

OneStor™ AP-2584

Data Sheet

Traditional storage solutions scale-up capacity and can quickly run into performance bottlenecks at the storage controller. There is a clear and present need for storage to scale-out its performance in a way that is balanced with capacity increases. Big Data analysis, converged infrastructure, virtual server integration and cloud computing are examples of applications that are driving scale-out requirements. These applications show no signs of stopping storage growth and can even demand more as they replicate data for analysis or protection.

Traditional systems consume large amounts of data center resources – energy and floor space - and prevent companies from easily adapting their IT infrastructure as needs change. Scale-out systems provide greater flexibility but can still have a large impact on the use of data center resources as capacity increases. To help customers face these growing challenges, OEMs need to move to higher density storage designs that include integrated application processing to reduce the impact on the data center while taking on the most demanding of applications. The serverization of application server processing and storage enables scale-out storage architectures and reduces the stress on today's data center.

Seagate introduces the OneStor AP-2584, a new ultra-dense storage architecture that improves rack utilization by as much as 67% giving up to three petabytes of storage in a standard data center rack using today's 6TB drives* (8TB drives available in 1H15). OneStor AP-2584 supports up to 84 3.5 inch hard disk or solid state disk drives in 5U (8¾ inches) of standard rack space, leverages the standard OneStor modular form factor for I/O modules or embedded server modules, reduces cable complexity for greater serviceability and availability of rack scale solutions and includes a unified management API.

Ultra Dense Application Platform

The OneStor AP-2584 embedded storage platform is the ultra high density application platform variant of the OneStor SP-2584 using single or dual embedded server modules. Inclusion of an embedded server module offers server-level processor capabilities for on-board scale-out storage applications, application power protection, and storage and data network connections in a single ultra high density storage platform. When paired, embedded server modules can deliver more scale-out processing and/or can be configured for high availability. There are multiple OneStor embedded sever module configurations to choose from to balance cost and performance.





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Robust System Management

OneStor AP-2584 includes Seagate's Unified Systems Management (USM) API, providing a standard software interface for access to active sensors, management of server and enclosures services and automated policy based actions for enterprise level reliability, availability and serviceability.

USM capabilities are available across the OneStor family of products allowing OEMs to design management and diagnostic systems that are universal across their product lines. This simplifies development and testing and enables OEMs to quickly bring new storage solutions to market.

With USM, OEMs can build enterprise storage solutions that include persistent error logging, monitoring, and rich fault diagnosis and resolution capabilities. USM is embedded software tightly coupled to OneStor hardware high availability features such as dual redundant PSUs, N+1 cooling modules, dual I/O modules and dual data paths to all drives.

Generate Energy Efficiency Savings

OneStor AP-2584 minimizes environmental impact through advancements in Seagate technology including: individual drive power control, advanced adaptive cooling technology and 80% plus (optional 90% plus) efficient power conversion at 50% load. Additionally, OneStor is designed to meet or exceed stringent worldwide requirements for recycling and environmental friendliness.

Features & Benefits

- Foundation for scale-out storage architectures
- Single or Dual pluggable embedded server modules
- Ultra Dense design providing over 3PB in a single datacenter rack
- Up to 84 SAS and SATA hard disk or solid state drives per enclosure
- Enterprise level reliability, availability and serviceability
- Option for integrated power protection
- Certified 80 PLUS Gold (optional 90 PLUS Platinum) efficient power
- Adaptive cooling technology



OneStor™ AP-2584

Specifications	
General Information	
Product Code	AP-2584-2SBB-01
Controller Specification	
Controller	OneStor™ Application Platform, AP-TL-1
Altitude, Power and Temperatures	
Operational Altitude	0 to 3,000m (0 to 10,000')
Non-operational Alt.	-300 to 12,192m (-1000 to 40,000')
Voltage	200-240V AC
Frequency	60/50Hz
Power Conversion Efficiency	92% @ 240V (50% load)
Temperature Range	5° to 35°C (de-rate 5°C above 2,133m (7,000'))
Humidity	20% to 80% non-condensing
Disk Drives	
Device Types Supported	Dual ported 6Gb/s SAS and SATA drives (via SAS to SATA bridge interposer)
Max Drives per Enc.	84 (For a full list of supported drives, please contact your account or sales manager.)
System Availability	
Hot Swappable Components	Disk drives, power supply units (PSUs), cooling modules and SBB I/O Modules
Dimensions (see quick install guide for additional rack installation requirements)	
Height	220mm (8.65") 5 EIA units
Width	483mm (19") IEC rack compliant
Depth	933mm (36.75")
Weight	128Kg (282lbs) with drives
Shock and Vibration	
Operational Shock	5g 10ms ½ Sine
Operational Vibration	Random 0.21g RMS 5-500Hz
Non-op. Shock	30g 10ms ½ Sine
Non-op. Vibration	Random 1.04g RMS 2-200Hz
Relocation Vibration	Swept Sine 0.3g 2-200Hz
Acoustics	Sound Power Operating ≤ 8.0 Bels LWAd @ 23°C
Approvals	
EMC	FCC pt15B Class A, EN55022 Class A, CISPR 22 Class A, EN 55024, CISPR24, EN61000-3-2/3, CNS13438
Safety	EN/IEC/UL 60950-1, CNS14336 CB report: CE, UL, cUL, FCC, BSMI, VCCI, CCC (PSU only)
Warranty Information	
Enclosures with drives	Please contact Seagate for detailed warranty information.
Environmental Standards	
Disk enclosures 80 PLUS® Gold Certified power efficiency with adaptive cooling, or option for 90 PLUS® Platinum Certified power efficiency with adaptive cooling technology.	
Seagate is registered through BSI to the international standard for environmental management systems ISO 14001:2004 and holds certificates for each of its three manufacturing locations at Havant UK, Guadalajara Mexico and Seremban Malaysia.	

Take the Next Step:

To learn more about Seagate® Cloud Systems and Solutions, visit www.seagate.com/oem

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