Resources

Computer Cluster / NEC LX 2U-Twin2 server 406Rh-2

NEC LX 2U-Twin2 server 406Rh-2 is x86_64 server with 40 cores (2 CPUs: Intel Xeon GOLD 6148 2.4GHz) whose memory size is 192 GByte. This cluster consists of 794 nodes and has 31760 cores and its peak performance is 2439 TFLOPS. All nodes are connected by Omni-Path. This system is used for large-scale molecular dynamics as well as electronic state calculations.

Computer Cluster / NEC LX 1U server 110Rh-1

NEC LX 1U server 110Rh-1 is also x86_64 server with 40 cores (2 CPUs: Intel Xeon GOLD 6148 2.4GHz) whose memory size is 768 GByte. This cluster consists of 20 nodes and has 800 cores and its peak performance is 61.4 TFLOPS. All nodes are connected by Omni-Path. This system is mainly used for electronic state calculations for the large system because this system has more memory than LX 2U-Twin2 server 406Rh-2.

Computer Cluster / NEC LX 1U server 110Rh-1

NEC LX 1U server 110Rh-1 is also x86_64 server with 36 cores (2 CPUs: Intel Xeon GOLD 6154 3.0GHz) whose memory size is 192 GByte. This cluster consists of 159 nodes and has 5724 cores and its peak performance is 550 TFLOPS. All nodes are connected by Omni-Path. This system is used for middle-scale molecular dynamics as well as electronic state calculations.

Computer Cluster / NEC LX 4U-GPU server 108Th-4G

NEC LX 4U-GPU server 108Th-4G is also x86_64 server with 24 cores (2 CPUs: Intel Xeon GOLD 6136 3.0GHz) whose memory size is 192 GByte. This cluster consists of 96 nodes and has 2304 cores and its peak performance is 221 TFLOPS. All nodes are connected by Omni-Path. Two GPGPU accelerator of NVIDIA's Tesla P100 is built in all nodes and its peak performance is 806 TFLOPS.This system is used for molecular dynamics simulation for larger.

Development Server for "K computer" / Fujitsu PRIMEHPC FX10

Fujitsu PRIMEHPC FX10 has the same architecture as the "K computer" in RIKEN. This system, which consists of 96 nodes with 1536 cores and has a disk space of 48 TByte as the work area, provides 20.2 TFLOPS. The system is used not only for parallel calculations but also for the development of programs used on the K computer.