCZ-F
	X12DPT-PT6
	X12SPL-F
	X12SPL-LN4F
	X12SPO-F

Downloads

User's Guide	[Download]
Driver	[Download]
Firmware	[Download]

Tested Hard Drives

Tested HDD/SSD	[Tested HDD List]

Parts List

	Part Number	Qty	Description
Add-on Card	**AOC-S3908L-H8IR**	1	Low Profile 12Gb/s 8-Port SAS Internal RAID Adapter, 240DD
Add-on Card	**AOC-S3908L-H8IR-16DD**	1	Low Profile 12Gb/s 8-Port SAS Internal RAID Adapter, 16DD
Add-on Card	**AOC-S3908L-H8IR-32DD**	1	Low Profile 12Gb/s 8-Port SAS Internal RAID Adapter, 32DD
Add-on Card	**AOC-S3916L-H16IR**	1	Low Profile 12Gb/s 16-Port SAS Internal RAID Adapter, 240DD
Add-on Card	**AOC-S3916L-H16IR-32DD**	1	Low Profile 12Gb/s 16-Port SAS Internal RAID Adapter, 32DD

Optional Parts List

	Part Number	Qty	Description
Cable	CBL-SAST-1264F-100	-	Slimline x8 (STR) to 2x Slimline x4 (STR), FFC, 64/64CM, 100-Ohm
Cable	CBL-SAST-1265F-100	-	Slimline x8 (STR) to Slimline x4 (STR), 64CM, 100-Ohm
Cable	CBL-SAST-1271F-100	-	Slimline x8 (RE) to 2x Slimline x4 (STR), FFC, 92/71CM, 100-Ohm
Cable	CBL-SAST-1276F-100	-	Slimline x8 (LE) to 2x Slimline x4 (STR), FFC, 76/76CM, 100-Ohm
Cable	CBL-SAST-1296F-100	-	Slimline x8 (LE) to 2x Slimline x4 (STR), FFC, 96/96CM, 100-Ohm
CacheVault Module	BTR-CVPM05	-	Supercap/TFM Unit for cached data protection