

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

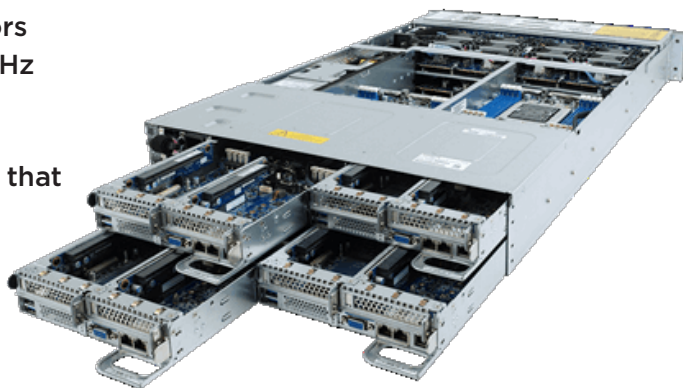
The following solution features the 7452 AMD EPYC processor with 512 total cores and 4Gb of memory per core. Visit our site at <http://bit.ly/clprocessors> to see all processor choices.

For questions about this system, contact:

Email: sales@advancedclustering.com | Phone: (913) 643-0300

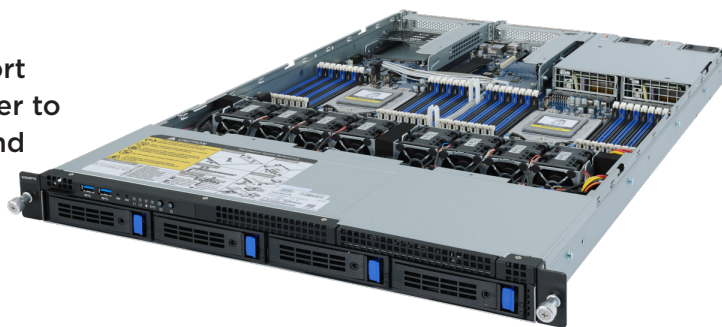
NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE E230 COMPUTE NODES	8	\$37,500.00	\$75,100.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 240GB SSD
- HDR-100 InfiniBand
- These nodes are housed in our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV E1210 LOGIN NODE	1	\$10,600.00	\$10,600.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 2x 240GB mirrored OS SSDs
- HDR-100 InfiniBand
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

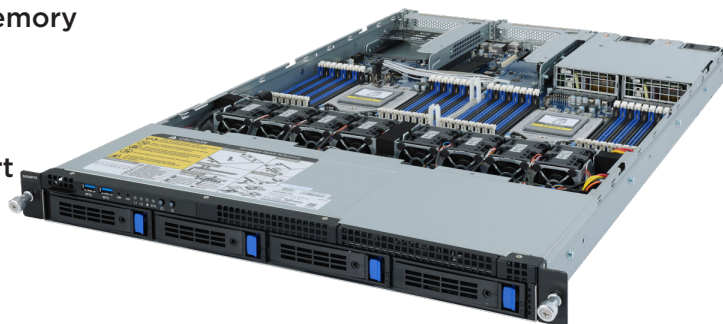
ACTSERV E1210 - ZFS STORAGE CONTROLLER

1

\$11,100.00

\$11,100.00

- 2x AMD EPYC 7452 (32-core, 2.35GHz) processors
- 256GB of 3200MHz Registered ECC DDR4 memory
- 2x 240GB mirrored OS SSDs
- HDR-100 InfiniBand
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

ACTSTOR 4060J - STORAGE TARGET

1

\$24,300.00

\$24,300.00

- 384TB usable storage
- 4U chassis with redundant power
- HDR-100 InfiniBand
- 1x 8TB onsite cold spare drive
- 3 year warranty with lifetime technical support



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 973.643.0299

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
NETWORK SYSTEM	1	\$1,700.00	\$1,700.00

Node communication is provided through an Ethernet network. This switch gives you the ability to:

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node
- Uplink via 10Gb ports

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
HDR INFINIBAND NETWORKING	1	\$17,600.00	\$17,600.00

- 100Gb HDR-100 nodes
- 40 port HDR IB switch; supports 40x 200Gb IB ports, 80x 100Gb ports or a combination of the two speeds.
- 3 year warranty



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

***** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.**

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
SOFTWARE	1	\$0.00	\$0.00

ClusterVisor is Advanced Clustering's HPC cluster management solution.

ClusterVisor includes the ability to:

- Manage your cluster from a simple web interface (GUI) or from the command line
- Control server processes on every node
- Customize multiple dashboards
- Manage users and groups
- Create rack diagrams
- Configure nodes, SLURM, time servers, etc.
- Sensors track such things as CP, memory, Infiniband and GPU's



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
RACK AND POWER INFRASTRUCTURE	1	\$4,500.00	\$4,500.00

POWER AND COOLING (ESTIMATED DATA)

Weight: 911.25 lbs.

Rack space used: 13U

Power: 8.3 kW

BTU: 28,825.77 BTU/hr.

HVAC needed: 2.40 tons

CIRCUITS NEEDED:

Qty 1 - IEC 309 60A 3P+PE

308V ePH at 60 Amps



www.advancedclustering.com ☎ 866.802.8222 📠 973.643.0299

Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

***** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.**

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

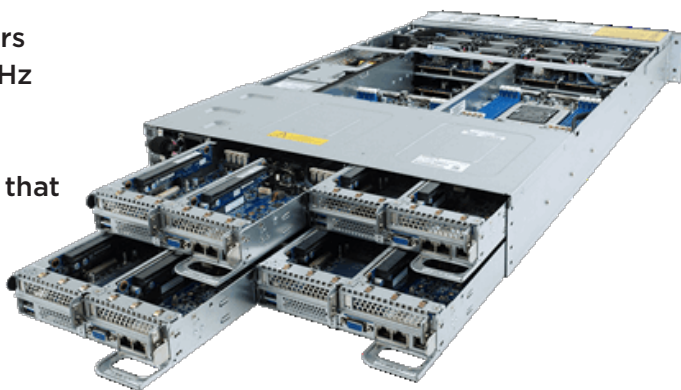
The following solution features the 7452 AMD EPYC processor with 1,024 total cores and 4Gb of memory per core. Visit our site at <http://bit.ly/clprocessors> to see all processor choices.

For questions about this system, contact:

Email: sales@advancedclustering.com | Phone: (913) 643-0300

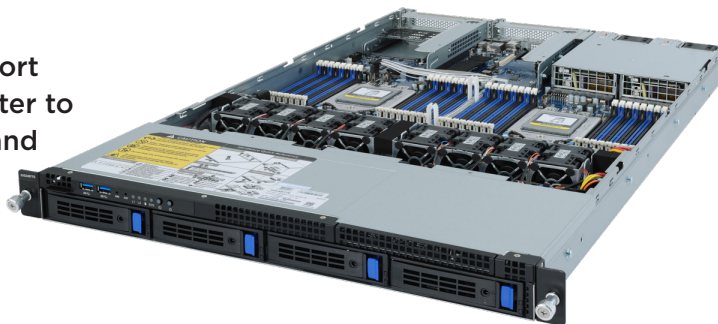
NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE E230 COMPUTE NODES	16	\$37,500.00	\$150,200.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 240GB SSD
- HDR-100 InfiniBand
- These nodes are housed in our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV E1210 LOGIN NODE	1	\$10,600.00	\$10,600.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 2x 240GB mirrored OS SSDs
- HDR-100 InfiniBand
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

BEEGFS PARALLEL FILE SYSTEM HDD STORAGE BLOCK

1

\$40,600.00

\$40,600.00

Storage target: Storage target as configured below

- Enclosure: 4U, 60 drive JBOD with redundant SAS expanders and power supplies
- Storage space: 480TB usable - 6GB/s (60x 10TB)
- Onsite cold spare(s): 10TB Drive w/ Carrier
- Warranty: 3 year standard warranty



Storage server: Storage server as configured below

- Base system: 2U Dual socket Xeon storage controller
- Metadata option: Shared meta data with storage server
- Metadata size: Support a total filesystem less than 640TB
- Networking: 2x RJ45 10Gb ethernet ports, 2x 10Gb SFP+ ethernet ports
- Fabric: Single port HDR-100 InfiniBand (100Gb/s)
- Warranty: 3 year standard warranty
- BeeGFS support: 3 year BeeGFS support contract



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

NETWORK SYSTEM

1

\$1,750.00

\$1,750.00

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Uplink via 10Gb ports
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 973.643.0299

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
HDR INFINIBAND NETWORKING	1	\$17,600.00	\$17,600.00

- 100Gb HDR-100 nodes
- 40 port HDR IB switch; supports 40x 200Gb IB ports, 80x 100Gb ports or a combination of the two speeds.
- 3 year warranty

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
SOFTWARE	1	\$0.00	\$0.00

ClusterVisor is Advanced Clustering's HPC cluster management solution.

ClusterVisor includes the ability to:

- Manage your cluster from a simple web interface (GUI) or from the command line
- Control server processes on every node
- Customize multiple dashboards
- Manage users and groups
- Create rack diagrams
- Configure nodes, SLURM, time servers, etc.
- Sensors track such things as CP, memory, Infiniband and GPU's



www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

***** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.**

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
RACK AND POWER INFRASTRUCTURE	1	\$4,500.00	\$4,500.00

POWER AND COOLING (ESTIMATED DATA)

Weight: 1,223.25 lbs.

Rack space used: 18U

Power: 12.4 kW

BTU: 42,474.34 BTU/hr.

HVAC needed: 3.54 tons

CIRCUITS NEEDED:

Qty 1 - IEC 309 60A 3P+PE

208V 3PH at 60 Amps



advanced clustering
technologies, inc.

www.advancedclustering.com 866.802.8222 913.643.0299

Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

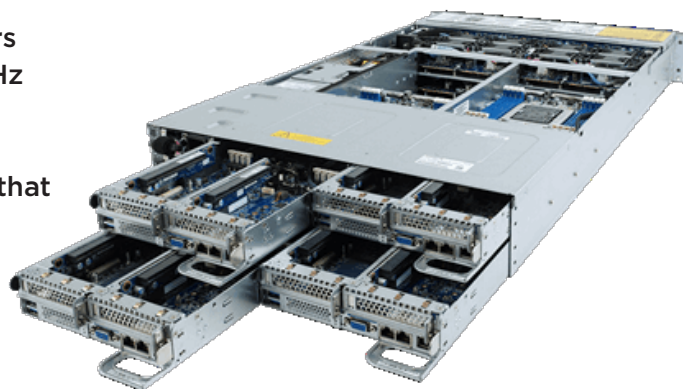
The following solution features the 7452 AMD EPYC processor with 512 total cores and 4Gb of memory per core. Visit our site at <http://bit.ly/clprocessors> to see all processor choices.

For questions about this system, contact:

Email: sales@advancedclustering.com | Phone: (913) 643-0300

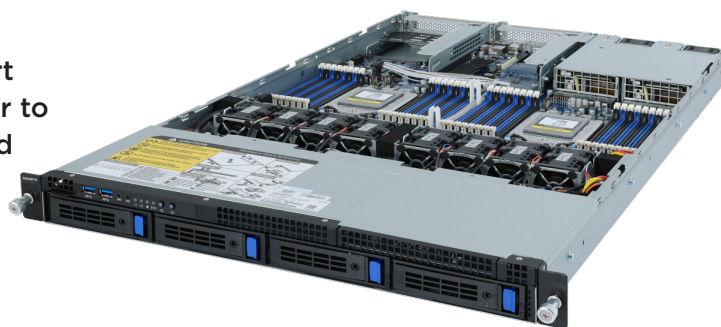
NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE E230 COMPUTE NODES	44	\$37,500.00	\$413,200.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 240GB SSD
- HDR-100 InfiniBand
- These nodes are housed in our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV E1210 LOGIN NODE	1	\$11,100.00	\$11,100.00

- 2x AMD EPYC 7452 (32-core, 2.35 GHz) processors
- Registered ECC DDR4 memory 256GB of 3200MHz
- 2x 240GB mirrored OS SSDs
- HDR-100 InfiniBand
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

BEEGFS PARALLEL FILE SYSTEM
HDD STORAGE BLOCK

1

\$56,000.00

\$56,000.00

Storage target: Storage target as configured below

- Enclosure: 4U, 60 drive JBOD with redundant SAS expanders and power supplies
- Storage space: 480TB usable - 6GB/s (60x 10TB)
- Onsite cold spare(s): 10TB Drive w/ Carrier
- Warranty: 3 year standard warranty



Storage server: Storage server as configured below

- Base system: 2U Dual socket Xeon storage controller
- Metadata option: Shared meta data with storage server
- Metadata size: Support a total filesystem less than 640TB
- Networking: 2x RJ45 10Gb ethernet ports, 2x 10Gb SFP+ ethernet ports
- Fabric: Single port HDR-100 InfiniBand (100Gb/s)
- Warranty: 3 year standard warranty
- BeeGFS support: 3 year BeeGFS support contract



HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

NETWORK SYSTEM	1	\$1,750.00	\$1,750.00
----------------	---	------------	------------

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Uplink via 10Gb ports
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

HDR INFINIBAND NETWORKING	1	\$22,700.00	\$22,700.00
---------------------------	---	-------------	-------------

- 100Gb HDR-100 nodes
- 40 port HDR IB switch; supports 40x 200Gb IB ports, 80x 100Gb ports or a combination of the two speeds.
- 3 year warranty

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

SOFTWARE	1	\$0.00	\$0.00
----------	---	--------	--------

ClusterVisor is Advanced Clustering's HPC cluster management solution. ClusterVisor includes the ability to:

- Manage your cluster from a simple web interface (GUI) or from the command line
- Control server processes on every node
- Customize multiple dashboards
- Manage users and groups
- Create rack diagrams
- Configure nodes, SLURM, time servers, etc.
- Sensors track such things as CP, memory, Infiniband and GPU's



www.advancedclustering.com 866.802.8222 973.643.0299

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE AMD

Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
RACK AND POWER INFRASTRUCTURE	1	\$6,000.00	\$6,000.00

POWER AND COOLING (ESTIMATED DATA)

Weight: 1,980.15 lbs.

Rack space used: 32U

Power: 27.8 kW

BTU: 95,021.32 BTU/hr.

HVAC needed: 7.29 tons

CIRCUITS NEEDED:

Qty 1 - IEC 309 60A 3P+PE

208V 3PH at 60 Amps



advanced clustering
technologies, inc.

www.advancedclustering.com 866.802.8222 973.643.0299

Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

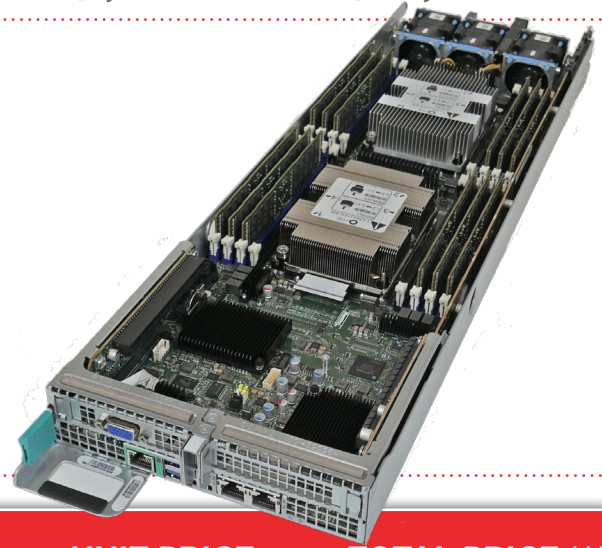
The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE X210 COMPUTE NODES	14	\$7,800.00	\$109,200.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 96GB of 2933MHz Registered ECC DDR4 memory
- 240GB SSD
- 100Gb Omni-Path interconnect
- These nodes are housed in our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV X1210 LOGIN NODE	1	\$9,650.00	\$9,650.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 192GB of 2933MHz Registered ECC DDR4 memory
- 2x 240GB mirrored OS SSDs
- 100Gb Omni-Path interconnect
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available. Visit our site at <http://actlink.co/cl> to see all processor choices.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSTOR X4251 ZFS STORAGE NODE	1	\$18,200.00	\$18,200.00

- 2x Xeon x6230 (20-core, 2.1GHz) processors
- 192GB of 2933MHz Registered ECC DDR4 memory
- 2x 240GB mirrored OS SSDs
- 144TB of raw storage capacity
- 100Gb Omni-Path interconnect
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
NETWORK SYSTEM	1	\$1,200.00	\$1,200.00

Node communication is provided through an Ethernet network. This switch gives you the ability to:

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node
- Uplink via 10Gb ports

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
OMNI-PATH FABRIC	1	\$8,950.00	\$8,950.00

The Omni-Path fabric is for node-to-node communication and provides 100Gb of bandwidth and latencies around 1 microsecond. Other interconnects such as IB or 100GbE are available.

HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$150,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

SOFTWARE	1	\$0.00	\$0.00
----------	---	--------	--------

Includes:

- CentOS - the latest, stable revision
- Cloner - Image replication and node installation software
- ACT Utils - Set of command line utilities to easy cluster admin and management
- Multiple message passing (MPI) libraries for both Ethernet and InfiniBand
- SLURM - Job queuing / scheduler system
- Benchmarking/Diagnostic tools
- Commercial compilers are available upon request

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
------	----------	------------	-----------------

RACK AND POWER INFRASTRUCTURE	1	\$2,800.00	\$2,800.00
-------------------------------	---	------------	------------

ACT's clusters ship fully configured in racks so that they're ready to go once they've been removed from their pallets and moved into the data center. It's a true turn-key solution to get you up and running out of the box.

POWER AND COOLING (ESTIMATED DATA)

Weight: 990 lbs.

Rack space used: 18U

Power: 10 kW

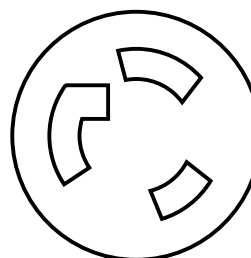
BTU: 36,000 BTU/hr.

HVAC needed: 3 tons

CIRCUITS NEEDED:

Qty 3 - 220V at 30 Amps

NEMA L6-30 receptacles needed



L6-30R



advanced clustering
technologies, inc.

www.advancedclustering.com ☎ 866.802.8222 📠 913.643.0299

Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

Pricing and configurations subject to change. Intel, the Intel logo, the Intel Inside logo, Xeon and Intel Xeon Phi are trademarks of Intel Corporation in the U.S. and/or other countries.

*** PRICE DOES NOT INCLUDE ANY DISCOUNTS AND IS SUBJECT TO CHANGE.
CONTACT US FOR CURRENT PRICING AND DISCOUNT INFORMATION.

HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

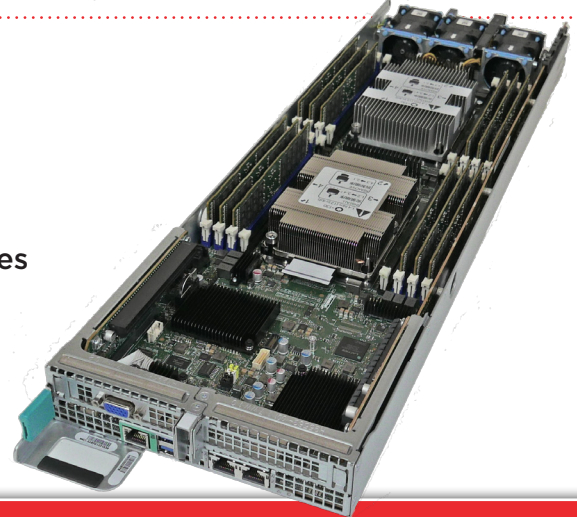
The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE X210 COMPUTE NODES	23	\$7,800.00	\$179,400.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 96GB of 2933MHz Registered ECC DDR4 memory
- 240GB SSD
- 100Gb Omni-Path interconnect
- These nodes are housed in our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV X1210 LOGIN NODE	1	\$9,650.00	\$9,650.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 192GB of 2666MHz Registered ECC DDR4 memory
- 2x 240GB mirrored OS SSDs
- 100Gb Omni-Path interconnect
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available. Visit our site at <http://actlink.co/cl> to see all processor choices.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
BEEGFS PARALLEL FILE SYSTEM HDD STORAGE BLOCK	1	\$40,600.00	\$40,600.00

Storage target: Storage target as configured below

- Enclosure: 4U, 60 drive JBOD with redundant SAS expanders
- Power supply: Dual redundant 1600W PSU
- Storage space: 384TB usable - 6GB/s (60x 8TB)
- Onsite cold spare(s): 8TB Drive w/ Carrier
- Warranty: 3 year standard warranty



Storage server: Storage server as configured below

- Base system: 2U Dual socket Xeon storage controller
- Metadata option: Shared meta data with storage server
- Metadata size: Support a total filesystem less than 640TB
- Networking: 2x RJ45 10Gb ethernet ports, 2x 10Gb SFP+ ethernet ports
- Fabric: Single port Omni-Path (100Gb/s)
- Warranty: 3 year standard warranty
- BeeGFS support: 3 year BeeGFS support contract



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
NETWORK SYSTEM	1	\$1,750.00	\$1,750.00

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Uplink via 10Gb ports
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node

HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$250,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
OMNI-PATH FABRIC	1	\$13,000.00	\$13,000.00

The Omni-Path fabric is for node-to-node communication and provides 100Gb of bandwidth and latencies around 1 microsecond. Other interconnects such as IB or 100GbE are available.

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
SOFTWARE	1	\$0.00	\$0.00

Includes:

- CentOS - the latest, stable revision
- Cloner - Image replication and node installation software
- ACT Utils - Set of command line utilities for easy cluster admin and management
- Multiple message passing (MPI) libraries for both Ethernet and InfiniBand
- SLURM - Job queuing / scheduler system
- Benchmarking/Diagnostic tools
- Commercial compilers are available upon request

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
RACK AND POWER INFRASTRUCTURE	1	\$5,600.00	\$5,600.00

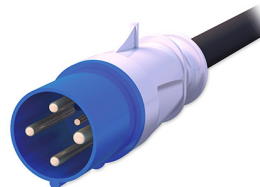
ACT's clusters ship fully configured in racks so that they're ready to go once they've been removed from their pallets and moved into the data center. It's a true turn-key solution to get you up and running out of the box.

POWER AND COOLING (ESTIMATED DATA)

Weight: 1,400 lbs.
Rack space used: 21U
Power: 15 kW
BTU: 54,000 BTU/hr.
HVAC needed: 4.5 tons

CIRCUITS NEEDED:

Qty 2 - 208V 3PH at 60 Amps
IEC 309 60A 3P+PE receptacles needed



Please confirm this type of power is available in your data center. Advanced Clustering Technologies can provide alternative PDUs as needed.

HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

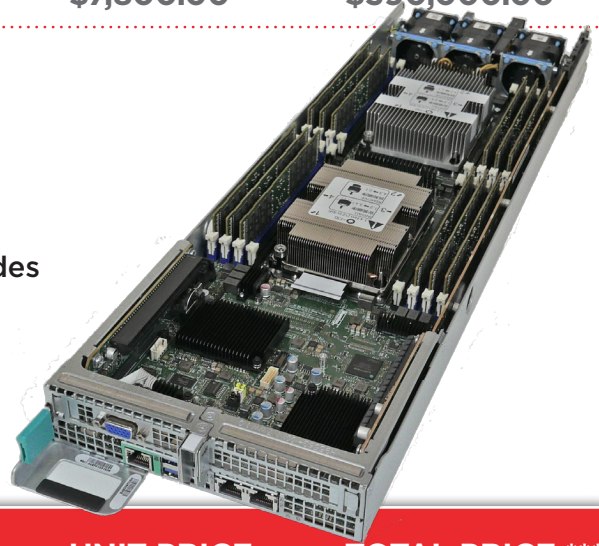
The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTBLADE X210 COMPUTE NODES	50	\$7,800.00	\$390,000.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 96GB of 2933MHz Registered ECC DDR4 memory
- 240GB SSD
- 100Gb Omni-Path interconnect
- These nodes are housed our ACTblade chassis that supports 4x compute nodes in 2U of space and includes redundant power
- 3 year warranty with lifetime technical support



NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
ACTSERV X1210 LOGIN NODE	1	\$9,650.00	\$9,650.00

- 2x Xeon 6230 (20-core, 2.1GHz) processors
- 192GB of 2933MHz Registered ECC DDR4 memory
- 2x 240GB mirrored OS SSDs
- 100Gb Omni-Path interconnect
- 1U chassis with redundant power
- 3 year warranty with lifetime technical support
- Login nodes are for users to SSH to the cluster to submit jobs, copy files to/from the cluster, and to compile code they want to run



HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

The following solutions feature the 6230 Intel Xeon Scalable processor but there are many more options available. Visit our site at <http://actlink.co/cl> to see all processor choices.

For questions about this system, contact:

sales@advancedclustering.com | Phone: (913) 643-0300

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
BEEGFS PARALLEL FILE SYSTEM HDD STORAGE BLOCK	1	\$52,450.00	\$52,450.00

Storage target: Storage target as configured below

- Enclosure: 4U, 60 drive JBOD with redundant SAS expanders
- Power supply: Dual redundant 1600W PSU
- Storage space: 576TB usable - 6GB/s (60x 12TB)
- Onsite cold spare(s): 12TB Drive w/ Carrier
- Warranty: 3 year standard warranty

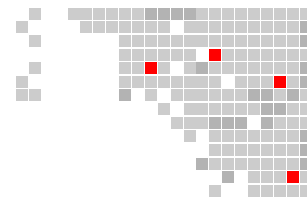


Storage server: Storage server as configured below

- Base system: 2U Dual socket Xeon storage controller
- Metadata option: Shared meta data with storage server
- Metadata size: Support a total filesystem less than 1.2PB
- Networking: 2x RJ45 10Gb ethernet ports, 2x 10Gb SFP+ ethernet ports
- Fabric: Single port Omni-Path (100Gb/s)
- Warranty: 3 year standard warranty
- BeeGFS support: 3 year BeeGFS support contract



HPC PRICING GUIDE



Finding Value and Optimal Performance in Any Budget

\$500,000 CLUSTER

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
NETWORK SYSTEM	1	\$3,600.00	\$3,600.00

- Manage file system traffic, cluster utility communication, system admin & maintenance
- Uplink via 10Gb ports
- Remotely monitor temperatures, voltages, fans, and power supplies
- Allow for remote power cycling of each node

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
OMNI-PATH FABRIC 2:1	1	\$36,000.00	\$36,000.00

The Omni-Path fabric is for node-to-node communication and provides 100Gb of bandwidth and latencies around 1 microsecond. Other interconnects such as IB or 100GbE are available.

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
SOFTWARE	1	\$0.00	\$0.00

- CentOS - the latest, stable revision
- Cloner - Image replication and node installation software
- ACT Utils - Set of command line utilities for easy cluster admin and management
- Multiple message passing (MPI) libraries for both Ethernet and InfiniBand
- SLURM - Job queuing / scheduler system
- Benchmarking/Diagnostic tools
- Commercial compilers are available upon request

NAME	QUANTITY	UNIT PRICE	TOTAL PRICE ***
RACK AND POWER INFRASTRUCTURE	1	\$8,300.00	\$8,300.00

ACT's clusters ship fully configured in racks so that they're ready to go once they've been removed from their pallets and moved into the data center. It's a true turn-key solution to get you up and running out of the box. This is spread into two racks.

POWER AND COOLING (ESTIMATED DATA)

Weight: 2,500 lbs.
Rack space used: 38U
Power: 31.5 kW
BTU: 108,000 BTU/hr.
HVAC needed: 9 tons

CIRCUITS NEEDED:

Qty 3 - 208V 3PH at 60 Amps
IEC 309 60A 3P+PE receptacles needed



Please confirm this type of power is available in your data center.
Advanced Clustering Technologies can provide alternative PDUs as needed.