

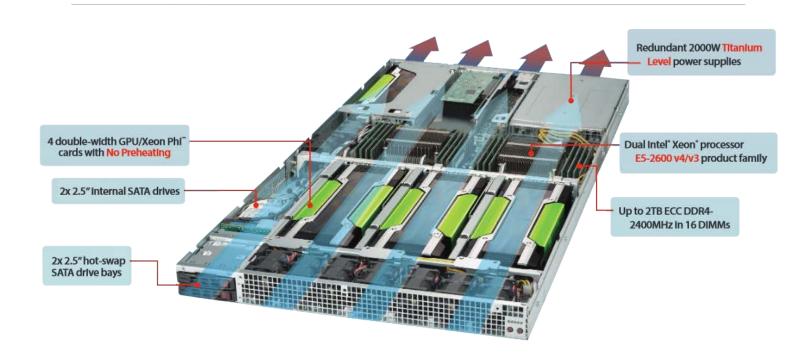
Dense GPU Server Configurations

Equus delivers market leading high density GPU configurations using the latest NVIDIA and Intel Xeon Phi™ technologies.

Equus continues to enable a highly scalable, energy efficient future for parallel computing with our latest supercomputing solution. Utilizing our expertise in maximizing compute density, performance and power efficiency, Equus has configured the following server for high GPU density and performance in a 1U server. This 1U server can hold 4 NVIDIA Tesla K80 GPUs, and uses 9 standard and 2 optional 4cm heavy duty fans to keep this powerful server cool. This system is currently configured with Dual Xeon® E5-2650v4 12-Core 2.2Ghz 30M Cache, 256GB DDR4 2400 RDIMM, Intel Dual Port 10GbE SFP+ with Optics and Single Port Mellanox ConnectX-3 VPU Pro for 10/40/56Gb connectivity, Micron 5100 Pro 240GB SATA SSD boot drive, Tool less Quick Rails, and DCMS Data Center Management Software with iKVM. This server will run in up to 35 degree ambient temperature allowing for warm datacenter operation to save on cooling costs.

Key Benefits:

- A CPU direct connect design optimizes signal integrity and airflow to eliminate the GPU pre-heating,
 PCI-E extension cables, and re-drivers.
- Reduced complexity, cost, power consumption and latency as compared to other vendor solutions
- Higher power efficiency by using fully redundant Titanium Level (96%+) power supplies
- Supports up to 4x 2.5" drive bays with fully redundant power supplies
- Uniquely supports NVIDIA GeForce GPU cards for customer applications.





Dense GPU Server Configuration Details





Key Features

- Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
- Up to 512GB[†] ECC 3DS LRDIMM, up to DDR4- 2400[†]MHz; 16x DIMM slots
- 4x PCI-E 3.0 x16 slots (4x GPU/ Xeon Phi cards opt.), 2x PCI-E 3.0 x8 (in x16) LP slot
- 4. Intel i350 Dual port GbE LAN
- 5. 2x 2.5" Hot-swap drive bays, 2x 2.5" internal drive bays
- 9x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
- 7. 2000W Redundant Power Supplies Platinum Level (94%+)

Quantity	Vendor	Description
1	Supermicro	Supermicro 1028GQ-TR 1U Xeon E5-2600v4 4xGPU DDR4 2x 2.5"HS 2000W RPSU
2	Intel	E5-2650V4 2.2GHZ 30M 12-Core Xeon CPU
8	Crucial	32GB DDR4 2400 ECC REG
1	Mellanox	Mellanox ConnectX-3 10/40 GbE / 56Gb Infiniband Network Adapter
1	Intel	2port SFP+ 10G PCle3.0x8 Direct Attach Twinax
2	Intel	INTEL DUAL RATE SFP+ MODULE XFP 1x10GBASE-SR
1	Micron	Micron 5100 PRO 240GB SATA 2.5
4	NVIDIA	NVIDIA Tesla K80 2x12GB/DDR5 PCI-E3.0 300W
1	Supermicro	Power Cable for Teslaq K80 1028GQ-TR
2	Supermicro	Power Cable for Teslaq K80 1028GQ-TR
1	Supermicro	Power Cable for Teslaq K80 1028GQ-TR
2	Supermicro	40x40x56 mm 23.3K-20.3K RPM Counter-rotating Fan
1	Supermicro	DataCenter management package (per node license)
1	EQUUS	Mid Server - 3 Year Onsite Warranty



Management Software

Manage and Maintain Servers with Included and Optional Management Software

- Remotely manage servers deployed worldwide.
- Manage server health, power consumption and firmware remotely using agent and agent-less mechanisms.
- Manage hardware with no impact on applications.
- Perform monitoring, configuration and update operations without affecting application performance or continuity.
- Using out-of-band (OOB) utilities.
- Server management functions accessed through utilities' command line interfaces to support existing datacenter automated management frameworks.
- Additionally, our server management utilities provide seamless integration with Nagios and other industry standard plugins.

Standard Management	OOB Management	DCMS Management
Included with Server	Includes Standard Management Plus	Includes Standard + OOB Management Plus
KVM/JAVA	Out-of-BAND System Checks,	Configuring, Mousemode, Fanmode,
KVM/HTML5 support	System Utilization, Asset Information	Radius, AD Through APIs
IPMI 2.0	OOB/in-band BIOS/BMC Management	Remote Syslog
DCMI	Getting/Clearing Event Log	Restful APIs
Web Based GUI	Trusted Platform Module Provisioning	Scripted Virtual Media
In-band BIOS updates	Mount/Unmounts ISO images from	Unified Hardware Management
BMC FW updates	SAMBA/HTTP	Remote Power Management/Monitoring
LDAP/Active Directory	Remote Screenshot Capture	Dynamic DNS
Virtual Media	Remote Keyboard Operation	3rd-party SW Integration through RedFish
SNMP Alerts	Redfish APIs	24/7 Health and Power Management
SMTP Alerts	Changing system boot order	Level II Support on utilities
SMASH and CLP Support		vCenter, SCOM and OpenStack Plugins
VLAN Support		Feature Updates and Support
Event Log		WS-MAN API
Serial over LAN		
Remote Power Control		
Hardware Health Monitoring		
HTTPS		
DHCP		
SSH CLI		
Dedicated NIC		
Local Users		
Embedded Remote Support		
Agentless Management		
Role Based Authority		
Multiple User Profiles		
IPv6		
Cost: Free	Cost: Pay Fee	Cost: Pay Fee