

Smarter technology for all

# Servicing the DM3200F, DM5200F, DM5200H, DM7200F, and DM242N storage systems

Lenovo

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Lenovo  
8001 Development Drive  
Morrisville, North Carolina, 27560

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# Preface

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[ServicesEdu@Lenovo.com](mailto:ServicesEdu@Lenovo.com)

# Prerequisites

- [ES71914C - Servicing ThinkSystem DM Series storage systems](#)
- [ES42026 - ONTAP 9.7 Administration](#)

# Objectives

After completing the course, you will be able to:

- Describe the ThinkSystem DM3200F, DM5200F, DM5200H, DM7200F, DM242N and their components
- List the features and specifications
- Describe the cable connections for the DM3200F, DM5200F, DM5200H, DM7200F, and DM242N
- Provide an update of the ONTAP software bundle
- Describe the problem determination steps and explain how to troubleshoot issues with the DM storage systems
- Describe the FRU replacement procedures
- Describe the software and firmware upgrade procedures

# **Product overview: DM3200F, DM5200F, DM5200H, DM7200F, and DM242N**

Product description and front, rear, and inside views

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## DM Series storage products overview

Lenovo has released a new generation of DM storage systems, all featuring a 2U rack-mount storage enclosure with dual active-active controllers. All systems operate on ONTAP version 9.16.1 or later.

The all-flash storage systems are NVMe solutions, and a 2U storage enclosure supports up to 24 2.5-inch NVMe SSD internal drives and is compatible with DM242N NVMe expansion shelves.

Hybrid systems use the same 2U24 NVMe chassis for controllers. They are equipped with two FlashCache drives but no data drives, and they support 2U12, 2U24, and 4U60 SAS expansion shelves.

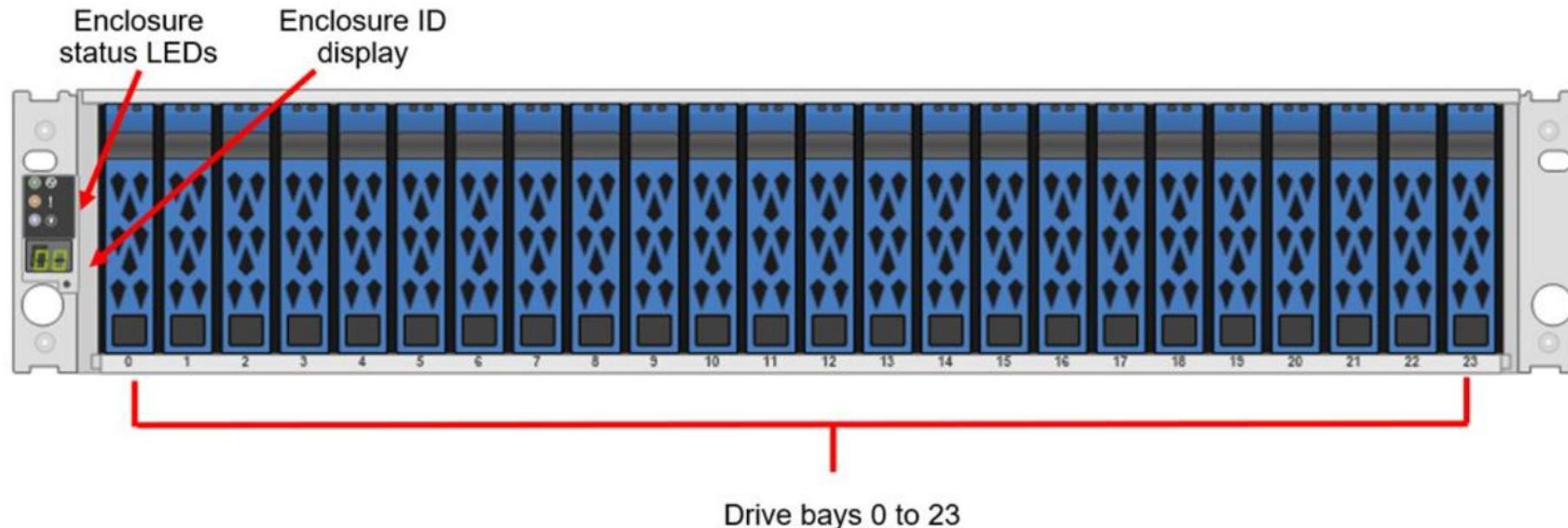
## All-flash storage overview

The DM3200F (machine type: 7DJ0), DM5200F (machine type: 7DJ2), and DM7200F (machine type: 7DJ3) are NVMe all-flash storage arrays. Each 2U storage enclosure supports up to 24 2.5-inch internal NVMe SSD drives. Each controller in a high-availability (HA) pair can connect to a DM242N or DM240N NVMe expansion shelf.



## All-flash storage front view

The front of the DM3200F, DM5200F, and DM7200F 2U storage enclosures (shown here without a bezel) supports up to 24 2.5-inch NVMe SSD drives.



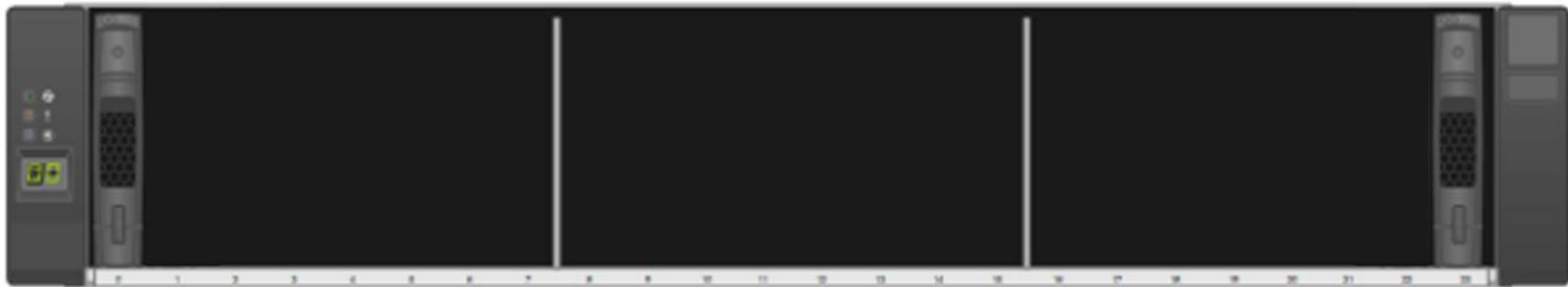
## Hybrid storage overview

The DM5200H (machine type: 7DJ1) is a hybrid storage array. The 2U storage enclosure contains two 2.5-inch FlashCache drives but no data drives. Each controller in a high-availability (HA) pair can connect to a DM120S, DM240S, or DM600S SAS expansion unit.



## Hybrid storage front view

The front of the DM5200H storage enclosure (shown here without a bezel) supports two 2 TB FlashCache drives and no data drives.



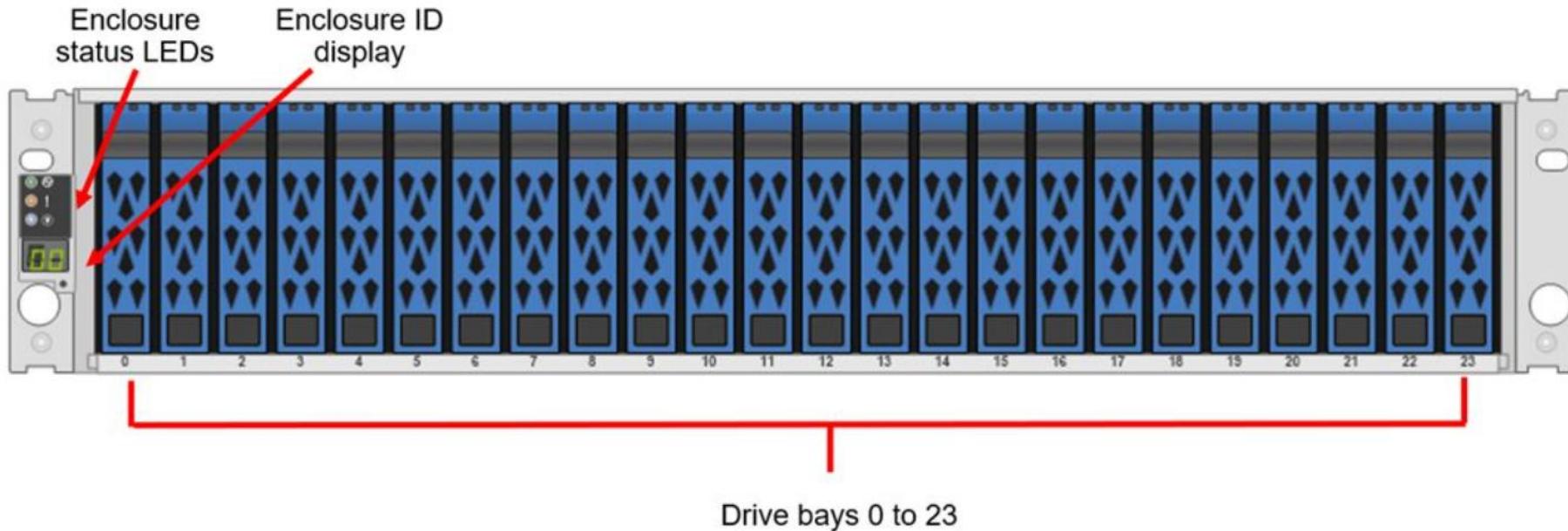
## Rear view

The rear of the DM3200F, DM5200F, DM5200H, and DM7200F storage systems is shown here with two controllers. Each controller supports one 1600 W hot-swap redundant power supply and four I/O slots.



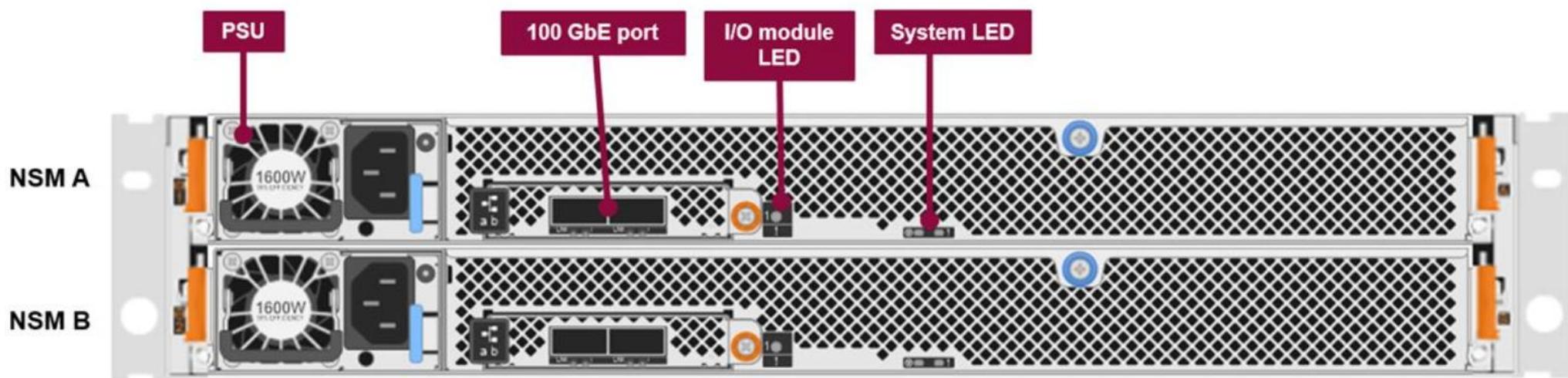
## DM242N expansion front view

The front of the DM242N expansion shelf (shown here without the bezel) supports up to 24 2.5-inch NVMe SSD drives.



## DM242N expansion rear view

The rear of the DM242N expansion shelf is shown here with two NVMe switch modules (NSM). Each NSM supports one 1600 W hot-swap redundant power supply and one 100 GbE I/O module.



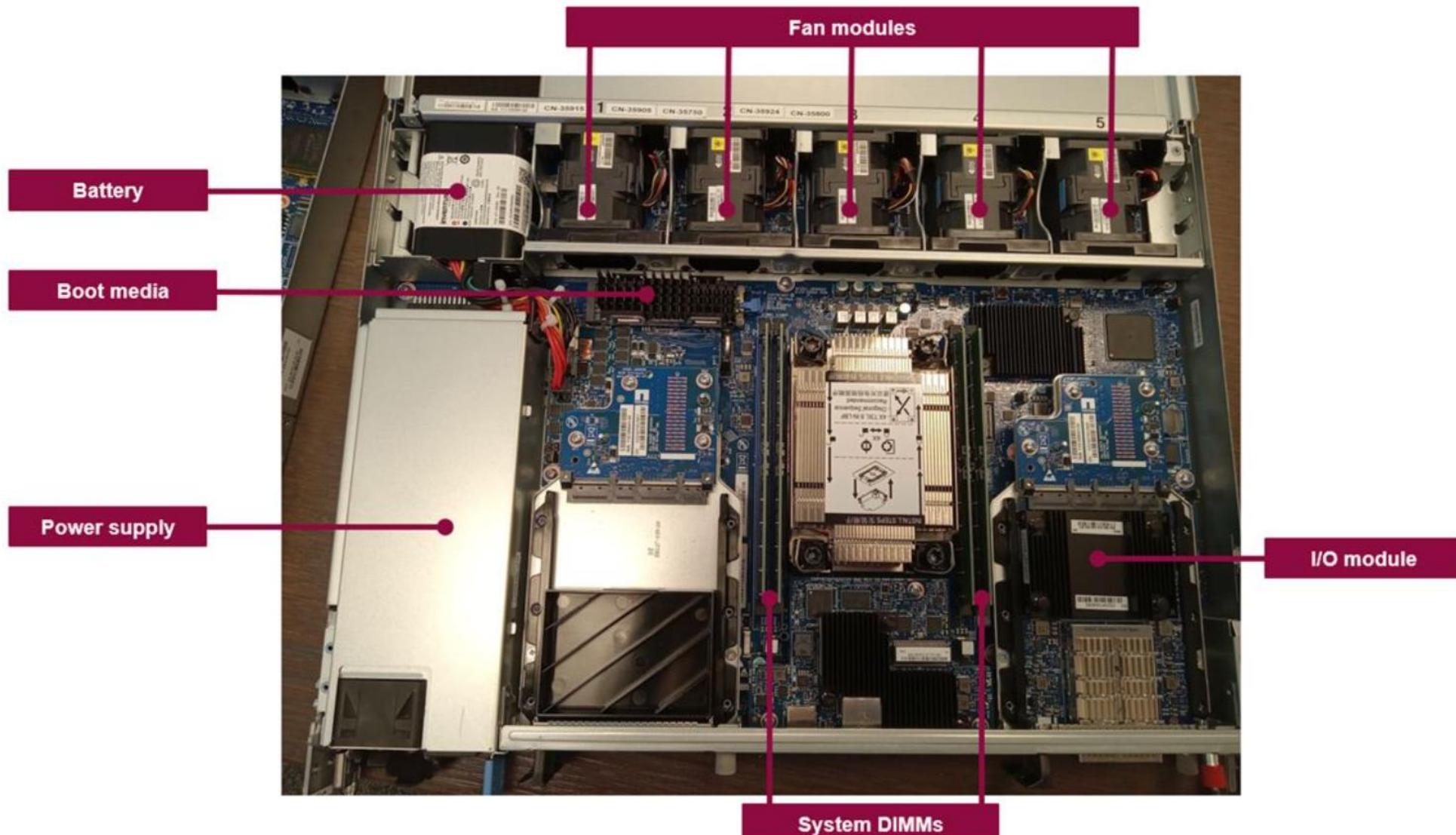
# Controller ports



No	Port address	Description	Protocols	Port icon	Port type
1	e0m/BMC	Management	Ethernet 10/100/1000 Mb		RJ45
2	Serial interface	Serial console	RS-232 11520 bps		RJ45
3	Serial interface	USB serial console	RS-232 11520 bps		USB-C
4	USB	Netboot & OS update	USB 3.0		USB-A

**Note:** The RJ45 serial port and USB-C connector serial port cannot be used simultaneously.

# Controller inside view



# DM242N NSM inside view

