

Borg Supercomputer Beowulf Cluster

Hardware:

Head node:

- 2x 4-Core Xeon Gold 5122 3.6Ghz CPUs
- 96GB DDR4 2666Mhz RAM
- 2x 240GB SSD - System
- 100Gbps Omnipath / 10Gbps Ethernet

Virtualization node:

- 2x 4-Core Xeon Gold 5122 3.6Ghz CPUs
- 96GB DDR4 2666Mhz RAM
- 2x 240GB SSD - System
- 100Gbps Omnipath / 10Gbps Ethernet

Compute nodes – 20 total:

- 2x 8-Core Xeon Gold 6134 3.2Ghz CPUs
- 96GB DDR4 2666Mhz RAM
- 240GB SSD – System, 1TB HDD scratch
- 100Gbps Omnipath / 10Gbps Ethernet

GPU / HI-memory node:

- 2x 8-Core Xeon Gold 6134 3.2Ghz CPUs
- 768GB DDR4 2666Mhz RAM
- 4x NVIDIA Titan V GPUs
 - o 12GB HBM2 Video RAM
 - o 640 Tensor Cores – 110 Teraflops for Deep Learning
 - o 5120 CUDA cores – <= 30 Teraflops for general compute
- 240 GB SSD – System
- 100Gbps Omnipath / 10Gbps Ethernet

File Server:

- 2x 8-Core Xeon Silver 4108 1.8Ghz CPUs
- 96 GB DDR4 2666Mhz RAM
- 2x 240GB SSDs – System
- 2x 2TB NVMe SSD – File Server cache
- 18x 6TB SAS 12Gb/s HDD 7.2k – File Storage
- 100Gbps Omnipath / 40Gbps Ethernet / 10Gbps Ethernet
- ~100TB useable space