



www.nor-tech.com
 901 Cliff Road E -- Burnsville, MN 55337
 877-808-1010

Quote Number: 7-18-1018

Personal Cluster 1807



July 18, 2018

Cluster



Nor-Tech Clusters:
 TOTAL SOLUTIONS, INSIDE & OUT

Visit nor-tech.com/solutions/nt-ez/



Solution **Nor-Tech Cluster (Custom Configured as below):** 1 \$27,622.00

Base Cluster has 48 Cores on 3 Compute nodes. MPI traffic configured over 10GB Ethernet. Cluster includes support for IPMI. All systems will be configured and tested prior to shipment. Hardware has 3-Year Depot Warranty Included. The systems will be loaded, burned, and tested with OpenHPC & CentOS prior to shipping.



Head Node

Case	2U Twin'2 12x 3.5" Hot-Swap Bays, 2000W Redundant Power Supply		1
Processors	Intel XEON 8-Core 3106 1.7-GHz CPU with 11MB Cache	8 Cores per Head Node	1
RAM	8GB 2400MHz DDR4-2133 ECC REG DIMM	48Gb RAM per Head Node	6
Hard Drive	Enterprise 2TB 6Gb/s Hard Drive, 7200RPM, 128M Cache (Operating System)	RAID 5	3
Operating System	CentOS 7.x		1
Controller	Software RAID 5		1
Management	PMI 2.0 with virtual media over LAN and KVM-over-LAN support		1
IP Network	Intel i350-AM2 Dual Port Gigabit Ethernet		1
Gateway	Ethernet Adapter Card		1
Cluster Management	OpenHPC		1
MPI Traffic	Mellanox 10GB Ethernet		1
Warranty	3-Year Parts & Labor		1



Compute Nodes

Processors	Intel XEON 8-Core 4110 2.1-GHz CPU with 11MB Cache	16 Cores per Compute Node	6
RAM	8GB 2400MHz DDR4-2400 ECC REG DIMM	96Gb Ram per Compute Node	36
Hard Drive	Enterprise 1TB 6Gb/s Hard Drive, 7200RPM, 128M Cache	One Drive per Compute Node	3
Operating System	CentOS 7.x		3
MPI Traffic	Mellanox 10GB Ethernet		3
Warranty	3-Year Parts & Labor		1

Power, & Accessories

UPS Power	3000VA Smart App Online UPS Series 208V 20A		1
Power Distribution	208V 20A 1U Basic PDU Series		1

Networking Switches & Cabling

Network Switch	Mellanax 12-Port 10Gb Ethernet Switch		1
IPMI Switch	16-Port Ethernet Switch		1
Cables	CAT 6 Network Cable		6
Cables	10GB Ethernet Cables		4

Software

Software	PBS Pro Open-Source		48
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Cluster Recovery Disk

DVD	Includes Cluster Recovery Media		1
Master Node	Restores Head Node back to original state		1
Complete Setup	Recovery DVD Disk will restore Computer setup including OS, Application and User Settings		1
RAID	Restores Master Node single hard drive, software RAID, hardware RAID		1
Bare Metal	Provides Bare Metal Recovery back onto the head note RAID Array		1



Cluster Health Monitoring

Remote	Monitor the Health of the Cluster Hardware		1
Period	One Month of Biweekly Remote Access and Log Reviewing		1
Includes	Scheduled Remote System Reviewing and Error Log Checking		1
Includes	Email Event Monitoring		1



Options

Rack	24U Rack Cabinet, Airflow & Cable Management		1	\$1,265	\$1,265
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(Confidential Information / Prices and specifications subject to change without notice / Not Responsible For Typographical Errors.)

Power Estimations
 1242 TOTAL POWER REQUIRED in watts
 4238 BTU's/HR =
 6 Amps on 208VAC Circuit
 1 Number of 20 Amp Circuits at > 80% Load

