Broadcom 9580-8i8e Datasheet



Broadcom 9580-8i8e 05-50076-00 PCIe 4.0 x8 8-port Int & 8-port Ext Tri-Mode Storage Adapter 9580-8i8e

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The MegaRAID 9500 series is the industry's first PCIe Gen 4.0 RAID adapter family, offering PCIe Gen 4.0 host and storage interfaces. The MegaRAID 9580-8i8e adapter, based on the SAS3916 high-port count PCIe 4.0 x8 RAID-on-Chip (RoC), delivers twice the performance of previous generations.

The 9580-8i8e is compatible with existing PCIe SFF-8639 Module (U.2) backplanes, allowing users to boost performance for today's ever increasing bandwidth environments. Coupled with two industry initiatives expanding the deployment of Tri-Mode SerDes technology, the 9580-8i8e is instrumental in getting the most performance and flexibility out of U.3 backplanes:

- SFF-TA-10001 Specification (U.3), which defines a common bay type for SAS, SATA and NVMe
- Universal Backplane Management (UBM), which defines a common backplane control and management framework

With Tri-Mode SerDes technology, the MegaRAID 9580-8i8e can operate in all three modes concurrently, serving NVMe, SAS or SATA drives. The adapter negotiates between speeds and protocols to seamlessly work with any of the three types of storage devices. Tri-Mode support provides a non-disruptive way to evolve existing data center infrastructure.

Features

- Connect up to 240 SAS/SATA devices or 32 NVMe devices per controller
- Fits into rack-mounted servers with low-profile form factor and side-mounted SAS connectors
- Form-factor friendly cable exit
- Support critical, high-bandwidth applications with PCIe 4.0 connectivity
- Balance protection and performance for critical applications with RAID 0, 00, 1, 5, 6, 10, 50 and 60
- JBOD mode with RAID 0, 1, 10 and JBOD for SDS environments
- Add more protection and peace of mind with CacheVault flash cache protection

Specifications

• Part Number: MegaRAID 9580-8i8e

• Cache Memory: 8GB

• Cache Protection: CacheVault CVPM05

• Data Transfer Rates: 12Gb/s SAS and 16GT/s PCIe Gen4 (NVMe) compliant

• Devices Supported: SAS/SATA: 240, NVMe: 32

• External Connectors: 2 x4 SFF-8644

• External Ports: 8

• Generation: 12 Gb/s

• Host Bus Type: x8 lane PCI Express 4.0

• I/O Processor / SAS Controller: SAS3916 12Gb/s SAS Tri-Mode RAID-on-Chip (ROC)

• Internal Connectors: 1 x8 SFF-8654 (SlimSAS)

• Internal Ports: 8

- Management Software: LSI Storage Authority (LSA), StorCLI (Command-Line Interface), HII (UEFI Human Interface Infrastructure)
- MTBF: >3,000,000 hours at 40° C
- Operating Temperature°C: 0°C to 55°C
- OS: Microsoft Windows, VMware vSphere/ESXi, Red Hat Enterprise Linux, SuSE Linux, Ubuntu Linux, Citrix XenServer, CentOS Linux, Debian Linux, Oracle Enterprise Linux, Fedora, FreeBSD
- Physical Dimensions: 167.52 (+/-0.13) mm x 68.77 (+/-0.13) mm
- RAID Levels: 0, 00, 1, 10, 5, 6, 60
- Regulatory Certifications: Australia/New Zealand (AS/NZS CISPR 22), Canada (ICES -003, Class B), Europe (EN55022/EN55024), Japan (VCCI V-3), Korea (RRA no 2013-24 & 25), RoHS compliant, Safety: EN/IEC/UL 60950, Taiwan (CNS 13438), USA (FCC 47 CFR part 15 Subpart B, class B), WEEE

For more information of this MegaRAID 9580-8i8e, please visit Broadcom website: https://www.broadcom.com/products/storage/raid-controllers/megaraid-9580-8i8e