Smarter technology for all

Servicing the ThinkSystem DM3010H storage system

ES62609 September 2023

Prerequisites

ES71914C - Servicing the ThinkSystem DM Series storage ES42026 - ONTAP 9.7 Administration



Objectives

After completing the course, you will be able to:

- Describe the ThinkSystem DM3010H and its components
- List the features and specifications
- Describe the cable connections for the DM3010H
- Provide an update of the ONTAP software bundle
- Describe the problem determination steps and explain how to troubleshoot issues with the DM3010H
- Describe the FRU replacement procedures
- Describe the software and firmware upgrade procedures

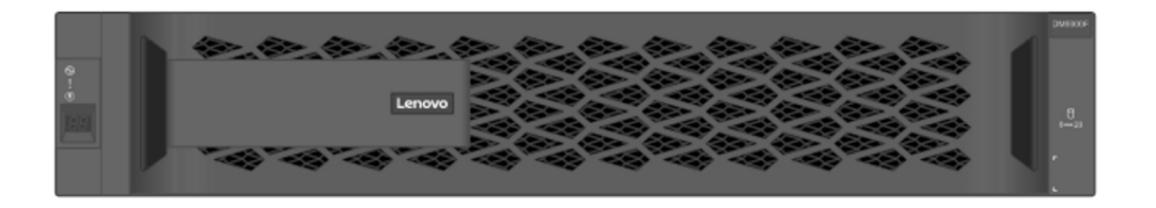


Product overview

Product description and front, rear, and inside views

Product overview

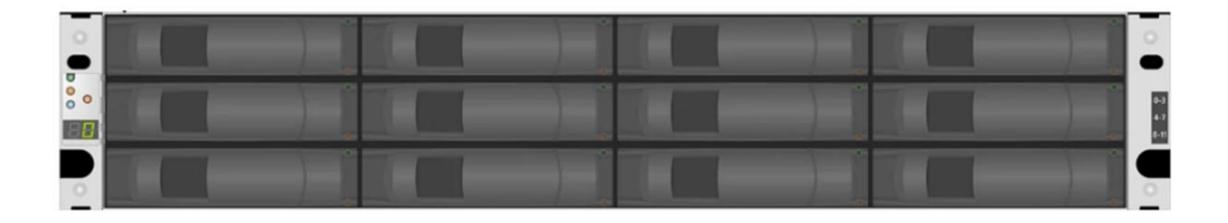
The DM3010H (Model: 7DCV) is an entry-level hybrid storage array designed to replace the DM3000H. It is a 2U storage enclosure with 128 GB of memory (64 GB per controller) supporting twelve 3.5-inch internal drives. Each high-availability (HA) pair can accommodate up to 144 drives. Host interface card connectivity has been upgraded to 32 Gb/FC and 25 GbE, and the cluster interconnect now operates at 25 GbE. The DM3010H runs on ONTAP version 9.13.1P1 or later.





Front view

The front of the DM3010H storage enclosure is equipped with 12 3.5-inch drives.



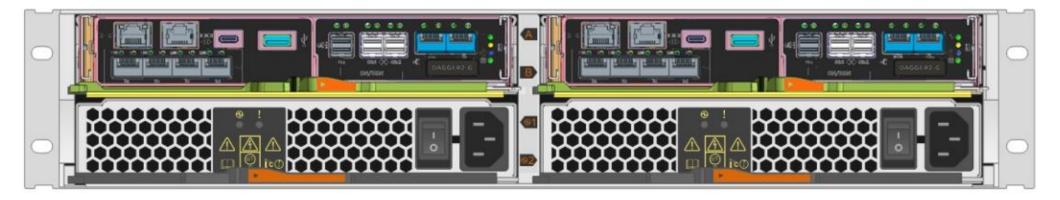


Rear view

The rear of the DM3010H storage enclosure has two controllers and two hotswap redundant power supplies.

Controller A

Controller B



PSU₁

PSU₂

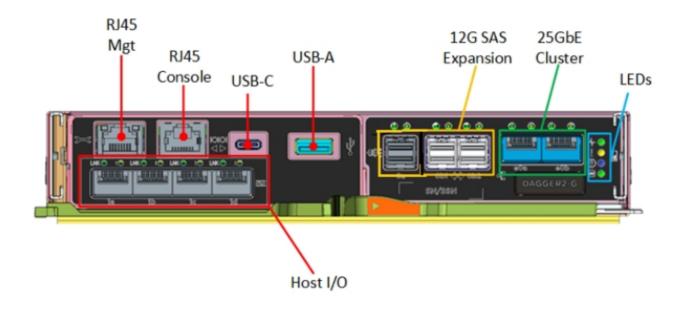


DM3010H controller

Processor and memory (per controller)

CPU: Eight core, 2.2 GHz

Memory: 64 GB

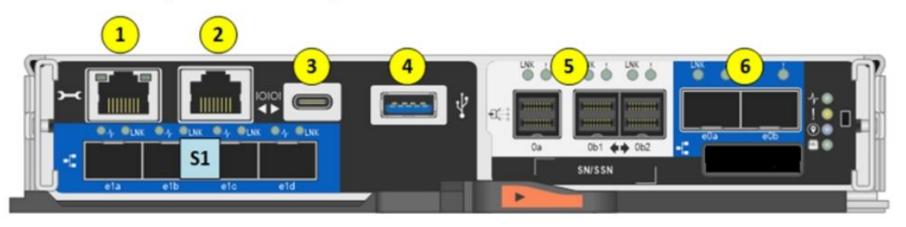


I/O ports (per controller)

- Two RJ45 ports management and console
- One Type-C USB port console
- One Type-A USB port read-only for NetBoot and OS updates
- One mezzanine slot for host connectivity
- Three 12 Gb SAS ports for expansion connectivity
- Two 25 Gb Ethernet ports HA and cluster interconnect

Note: The RJ45 console and USB-C console ports cannot be used simultaneously. Of the three 12 Gb SAS expansion ports, the port on the left is always connected, while the port on the right is not utilized by ONTAP and remains disabled at all times.

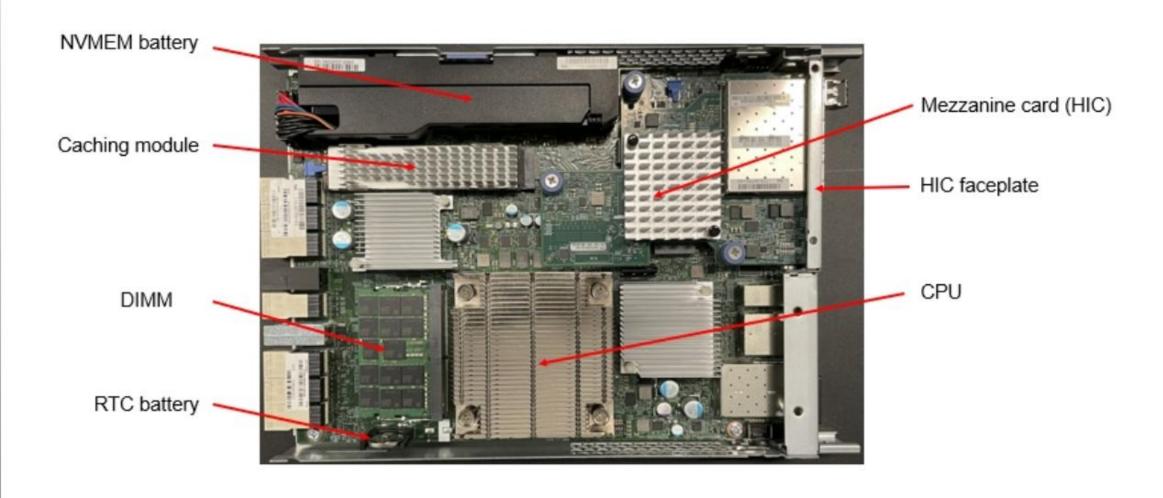
DM3010H components per controller



| Label | Port Name | Connector | Description | Speed |
|-------|--------------|------------|---------------------|------------|
| 1 | ВМС | RJ-45 | Management | 1 Gbps |
| 2 | Management | RJ-45 | Serial console | 115200 bps |
| 3 | CLI | USB-C | Console | |
| 4 | Service | USB-A | Service port | |
| 5 | SAS port | HD miniSAS | Expansion | 12 Gb |
| 6 | Cluster port | SFP28 | Cluster | 25 Gb |
| S1 | HIC port | x16 PCle | Host interface port | |



Controller inside view





Controller inside view – without HIC and faceplate

