

DAVinCI Description

The DAVinCI system consists of 2400 processor cores in 192 Westmere nodes (12 processor cores per node) at 2.83 GHz with 48 GB of RAM per node (4 GB per core) and 6 Sandy Bridge nodes (16 processor cores per node) at 2.2GHz with 128 GB of RAM per node (8 GB per core). All of the nodes are connected via QDR InfiniBand (40 Gb/s) both to each other and to the GPFS fast scratch storage system. 16 of the Westmere nodes are equipped with NVIDIA Fermi GPGPUs. This system is a hybrid system accommodating HTC (high throughput computing) serial jobs and tightly-coupled parallel (MPI) jobs along with General-Purpose Computing on Graphics Processing Units (GPGPU) and 3D stereo visualization. It will accommodate serial jobs that need one node (12 cores or less) and multinode parallel jobs (24 cores up to 1152 cores).