

Smarter technology for all

Servicing the DG5200, DG7200, and DG242N storage systems

ES62719

April 2025

Lenovo

© Copyright Lenovo 2025

Lenovo

8001 Development Drive

Morrisville, North Carolina, 27560

Lenovo reserves the right to change product information and specifications at any time without notice. This publication might include technical inaccuracies or typographical errors. References herein to Lenovo products and services do not imply that Lenovo intends to make them available in all countries. Lenovo provides this publication as is, without warranty of any kind, either expressed or implied, including the implied warranties of merchantability or fitness for a particular purpose. Some jurisdictions do not allow disclaimer of expressed or implied warranties. Therefore, this disclaimer may not apply to you.

Data on competitive products is obtained from publicly obtained information and is subject to change without notice. Contact the manufacturer for the most recent information.

Lenovo and the Lenovo logo is a trademark or registered trademark of Lenovo Corporation or its subsidiaries in the United States, other countries, or both. Intel and the Intel logo is a trademark or registered trademark of Intel Corporation or its subsidiaries in the United States, other countries, or both. Other names and brands are the property of their respective owners.

The following terms are trademarks, registered trademarks, or service marks of Lenovo:

Access Connections, Active Protection System, Automated Solutions, Easy Eject Utility, Easy-Open Cover, IdeaCentre, IdeaPad, ImageUltra, Lenovo Care, Lenovo (logo), Lenovo, MaxBright, NetVista, New World. New Thinking, OneKey, PC As A Service, Rapid Restore, Remote Deployment Manager, Rescue and Recovery, ScrollPoint, Secure Data Disposal, Skylight, Software Delivery Center, System Information Gatherer, System Information Reporter, System Migration Assistant, System x, ThinkAccessories, ThinkAgile, ThinkCentre, ThinkDisk, ThinkDrive, ThinkLight, ThinkPad, ThinkPlus, ThinkScribe, ThinkServer, ThinkStation, ThinkStore, ThinkSystem, ThinkVantage, ThinkVision, ThinkWorld, TopSeller, TrackPoint, TransNote, UltraBase, UltraBay, UltraConnect, UltraNav, VeriFace.

For more information, go to: <https://www.lenovo.com/us/en/legal/copytrade/>.

The terms listed for the following partners are the property of their respective owners:

AMD Intel IBM Microsoft NVIDIA

The content in this document is subject to the existing non-disclosure agreement held between Lenovo and its Authorized Service Providers.

Preface

This document may not be copied or sold, either in part or in whole, without permission from the Lenovo ISG Services Education team.

Current release date: April 2025

Current release level: 1.0

The information in this publication is current as of the date of the latest revision and is subject to change at any time without notice.

To provide feedback or receive more information about this course, send an email to:

ServicesEdu@Lenovo.com

Prerequisites

- [ES62600 - Servicing the ThinkSystem DG Series storage systems](#)
- [ES42026 - ONTAP 9.7 Administration](#)

Objectives

After completing the course, you will be able to:

- Describe the ThinkSystem DG5200, DG7200, DG242N, and their components
- List the features and specifications
- Describe the cable connections for the DG5200, DG7200, and DG242N
- Provide an update of the ONTAP software bundle
- Describe the problem determination steps and explain how to troubleshoot issues with the DG storage systems
- Describe the FRU replacement procedures
- Describe the software and firmware upgrade procedures

Product overview: DG5200, DG7200, and DG242N

Product description and front, rear, and inside views

Lenovo

DG Series storage products overview

Lenovo has released a new generation of DG 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 QLC NVMe SSD internal drives and is compatible with DG242N NVMe expansion shelves.

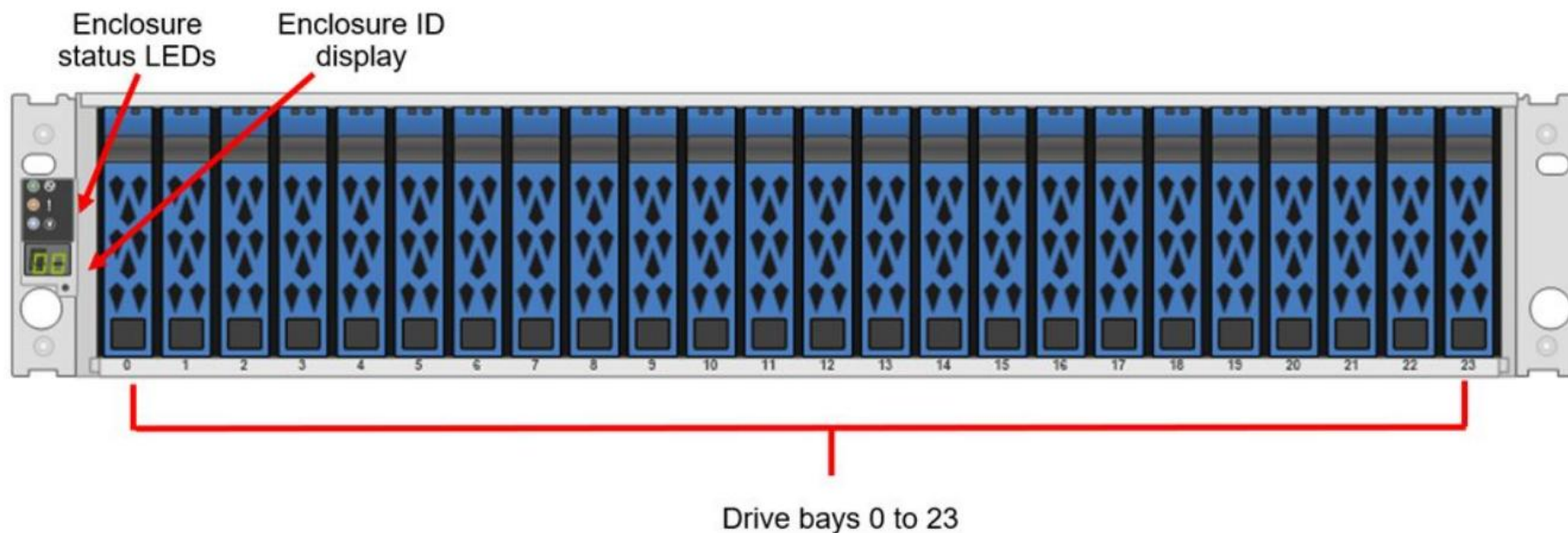
All-flash storage overview

The DG5200 (machine type: 7DHY) and DG7200 (machine type: 7DHZ) are NVMe all-flash storage arrays. Each 2U storage enclosure supports up to 24 2.5-inch internal QLC NVMe SSD drives. Each controller in a high-availability (HA) pair can connect to a DG242N (machine type: 7DJ9) QLC expansion shelf.



Storage front view

The front of the DG5200 and DG7200 2U storage enclosures (shown here without a bezel) supports up to 24 2.5-inch QLC NVMe SSD drives.



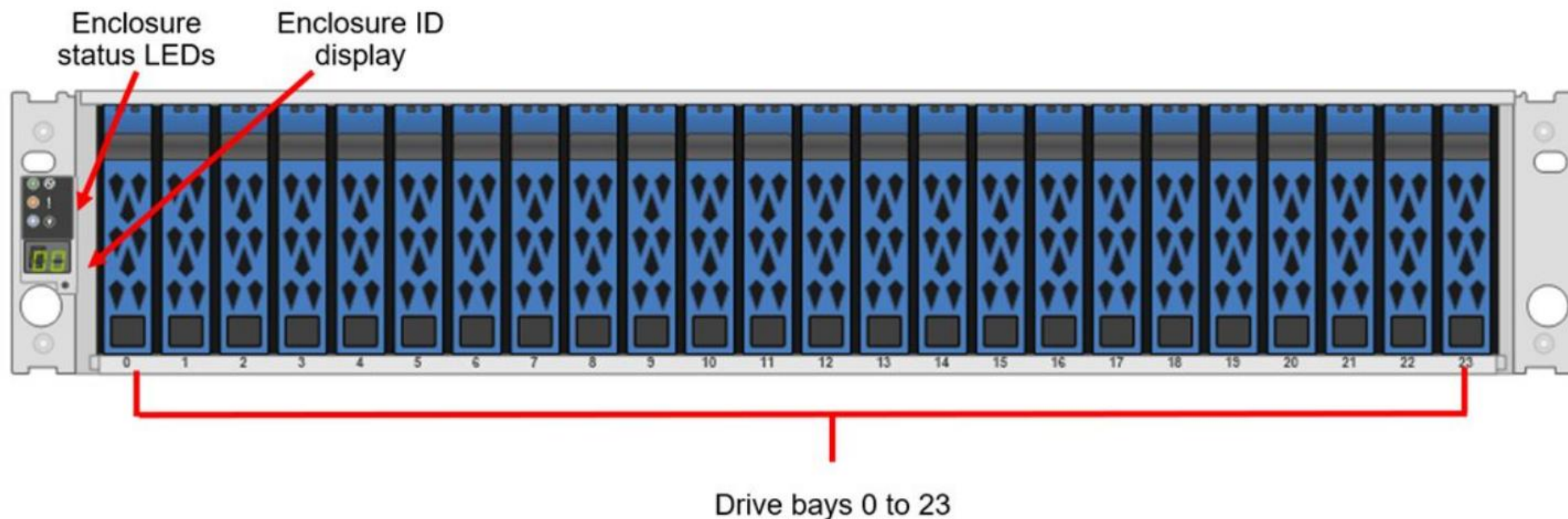
Storage rear view

The rear of the DG5200 and DG7200 storage systems is shown here with two controllers. Each controller supports one 1600 W hot-swap redundant power supply and four I/O slots.



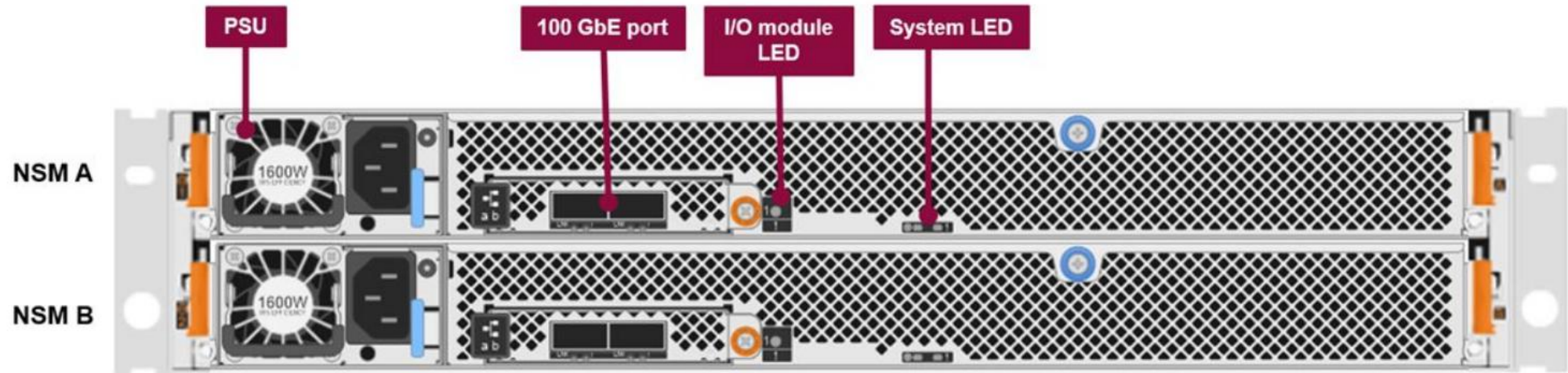
DG242N expansion front view

The front of the DG242N expansion shelf (shown here without the bezel) supports up to 24 2.5-inch QLC NVMe SSD drives.

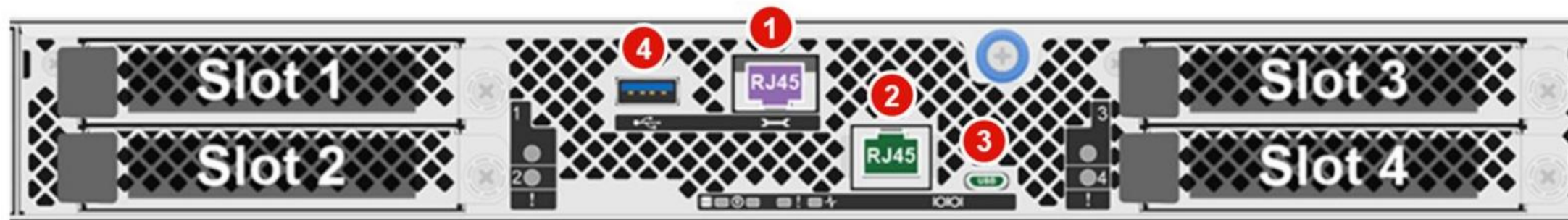





DG242N expansion rear view

The rear of the DG242N 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.



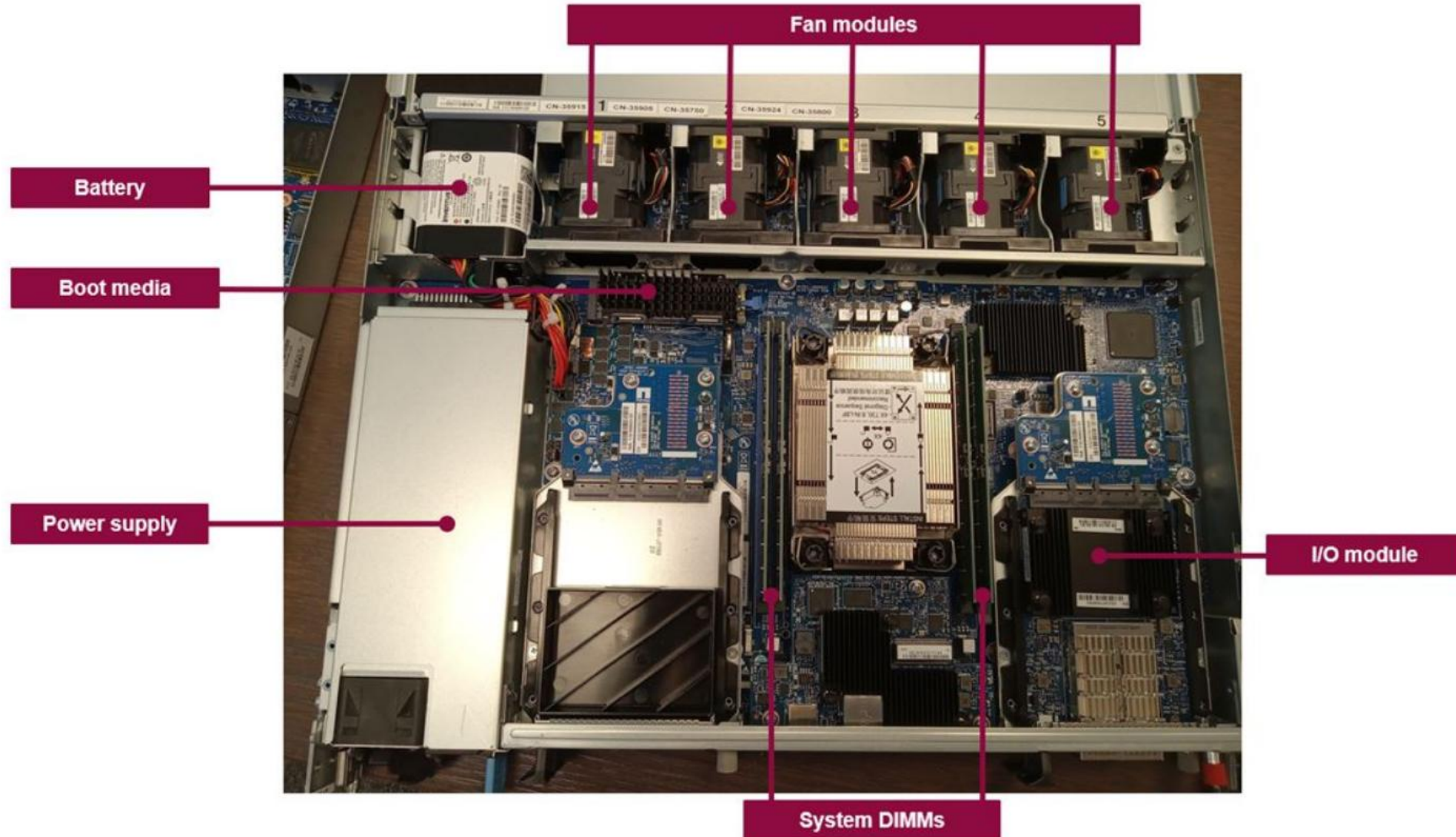
Controller ports



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	<u>Netboot</u> & 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



DG242N NSM inside view

