



# 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.



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## 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

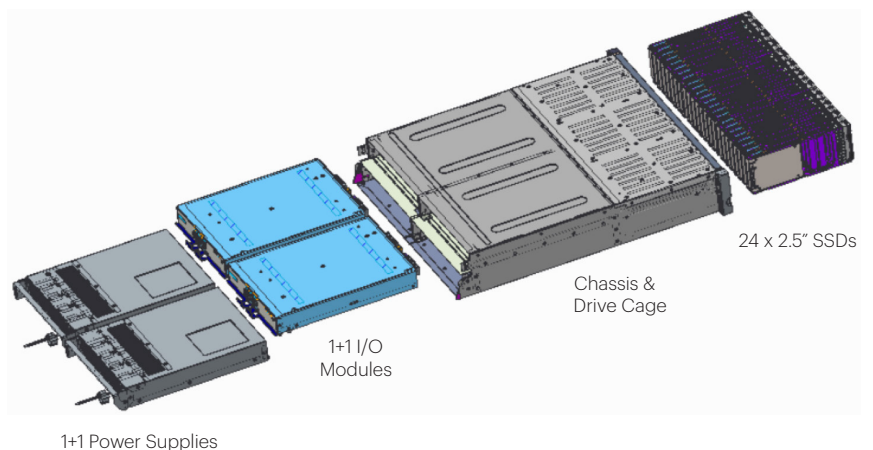


Figure 1. Platform Layout



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## Platform Models, Capacity and Performance

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

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

## Specifications

<b>Max. Drives</b>	24 x 2.5" SSDs
<b>Drive Interface</b>	12Gb/s SAS or 6Gb/s SATA
<b>Available SSD Capacities</b>	<ul style="list-style-type: none"> <li>SAS (1DW/D): 3.84TB, 7.68TB</li> <li>SATA (0.6DW/D): 960GB, 1.92TB</li> </ul>
<b>Host Interface</b>	1+1 I/O Modules (IOM), 3 Mini-SAS HD ports per IOM
<b>Management</b>	SCSI Enclosure Services
<b>LED Indicators</b>	Front/Rear: Power, ID, Fault Drive: Activity, Fault
<b>Physical Dimensions</b>	Height: 87.4mm (3.44") Width: 446mm (17.56") Depth: 536mm (21.1")
<b>Weight</b>	<ul style="list-style-type: none"> <li>Product without SSDs: 18.3kg (40.3lbs)</li> <li>Product with 24 SSDs: 23.7kg (52.3lbs)</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>1+1 600W, 80+ Gold</li> <li>90-264V AC input, auto ranging, 47-63Hz</li> </ul>
<b>Cooling</b>	<ul style="list-style-type: none"> <li>3 fan modules per power supply, front-to-rear system cooling</li> <li>Fan speed turning via system management interface</li> </ul>
<b>Environmental</b>	Operating Temperature: 5 to 40°C Non-op Temperature: -40 to 60°C Humidity: 5 to 85% relative humidity Operating Altitude: 40°C @ 3,000ft Sound Power: < 7.2Bels @ 23±2°C
<b>Serviceability</b>	Hot-swappable IOM, power supply and SSDs

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