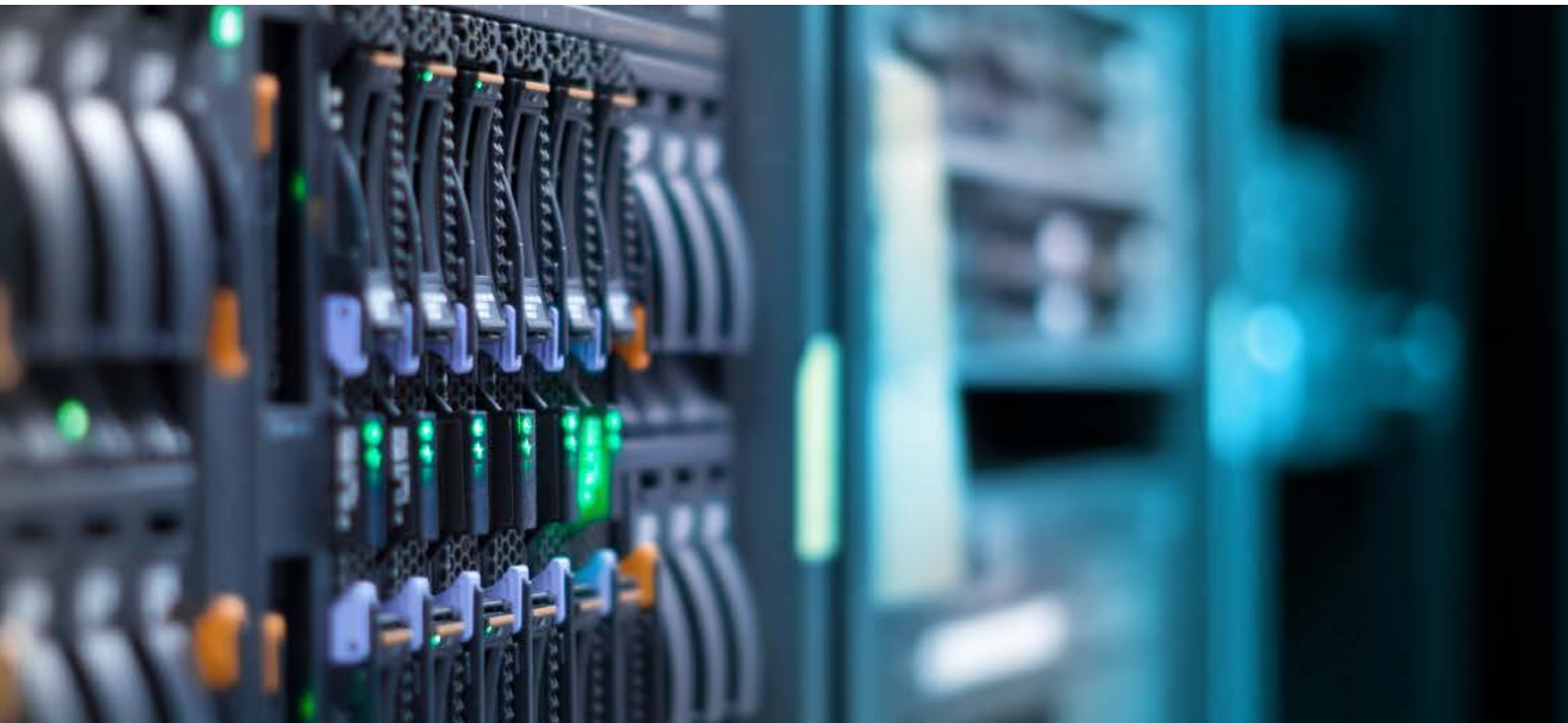




SELECTION GUIDE

# Storage Solutions



[broadcom.com](http://broadcom.com)

## Table of Contents

|                                      |    |
|--------------------------------------|----|
| Host Bus Adapters (HBAs) .....       | 4  |
| MegaRAID Entry (iMR) .....           | 5  |
| MegaRAID (iMR) Boot Protection ..... | 6  |
| MegaRAID .....                       | 7  |
| OCP Adapters .....                   | 8  |
| Cache Protection Options .....       | 9  |
| Tri-Mode Cables .....                | 10 |

The amount and variety of data produced by content-rich Internet, cloud, and enterprise applications poses unprecedented challenges for data centers of all sizes.

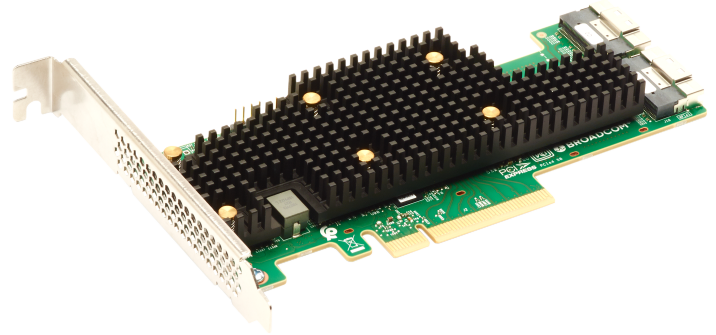
New approaches and technologies are needed to manage this deluge of data: to store it, protect it, and maximize the value from it. These challenges present opportunities to help the world make the most from its data.

Broadcom is focused on helping customers in wireless communications, wired infrastructure, enterprise storage, and industrial and other markets solve their challenges. Broadcom has the industry's broadest portfolio of storage solutions, backed by decades of experience and trusted by the world's leading server and storage suppliers. Broadcom provides the building blocks for storage solutions that help customers understand, prioritize, store, and protect critical data. Whether you need to protect data, power your storage solutions, or deliver the performance needed by critical applications, Broadcom® 24G and 12Gb/s SAS/SATA/NVMe Tri-Mode MegaRAID™ controller cards and host bus adapters (HBAs), and advanced software options are the smart choice.



# Host Bus Adapters (HBAs)

Equip storage solutions with the connectivity needed to meet any scaling needs from the smallest SMBs to the largest data centers. Broadcom HBAs can enable an easy, long-term storage growth strategy in practically any direct-attached storage scenario. Whether solutions use SAS or SATA, NVMe (PCIe), hard disk or flash, or even internal or external storage elements, Broadcom HBAs are designed to create the fabric tying any or all of those components together into a unified storage effort.



## 24G SAS/SATA/NVMe HBA Specifications

| Product Name | MPN (SGL)   | Form Factor Ports | Ports | Connectors                   | Bus Interface    | RAID Levels |
|--------------|-------------|-------------------|-------|------------------------------|------------------|-------------|
| 9700W-32i    | 05-50164-02 | LP-MD2            | 32    | Two SFF-TA-1016              | x16 PCIe Gen 5.0 | JBOD        |
| 9700-16e     | 05-50165-00 | LP-MD2            | 16    | Four SFF-8674                | x8 PCIe Gen 5.0  | JBOD        |
| 9620-16i     | 05-50111-02 | LP-MD2            | 16    | Two SFF-8654                 | x8 PCIe Gen 4.0  | 0/1/10/JBOD |
| 9600-24i     | 05-50111-01 | LP-MD2            | 24    | Three SFF-8654               | x8 PCIe Gen 4.0  | JBOD        |
| 9600-16i     | 05-50111-00 | LP-MD2            | 16    | Two SFF-8654                 | x8 PCIe Gen 4.0  | JBOD        |
| 9600W-16e    | 05-50108-00 | LP-MD2            | 16    | Four SFF-8674                | x16 PCIe Gen 4.0 | JBOD        |
| 9600-16e     | 05-50118-00 | LP-MD2            | 16    | Four SFF-8674                | x8 PCIe Gen 4.0  | JBOD        |
| 9600-8i8e    | 05-50145-00 | LP-MD2            | 16    | One SFF-8654,<br>Two SF-8674 | x8 PCIe Gen 4.0  | JBOD        |

## 12Gb/s SAS/SATA/NVMe HBA Specifications

| Product Name | MPN (SGL)   | Form Factor Ports | Ports | Connectors    | Bus Interface   | RAID Levels |
|--------------|-------------|-------------------|-------|---------------|-----------------|-------------|
| 9500-16i     | 05-50077-02 | LP-MD2            | 16    | Two SFF-8654  | x8 PCIe Gen 4.0 | JBOD        |
| 9500-8i      | 05-50077-03 | LP-MD2            | 8     | One SFF-8654  | x8 PCIe Gen 4.0 | JBOD        |
| 9500-16e     | 05-50075-00 | LP-MD2            | 16    | Four SFF-8644 | x8 PCIe Gen 4.0 | JBOD        |
| 9500-8e      | 05-50075-01 | LP-MD2            | 8     | Two SFF-8644  | x8 PCIe Gen 4.0 | JBOD        |

# MegaRAID Entry (iMR)

MegaRAID SAS/SATA/NVMe entry controller cards provide trusted MegaRAID data protection and reliability for non-business-critical applications. Offering the same management features and OS support as the mainstream MegaRAID lineup at an affordable price point, the entry controllers are great solutions for small and medium businesses (SMB) deploying entry-level server platforms and workstations.

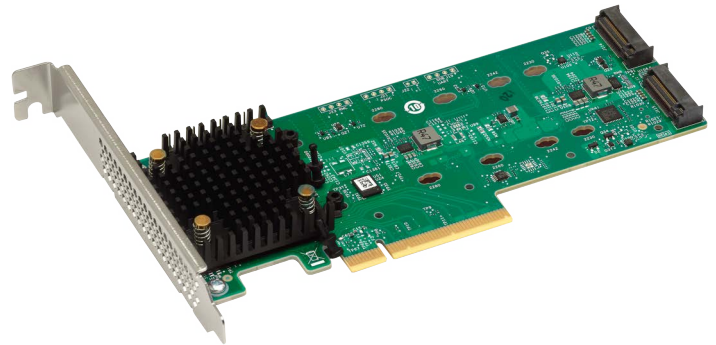


## 12Gb/s SAS/SATA/NVMe MegaRAID Entry (iMR) Specifications

| Product Name | MPN (SGL)   | Form Factor Ports | Ports | Connectors   | Bus Interface   | RAID Levels |
|--------------|-------------|-------------------|-------|--------------|-----------------|-------------|
| 9524-8i      | 05-50170-00 | M.2               | 8     | One SFF-8654 | x4 PCIe Gen 4.0 | 0/1/10/JBOD |
| 9520-8i      | 05-50134-25 | LP-MD2            | 8     | One SFF-8654 | x8 PCIe Gen 4.0 | 0/1/10/JBOD |

# MegaRAID (iMR) Boot Protection

The MegaRAID boot adapter provides a reliable boot solution based on the Broadcom second-generation PCIe Gen 4.0 Tri-Mode SAS3808 I/O controller. The 9520-2M2 adapter supports two M.2 NVMe or SATA drives, enabling users to separate their OS drives from their primary data drives. By taking advantage of the unified Broadcom tool suite, users familiar with the Broadcom standard RAID and HBA controllers can easily integrate the 9520-2M2 adapter into their existing management application suite.



## 12Gb/s SATA/NVMe MegaRAID Entry (iMR) Specifications

| Product Name | MPN (SGL)   | Form Factor Ports | Ports | Connectors | Bus Interface   | RAID Levels |
|--------------|-------------|-------------------|-------|------------|-----------------|-------------|
| 9520-2M2     | 05-50148-03 | LP-MD2            | 2 x4  | Two M.2    | x8 PCIe Gen 4.0 | 0/1/JBOD    |

# MegaRAID

Ensure critical data is protected and available with the most widely deployed RAID data protection architecture. Broadcom enables high-performance storage connectivity and flexible system designs that support any combination of NVMe, SAS and SATA devices with the industry's first hardware RAID adapter with Tri-Mode SerDes technology.

The MegaRAID Tri-Mode storage adapters bring NVMe performance benefits to the storage tier by providing connectivity and data protection that MegaRAID technology has offered for over 20 years for SAS/SATA interfaces.

Broadcom Tri-Mode SerDes technology enables operation of NVMe, SAS or SATA devices in a single drive bay. A single controller can operate in all three modes concurrently servicing NVMe, SAS, or SATA devices. Tri-Mode support provides a non-disruptive way to evolve existing data center infrastructure.



## 24G SAS/SATA/NVMe MegaRAID Specifications

| Product Name | MPN (SGL)   | Form Factor | Ports | Connectors      | Bus Interface    | Cache Memory (GB) | Cache Protection    |
|--------------|-------------|-------------|-------|-----------------|------------------|-------------------|---------------------|
| 9760W-16i    | 05-50164-01 | LP-MD2      | 16    | One SFF-TA-1016 | x16 PCIe Gen 5.0 | IRC               | CVPM33 <sup>a</sup> |
| 9760W-32i    | 05-50164-00 | LP-MD2      | 32    | Two SFF-TA-1016 | x16 PCIe Gen 5.0 | IRC               | CVPM33 <sup>a</sup> |
| 9670W-16i    | 05-50113-00 | FH          | 16    | Two SFF-8654    | x16 PCIe Gen 4.0 | 8                 | CVPM05 <sup>b</sup> |
| 9670-24i     | 05-50123-00 | FH          | 24    | Three SFF-8654  | x8 PCIe Gen 4.0  | 8                 | CVPM05 <sup>b</sup> |
| 9660-16i     | 05-50123-00 | LP-MD2      | 16    | Two SFF-8654    | x8 PCIe Gen 4.0  | 4                 | CVPM05 <sup>b</sup> |

a. CacheVault™ Kit/Power Module included.

b. CacheVault Kit/Power Module sold separately.

## 12Gb/s SAS/SATA/NVMe MegaRAID Specifications

| Product Name | MPN (SGL)   | Form Factor | Ports | Connectors                    | Bus Interface   | Cache Memory (GB) | Cache Protection    |
|--------------|-------------|-------------|-------|-------------------------------|-----------------|-------------------|---------------------|
| 9560-16i     | 05-50077-00 | LP-MD2      | 16    | Two SFF-8654                  | x8 PCIe Gen 4.0 | 8                 | CVPM05 <sup>a</sup> |
| 9560-8i      | 05-50077-01 | LP-MD2      | 8     | One SFF-8654                  | x8 PCIe Gen 4.0 | 4                 | CVPM05 <sup>a</sup> |
| 9580-8i8e    | 05-50076-00 | LP-MD2      | 16    | Two SFF-8654,<br>Two SFF-8644 | x8 PCIe Gen 4.0 | 8                 | CVPM05 <sup>a</sup> |

a. CacheVault Kit/Power Module sold separately.

# OCP Adapters

Broadcom offers a series of PCIe Gen 4.0-based OCP 3.0 storage adapters that utilize Broadcom Tri-Mode SerDes technology. The OCP adapters enable the operation of NVMe, SAS, or SATA devices in a single drive bay, allowing for endless design flexibility. Based on the Broadcom SAS3916 and SAS3816 eight-lane host PCIe to SAS/SATA/PCIe ROC/IOC controllers, the 9562 and 9502 series OCP 3.0 adapters offer both PCIe Gen 4.0 host and PCIe Gen 4.0 storage interfaces.

Providing storage adapters in the OCP 3.0 NIC small form factor (SFF) gives users more flexibility for integrating storage into the server. By using an OCP slot for storage, users can free up a standard PCIe adapter slot for other uses. The adapters support the same feature set and provide the same performance as the standard 95xx PCIe adapters.



## 12Gb/s SAS/SATA/NVMe OCP Adapter Specifications

| Product Name | MPN (SGL)   | Form Factor     | Ports | Connectors   | Bus Interface   | Cache Memory (GB) | Cache Protection    |
|--------------|-------------|-----------------|-------|--------------|-----------------|-------------------|---------------------|
| 9562-16i     | 05-50137-00 | OCP 3.0 NIC SFF | 16    | Two SFF-8654 | x8 PCIe Gen 4.0 | 8                 | CVPM05 <sup>a</sup> |
| 9502-16i     | 05-50137-02 | OCP 3.0 NIC SFF | 16    | Two SFF-8654 | x8 PCIe Gen 4.0 | —                 | —                   |

a. CacheVault Kit/Power Module sold separately.

# Cache Protection Options

RAID caching is a cost-effective way to improve I/O performance by writing data to a controllers' cache before it is written to disk. In write-back mode, data written to cache is vulnerable until it is made permanent on disk. To help avoid the possibility of data loss or corruption during a power or server failure, Broadcom offers the CacheVault flash cache protection module or the battery backup units for MegaRAID SAS controllers cards.

For additional details, view the Cache Protection Options Matrix.



## Cache Protection Product Specifications

| Product Name   | MPN         | Description                      | Compatible Controller Cards                |
|----------------|-------------|----------------------------------|--|
| CVPM33         | 05-50169-00 | Cache Offload Energy Pack        | MegaRAID 9760 Series                       |
| CVPM05         | 05-50039-00 | Cache Offload Energy Pack        | MegaRAID 9560, 9580, 9660, and 9670 Series |
| BBU-BRACKET-05 | L5-25376-00 | Remote Mounting Board for CVPM05 | MegaRAID 9560, 9580, 9660, and 9670 Series |

# Tri-Mode Cables

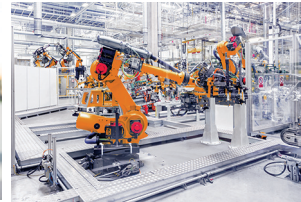
These cables enable connection from 95xx and 96xx series MegaRAID and HBA Tri-Mode adapters to SAS, SATA, and PCIe (NVMe) devices.

## Cable Specifications

| MPN         | Description                                      | Length (m) | Side Bands Supported | To Controller           | To Device/Backplane                                      | Compatible Controllers  |
|-------------|--|------------|----------------------|-------------------------|--|---|
| 05-60015-00 | Cable, x16 1016 to 2x8 1016                      | 1          | Yes                  | x16 SFF-TA-1016         | 2x8 SFF-TA-1016 MCIO                                     | 9760W-16i<br>9760W-32i<br>9700W-32i   |
| 05-60016-00 | Cable, x16 1016 to 2x8 8564 (24G SAS/PCIe Gen 4) | 1          | Yes                  | x16 SFF-TA-1016         | 2x8 SFF-8654 SlimSAS                                     |   |
| 05-60017-00 | Cable, x16 1016 to 4x4 8639                      | 1          | Yes                  | x16 SFF-TA-1016         | 4x4 SFF-8639<br>Direct U.2 Drive Connect                 |   |
| 05-60018-00 | Cable, x16 1016 to 4x4 1009                      | 1          | Yes                  | x16 SFF-TA-1016         | 4x4 SFF-TA-1009<br>Direct EDSFF Drive Connect            |   |
| 05-60019-00 | Cable, x16 1016 to 16x1 SAS/SATA                 | 1          | Yes                  | x16 SFF-TA-1016         | 16x1 SAS/SATA<br>Direct Drive Connect                    |   |
| 05-60001-00 | Cable, x8 8654 to 2x4 8612, AltWiring            | 1          | Yes                  | SFF-8654 (SlimSAS)      | 2x4SFF-8612 OCuLink                                      | 9670-24i<br>9670W-16i<br>9620-16i<br>9600-24i<br>9600-16i<br>9600-8i8e        |
| 05-60002-00 | Cable, x8 8654 to 2x4 8643 (W), SMC              | 1          | Yes                  | SFF-8654 (SlimSAS)      | 2x4 SFF-8643<br>Mini SAS HD NVMe Connection <sup>a</sup> |   |
| 05-60003-00 | Cable, x8 8654 to 2x4 8643, 9402 SAS             | 1          | Yes                  | SFF-8654 (SlimSAS)      | 2x4 SFF-8643<br>Mini SAS HD SAS Connections              |   |
| 05-60004-00 | Cable, x8 8654 to 2x4 8654, 9402                 | 1          | Yes                  | SFF-8654 (SlimSAS)      | 2x4 SFF8654 SlimSAS                                      | 9580-8i8e<br>9560-16i<br>9560-8i<br>9524-8i<br>9520-8i<br>9500-16i<br>9500-8i |
| 05-60005-00 | Cable, x8 8654 to 2xU.2 Direct                   | 1          | Yes                  | SFF-8654 (SlimSAS)      | 2xU.2 Direct Connect                                     |   |
| 05-60006-00 | Cable, x8 8654 to 8xU.3 Direct                   | 1          | Yes                  | SFF-8654 (SlimSAS)      | 8xU.3 Direct Connect                                     |   |
| 05-60007-00 | Cable, x8 8654 to 1x8 8654, 9402                 | 1          | Yes                  | SFF-8654 (SlimSAS)      | 1x8 SFF8654 SlimSAS                                      |   |
| 05-60010-00 | Cable, x8 8654 to 8x1 SATA with Sideband         | 1          | Yes                  | 8 SFF-TA-8654 (SlimSAS) | 8x1 SATA   |   |

a. Cable 05-60002-00 is designed for SuperMicro NVMe enabled backplanes using white Mini SAS HD connectors for the NVMe connections.

# Connecting everything<sup>®</sup>



Broadcom Inc., a Delaware corporation headquartered in Palo Alto, California, is a global infrastructure technology leader built on more than 60 years of innovation, collaboration, and engineering excellence.

With roots based in the rich technical heritage of AT&T/Bell Labs, Lucent, and Hewlett-Packard/Agilent, Broadcom focuses on technologies that connect our world. Through the combination of industry leaders Broadcom, LSI, Broadcom Corporation, Brocade, CA Technologies, Symantec's enterprise security business, and VMware, the company has the size, scope, and engineering talent to lead the industry into the future.

Broadcom is focused on technology leadership and category-leading semiconductor and infrastructure software solutions. The company is a global leader in numerous product segments serving the world's most successful companies.

Broadcom combines global scale, engineering depth, broad product portfolio diversity, superior execution, and operational focus to deliver category-leading semiconductor and infrastructure software solutions so its customers can build and grow successful businesses in a constantly changing environment.



Copyright © 2024–2026 Broadcom. All Rights Reserved. The term "Broadcom" refers to Broadcom Inc. and/or its subsidiaries. For more information, go to [www.broadcom.com](http://www.broadcom.com). All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

April 2, 2026; AV00-0315EN