FUJITSU

Data Sheet
Fujitsu Storage ETERNUS AX4100 All-flash Array

ETERNUS AX

FUJITSU Storage ETERNUS AX series is a collection of unified and massively scale-out all-flash storage systems, designed to enable your digital transformation by offering superior flexibility, continuous availability and seamless cloud-connected data management in Hybrid IT environments. Powered by industry leading NVMe technologies, the ETERNUS AX storage systems accelerate your applications while seamlessly managing your data on the edge, core and the cloud to keep your data available, protected and secure.

ETERNUS AX4100

Fujitsu Storage ETERNUS AX4100 is a midrange all-flash storage system with high scalability and faster connectivity. It offers full end-to-end NVMe support by combining low-latency NVMe solid-state drives (SSDs) and NVMe over Fibre Channel (NVMe/FC) connectivity to deliver optimal performance for the most demanding workloads. Powered by best-in-class data management software, ETERNUS AX4100 delivers accelerated application performance, continuous availability, and seamless cloud-connected data management in Hybrid IT Infrastructures. ETERNUS AX4100 is also available as a dedicated, all-flash SAN solution for mission-critical applications. It provides a simplified and dedicated SAN experience with availability, consistent and predictable performance, and cloud connectivity

Features & Benefits

Main Features	Benefits
Flexible and future-proof storage	■ Unified data services across SAN and NAS environments, which can scale capacity and performance non-disruptively and also seamlessly cluster different ETERNUS AX and ETERNUS HX systems.
Seamless cloud-connected data management	■ Consolidate data management across on-premise storage and cloud in Hybrid IT Infrastructures, along with effortless integration with multiple public clouds – AWS, Microsoft Azure and Google Cloud.
Accelerate business applications with end-to-end NVMe	■ Speed up your critical applications with end-to-end NVMe all-flash array offering ultra-low latency and increased data throughput.
Continuous availability without compromise	■ Best-in-class integrated and application-consistent data protection software to prevent data loss and accelerate recovery with space-efficient snapshots, synchronous and asynchronous replication.
Maximize storage efficiency	■ Innovative data reduction technologies provide incremental space savings to efficiently meet SLAs in hybrid IT environments with secure multitenancy and adaptive quality of service (QoS). Simplify and speed up day-to-day storage management with ONTAP System Manage and optimize your storage infrastructure with predictive analytics using Active IQ.

Technical details

General system information

	Base
No. of controllers	NAS:2-24Node (HA Pair x12)
	SAN:2-12Node (HA Pair x6)
No. of host interfaces	24 Port [FC (16, 32Gbit/s)]
	24 Port [NVMe-FC (32Gbit/s)]
	12 Port [iSCSI (25, 40, 100Gbit/s)]
	32 Port [iSCSI (10Gbit/s)]
	16 Port [iSCSI (1, 10GBase-T)
	12 Port [Ethernet (25, 40, 100Gbit/s)]
	32 Port [Ethernet (10, 25Gbit/s)]
	16 Port [Ethernet (1, 10GBase-T)
Supported RAID levels	4, 6, TEC
Host Interfaces	Fibre Channel (32Gbit/s, 16Gbit/s, 8Gbit/s)
	iSCSI (100Gbit/s, 40Gbit/s, 25Gbit/s, 10Gbit/s)
	Ethernet (100Gbit/s, 40Gbit/s, 25Gbit/s, 10Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	4,096
Maximum Storage Capacity (HA Pair)	14.6 PB
Maximum Storage Capacity(NAS)	176.2 PB
Maximum Storage Capacity (SAN)	88.1 PB
Drive Type	2.5-inch, SSD (30.6TB / 15.3TB / 7.6TB / 3.8TB / 960GB)
	2.5-inch, SSD (FIPS) (3.8TB)
	2.5-inch, NVMe SSD (3.8TB / 1.9TB)
	2.5-inch, NVMe SSD (SED) (15.3TB / 7.6TB / 3.8TB / 1.9TB)
	2.5-inch, NVMe SSD (FIPS) (3.8TB)
Drive interface	12G SAS(MiniSAS HD); 100GbE (QSFP)
Back-end disk connectivity	8/HA Pair
Max. no. of LUNs	16,384
Max. LUN capacity	16 TB
Max. no. of copy generations	1,023
Deduplication	Yes
Compression	Yes
Compaction	Yes
Note	AX4100 is also available as a dedicated, all flash SAN solution with additional specifications

Performance management

Quality of Service	Yes
Operation Management Client	Google Chrome 65.0, Microsoft Internet Explorer 11.0, Mozilla Firefox 59.0

Continuity management

Metro cluster	Yes
Remote Copy functionality	Synchronous and asynchronous
Note	The product may in connection with and depending on the specific configuration include elements to support time- and performance-critical applications, however high availability (e.g., 99.9999%) and failsafe performance is not a standalone product feature. If and to the extent the product is to be used in such business-critical environments, it is within the sole responsibility of the user to set up the specific additional technical features (e.g., Storage Cluster), redundancies, and operational conditions as required to ensure such high availability or failsafe performance.

Information security management

Data confidentiality	HTTPS (SSL), SSH, iSCSI (CHAP, Bidirectional CHAP)
Data integrity	Rebuild, Data Block Guard, Cache Protection, Disk Patrol, HDD Shield, Data Encryption, CheckSum: BCS/AZCS, Pool Diagnosis (CLI Only), Copy back less

Information security management

Note	The properties of the product provide a baseline for product security and therefore end-customer IT security. However, these properties are not sufficient on their own to protect the product from all existing threats, such as intrusion attempts, data exfiltration and other forms of cyberattacks. To customize security settings, please use the configuration options as available for the respective product. During operation, the IT security of this product is within the responsibility of the respective administrator/end-user of the product. Please note, that Fujitsu as a manufacturer does not make any policy prescriptions or advocacy statements regarding IT security best practices and/or general product operation.

Availability management

Non-disruptive firmware upgrade	Yes
Hot part replacement	Yes

Capacity management

Thin Provisioning	Yes
Reporting function	Yes (capacity, health, performance, and protection relationships)
Hot part expansion	Yes
Non-disruptive firmware upgrade	Yes

Management

Interfaces	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
Supported protocols	NFS, CIFS/SMB , iSCSI, FC, NVMe/FC

Supported OS for ETERNUS SF Express

Operation Management Client	Google Chrome 65.0 Microsoft Internet Explorer 11.0 Mozilla Firefox 59.0

Installation specification

19" rackmount	Yes
Power voltage	AC200-240V/AC100V-120V
Power frequency	50 / 60 Hz
Maximum Power Consumption	AC200-240V/AC100V-120V: Controller Shelf: 1,580W 2U-Drive Shelf: - DS224C: 390W - NS224: 848W
Power phase	Single

	2.5 Drive Shelf	2.5 NVMe Drive Shelf	Base
Dimensions (W x D x H)	480 x 484 x 85 mm 18.9 x 19.1 x 3.3 inch 2 U	483 x 543 x 87 mm 19 x 21.4 x 3.4 inch 2 U	483 x 828 x 175 mm 19 x 32.6 x 6.9 inch 4 U
Weight	24.4 kg (54 lb)	30.3 kg (67 lb)	49.9 kg (110 lb)
Note	Numbers do not include Rack Mount Kits. Rack Mount Kits increase the weight by 4 kg.		

Environment

Temperature (operating)	10 - 35 °C
Humidity (operating)	8 - 80 %

Compliance

Product safety	IEC 60950-1, IEC 62368-1, EN 62368-1, ANSI/UL 62368-1, 2nd Ed, CAN/CSA C22.2 No. 62368-1-14, CNS 14336-1, TP TC 004
Electromagnetic Compatibility	EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, FCC Part-15 Subpart B Class A, ICES-003 Class A, VCCI Class A, JIS C 61000-3-2, CNS 13438, AS/NZS CISPR 32 class A, TP TC 020, KN32 Class A, KN35
Electromagnetic Immunity	EN 55035
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

Warranty

Warranty type	Onsite warranty
Warranty Terms & Conditions	www.fujitsu.com/warranty

Product Support - the perfect extension

Service Lifecycle	at least 5 years after shipment, for details see https://support.ts.fujitsu.com/

Warranty

Service Weblink	www.fujitsu.com/services/product-services

Fujitsu products, solutions & services

In addition to Fujitsu ETERNUS AX4100, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Built on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offerings. This allows customers to select from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/products/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS AX4100, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/eternus

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment

Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering. The product was developed for normal business use.
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