vantageo



Datasheet Vantageo 24H0-ST

Key Features

- 1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3/v4 family; UPI up to 9.6GT/s
- 2. Intel® C612 chipset
- 3. Up to 2TB⁺ ECC 3DS LRDIMM, up to DDR4- 2400⁺MHz; 16 DIMM slots
- 4. 3 PCI-E 3.0 x16 and 3 PCI-E 3.0 x8
- 5. Intel® i350 Dual port GbE LAN
- 6. 10 SATA3 (6Gbps); RAID 0, 1, 5,6,10
- 7. Integrated IPMI 2.0 and KVM with Dedicated LAN
- 8. 5 USB 3.0 (2 rear, 2 via header(s), 1 Type A), 6 USB 2.0 (2 rear, 4 via header(s))
- 9. Drive Bays:
- 2.5" / 3.5" SAS / SATA Hot Swap 24
- 2.5" SAS / SATA Hot Swap Rear Side 2

Int 2.5" - 2



Chassis

Form Factor **4U Rackmount** Model

24H0-ST

Processor / Cache

CPU

- Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor Cores / Cache E5-2600 v4.
- Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 2 QPI up to 9.6GT/s

Up to 24 cores / Up to 55MB† cache

Dimensions

660 * 433 * 178 mm Net Weight: 19 Kg

System Memory

Memory Capacity

• Up to 1TB Registered ECC RDIMM, DDR4-2133MHz; Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slotsUp to 2TB ECC 3DS LRDIMM, 1TB ECC **RDIMM**

DIMM Sizes

- RDIMM: 4GB, 8GB, 16GB, 32GB, 64GB
- LRDIMM: 32GB, 64GB
- 3DS LRDIMM: 4GB, 8GB, 16GB, 32GB, 64GB, 128GB

Memory Type

2400 /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

Memory Voltage

1.2V

Expansion Slots

- PCI Express 2 PCI-E 4.0 x16 slots (16/NA or 8/8),
 - 2 PCI-E 3.0 x1
 - 1 5V PCI 32bit

M.2

- M.2 Interface: 1 PCI-E 4.0 x4, RAID 0 & 1; 2 PCI-E 3.0 x4
- Form Factor: 2280/22110
- Key: M-Key
- RAID 5 only applied for INTEL Storage Device

On-Board Devices

Chipset

Intel® C612

SCU SATA

SATA3 (6Gbps); RAID 0, 1, 5, 10

SATA

 Intel® C612 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,6,10

Network Controllers Dual LAN with Intel® i350 Gigabit Ethernet Controller Single LAN with Virtual Machine Device Queues reduce I/O overhead Single LAN with Supports 10Base-T, 100BASE-TX, and 1000BASE-T, RJ45 output

AHCI SATA

SATA3 (6Gbps); RAID 0, 1, 5,6,10

IPMI

- Support for Intelligent Platform Management Interface v.2.0
- IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- ASPEED AST2400 BMC



Input / Output

6 USB 2.0 ports (2 rear + 4 headers) **USB**

5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)

SATA • 10 SATA3 (6Gbps) port

Video 1 VGA port

Output

TPM TPM Header

Serial Port / Header

LAN

2 COM Ports (1 rear, 1 header) 2 fast

UART 16550 serial

2 RJ45 Gigabit Ethernet LAN ports

1 RJ45 Dedicated IPMI LAN port

System BIOS

BIOS Type 128Mb SPI Flash EEPROM with AMI BIOS

Bios **Features** Plug and Play (PnP)

PCI 2.3

ACPI 1.0 / 2.0 / 3.0 / 4.0

USB Keyboard support

SMBIOS 2.7.1

UEFI 2.3.1

Management

Intel® Node Manager, NMI, SPM, SUM, Software SuperDoctor® 5, Watchdog

Power Configuration **ACPI Power Management**

Power-on mode for AC power recovery

Operating Environment

Operating Temperature: 10°C - 35°C (50°F - 95°F)

Non-operating Temperature: -40°C - 70°C (-40°F - 158°F)

Environmental Spec.

Operating Relative Humidity Range: 8% - 90% (non-condensing)

Non-Operating Relative Humidity Range: 5% - 95% (non-condensing)

PC Health Monitoring

Voltage

+1.8V, +12V, +3.3V, +5V, +5V standby, 3.3V standby, 5 Phaseswitching voltage regulator, Chassis intrusion header, Supports system management utility, VBAT

CPU / System Overheat LED, Suspend static indicator LED, UID/Remote UID

Fan

8x 4-pin fan headers (up to 8 fans), 8x fans with tachometer monitoring, Pulse Width Modulated (PWM) fan connectors, Status monitoring for speed contro

Other **Features**

Chassis intrusion detection, Chassis intrusion header, RoHS, SDDC

Temperature

Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Control for 8 Fan Connectors, Thermal Monitor 2 (TM2) support, PECI



Storage Solution Capabilities

Data Protection (Backup & Replication)

- Unlimited block-based snapshots for continuous data protection
- Restore Snapshots to any point in time
- Restore Snapshot data from local admin GUI
- Scheduled and manual snapshots
- File Synchronization (rsync)
- Remote Replication
- RAID Levels: RAID Z, RAID Z1, RAID Z2, mirror, stripe, mirror + stripe equivalent to0, 1, 5, 6, 10, others (RAID level support depends on number of drives/bays)
- RAID Global Hot Spare

Storage Area Networks (SAN), Virtualization

- Unlimited iSCSI LUN Snapshot
- Thin or thick provision LUNs
- Multi-LUN per target
- LUN mapping
- LUN masking
- SPC-3 Persistent Reservation (iSCSI)
- MPIO (iSCSI)

File System & Transfer Protocols

- External File System: EXT3, EXT4, NTFS, FAT32, HFS+
- Copy-on-write file system
- Microsoft Network (CIFS/SMB)
- Apple OS X (AFP 3.3)
- Linux/Unix (NFS v3)
- Internet (HTTP)
- Secure Internet (HTTPS)
- File Transfer Protocol (FTP)
- Secure Shell (SSH)
- Web Authoring (WebDAV)
- Storage Array Network (iSCSI)
- File Synchronization (rsync)
- · Local web file manager

Users/Groups

- Share Folder Level ACL Support
- Advanced Folder Permissions with Subfolder ACL support for CIFS/SMB, AFP, FTP
- Microsoft Active Directory (AD) Domain Controller Authentication
- · Local access list



Storage Solution Capabilities

Management

- Save and restore system configuration (clone devices)
- Local event log
- Thin provision Shares and LUNs
- Instant Provisioning/Expansion with data protection
- Restore to factory default
- Operating Systems supported: Microsoft Windows 7, 8/8.1, 10, Microsoft Windows Server 2008 R2/2012, Apple OS X, Linux/ Unix, Solaris, Apple iOS, Google Android
- Supported Web Browsers (Microsoft Internet Explorer 9+, Mozilla Firefox 14+, Google Chrome 20+, Apple Safari 5+)

System Monitoring

- Device capacity, performance, resource and health monitoring
- Bad block scan
- Hard Drive S.M.A.R.T.
- File System Check
- Disk Scrubbing
- Volume balance
- Alerts (SMTP email)

Software Key Features

- Data Scrubbing
- Unlimited Snapshots
- Data Replication
- iSCSI and Thin Provisioning
- Enterprise GUI



Software Key Features

IOPStor storage arrays are unique convergence of hardware, software, and storage expertise offering enterprise reliability and performance at a value unheard in storage. Unify your business, critical applications with IOPStor array that fix the performance and capacity requirement of your applications. IOPStor unifies block and file storage, can grow to Peta bytes in a rack and is available in hybrid as well as all flash configurations.

Zettabyte File System

ZFS is a revolutionary file system and logical volume manager that fundamentally changes the way file systems are administered, with features and benefits not found in any other file system available today. ZFS is robust, scalable, and easy to administer.

128 Bit File System

16 Billion Billion times that of 64 Bit File System ie. A HUGE Capacity.

Read / Write Cache using a combination of RAM / SSD / NVME

Frequent reads are stored in Cache making data retrieval very fast. Data is first written to cache & then to Drive removing latency in writes.

Snapshots & Clones

Snapshot Policy recovers deleted or corrupt data & Protects against Ramsomeware.

Replication

Replicate data off site or on site for data protection

Hot Data Movement

Move older un-used data from SSD storage pool to Archival Pool.

End to end Data Integrity

Data is Checksumed for integrity

RaidZ

Unlike Hardware Raid, RaidZ has NO Black Hole. There is no data loss what so ever. Raid Build time is Instantaneous. Incase of Drive Failure rebuild of pool does not affect work in any way.

Hardware Agnostic

No getting tied down to any particular hardware vendor. Free to replace component form any vendor.

Deduplication

Automatically stores only a single version of a file & not multiple copies.

Compression

Fast Data Compression with NO IMPACT on performance. Increases storage capacity.

File Server

Unified storage platform for sharing files between Windows, Mac and Linux-based computers

Virtualization

Thin provisioning, iSCSI support and certified with VMware and Microsoft

iSCSI and Thin Provisioning

Powerful tools for a business's taking advantage of virtual infrastructures

Enterprise GUI

SW RAID redundancy with automatic expansion and unlimited data snapshots for point-in-time restore

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