

2U24 Flash Storage Platform

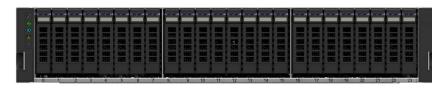
Features

- Flash storage platform with up to 24 Ultrastar[®] 2.5" SAS SSD modules or 24 CloudSpeed[™] Gen II SATA SSD modules
- Available SSD capacities include 7.68TB, 3.84TB, 1.92TB, and 960GB
- Start with as little as 12 SSDs; upgrade one additional module at a time
- 2 rack units
- Up to six 12Gb/s SAS3 connections to host
- Up to 4.7M IOPS, 23 GB/s; <1ms latency
- Easy maintenance of SSD modules. Front accessible and hot swappable.



Flash Storage Platform for Software-Defined Storage

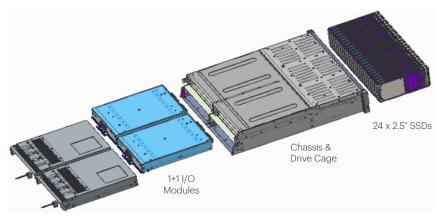
The 2U24 Flash Storage Platform is a key element of next generation software-defined storage (SDS) systems. The Platform balances performance with capacity, delivering high IOPS, low latency at up to 184TB capacity. It also offers flexibility to improve compute-to-capacity ratio by decoupling available storage from CPU resources.



Designed for Enterprise and the Cloud

The 2U24 Flash Storage Platform addresses the demanding storage needs of large enterprises and cloud service providers who require dense, shared flash storage. The Platform offers distinct features designed for today's data centers, such as:

- Enterprise-class high availability: hot swappable components including SSDs, I/O Modules, PSUs (integrated fans)
- Fully upgradeable: upgradeable firmware enables drive technology and capacity updates without impacting applications
- Support enterprise workloads including database, virtualization and scale-out configurations



1+1 Power Supplies

Figure 1. Platform Layout

One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drives, the operating system and other factors.



2U24 Flash Storage Platform

Platform Models, Capacity and Performance

| Model Number | 1ES0243 | 1ES0241 | 1ES0242 | 1ES0240 | 1ES0107 | 1ES0110 | 1ES0108 | 1ES0111 | |
|-----------------------|---------|-------------------------|---------|--------------|-----------------------|-------------|-----------|-------------|--|
| SSD Type | SATA | SATA, 960GB | | SATA, 1.92TB | | SAS, 3.84TB | | SAS, 7.68TB | |
| Endurance | | Read-Intensive, 0.6DW/D | | | Read-Intensive, 1DW/D | | | | |
| # of Drives | 12 | 24 | 12 | 24 | 12 | 24 | 12 | 24 | |
| Capacity (TB) | 11.52 | 23.04 | 23.04 | 46.08 | 46.08 | 92.16 | 92.16 | 183.32 | |
| 4KB Random Read IOPS | \$ | 735,000 | | | 3,000,000 | 4,700,000 | 3,000,000 | 4,700,00 | |
| 4KB Random Write IOPS | ; | 312,000 | | | 336,000 | 672,000 | 264,000 | 528,000 | |
| Seq Read BW (MB/s) | | 5,700 | | | 21,350 | 23,000 | 17,800 | 23,000 | |
| Seq Write BW (MB/s) | | 4,600 | | | 12,350 | 23,000 | 12,100 | 23,000 | |

Based on internal testing results or projections. Results and performance may vary according to system adoption, configuration and broader system architecture.

Specifications

| Max. Drives | 24 x 2.5" SSDs | | | |
|--|---|--|--|--|
| Drive Interface | 12Gb/s SAS or 6Gb/s SATA | | | |
| Available SSD Capacities | • SAS (1DW/D): 3.84TB, 7.68TB • SATA (0.6DW/D): 960GB, 1.92TB | | | |
| Host Interface | 1+1 I/O Modules (IOM), 3 Mini-SAS HD ports per IOM | | | |
| Management | SCSI Enclosure Services | | | |
| LED Indicators | Front/Rear: Power, ID, Fault | | | |
| | Drive: Activity, Fault | | | |
| Physical Dimensions Height: Width: Depth: | 87.4mm (3.44″) 446mm (17.56″) 536mm (21.1″) | | | |
| Weight | Product without SSDs: 18.3kg (40.3lbs) Product with 24 SSDs: 23.7kg (52.3lbs) | | | |
| Power | • 1+1 600W, 80+ Gold • 90-264V AC input, auto ranging, 47-63Hz | | | |
| Cooling | 3 fan modules per power supply, front-to-rear system cooling Fan speed turning via system management interface | | | |
| Environmental Operating Temperature: Non-op Temperature: Humidity: Operating Altitude: Sound Power: | 5 to 40°C -40 to 60°C 5 to 85% relative humidity 40°C @ 3,000ft < 7.2Bels @ 23±2°C | | | |
| Serviceability | Hot-swappable IOM, power supply and SSDs | | | |

Contact

Western Digital Corporation

5601 Great Oaks Parkway

San Jose, CA 95119 USA

Sales Inquiries North America: salesNA@hgst.com Europe/Middle East/Africa (EMEA): salesEMEA@hgst.com Asia/Pacific: salesAP@hgst.com Japan: salesJP@hgst.com Information & Technical Support http://www.hgst.com/support/platforms-support Partners First Program channelpartners@hgst.com www.hgst.com/partners

© 2017 Western Digital Corporation or its affiliates. All rights reserved. Produced 5/17. Western Digital, the HGST logo, Ultrastar and CloudSpeed are registered trademarks or trademarks of Western Digital Corporation or its affiliates in the U.S. and/or other countries. All other marks are the property of their respective owners.