Tarea N°4

Claudio Acuña Guillermo Rojar Cristian Garrido Jose Acuña Leonardo jofre

October 11, 2013

Lista Top Ten de los superordenadores

1 Tianhe-2 (MilkyWay-2) - TH-IVB-FEP Cluster, Intel Xeon E5-2692 12C 2.200GHz, TH Express-2, Intel Xeon Phi 31S1P

- Site: National University of Defense Technology
- Manufacturer: NUDT
- Cores: 3,120,000 Linpack Performance (Rmax) 33,862.7 TFlop/s Theoretical Peak (Rpeak) 54,902.4 TFlop/s
- Power: 17,808.00 kW
- Memory: 1,024,000 GB
- Interconnect: TH Express-2
- Operating System: Kylin Linux
- Compiler: icc
- Math Library: Intel MKL-11.0.0
- MPI: MPICH2 with a customized GLEX channel

2 Titan - Cray XK7 , Opteron 6274 16C 2.200GHz, Cray Gemini interconnect, NVIDIA K20x

- Site: DOE/SC/Oak Ridge National Laboratory System
- URL: http://www.olcf.ornl.gov/titan/
- Manufacturer: Cray Inc.
- Cores: 560,640 Linpack Performance (Rmax) 17,590.0 TFlop/s Theoretical Peak (Rpeak) 27,112.5 TFlop/s
- Power: 8,209.00 kW
- Memory: 710,144 GB
- Interconnect: Cray Gemini interconnect
- Operating System: Cray Linux Environment

3   Sequoia - BlueGene/Q, Power BQC 16C 1.60 GHz, Custom

- Site: DOE/NNSA/LLNL

- Manufacturer: IBM

- Cores: 1,572,864 Linpack Performance (Rmax) 17,173.2 TFlop/s Theoretical Peak (Rpeak) 20,132.7 TFlop/s

- Power: 7,890.00 kW Memory: 1,572,864 GB

- Interconnect:

- Custom Interconnect Operating System: Linux

4   K computer, SPARC64 VIIIfx 2.0GHz, Tofu interconnect

- Site: RIKEN Advanced Institute for Computational Science (AICS)

- Manufacturer: Fujitsu

- Cores: 705,024 Linpack Performance (Rmax) 10,510.0 TFlop/s Theoretical Peak (Rpeak) 11,280.4 TFlop/s

- Power: 12,659.89 kW

- Memory: 1,410,048 GB

- Interconnect: Custom Interconnect

- Operating System: Linux

5   Mira - BlueGene/Q, Power BQC 16C 1.60GHz, Custom

- Site: DOE/SC/Argonne National Laboratory

- Manufacturer: IBM

- Cores: 786,432 Linpack Performance (Rmax) 8,586.6 TFlop/s Theoretical Peak (Rpeak) 10,066.3 TFlop/s

- Power: 3,945.00 kW Memory:

- Interconnect: Custom Interconnect

- Operating System: Linux

6   Stampede - PowerEdge C8220, Xeon E5-2680 8C 2.700GHz, Infiniband FDR, Intel Xeon Phi SE10P

- Site: Texas Advanced Computing Center/Univ. of Texas System
- URL: http://www.tacc.utexas.edu/stampede
- Manufacturer: Dell Cores: 462,462 Linpack Performance (Rmax) 5,168.1 TFlop/s Theoretical Peak (Rpeak) 8,520.1 TFlop/s Power: 4,510.00 kW
- Memory: 192,192 GB
- Interconnect: Infiniband FDR
- Operating System: Linux
- Compiler: Intel Math
- Library: MKL
- MPI: MVAPICH2

7   JUQUEEN - BlueGene/Q, Power BQC 16C 1.600GHz, Custom Interconnect

- Site: Forschungszentrum Juelich (FZJ) System
- URL: http://www.fz-juelich.de/ias/jsc/EN/Expertise/Supercomputers/JUQUEEN/JUQUEEN_node.html
- Manufacturer: IBM
- Cores: 458,752 Linpack Performance (Rmax) 5,008.9 TFlop/s Theoretical Peak (Rpeak) 5,872.0 TFlop/s
- Power: 2,301.00 kW
- Memory: 458,752 GB
- Interconnect: Custom Interconnect
- Operating System: Linux

8   Vulcan - BlueGene/Q, Power BQC 16C 1.600GHz, Custom Interconnect

- Site: DOE/NNSA/LLNL
- Manufacturer: IBM
- Cores: 393,216 Linpack Performance (Rmax) 4,293.3 TFlop/s Theoretical Peak (Rpeak) 5,033.2 TFlop/s
- Power: 1,972.00 kW Memory: 393,216 GB
- Interconnect: Custom Interconnect
- Operating System: Linux

9 SuperMUC - iDataPlex DX360M4, Xeon E5-2680 8C 2.70GHz, Infiniband FDR

- Site: Leibniz Rechenzentrum System
- URL: http://www.lrz.de/services/compute/supermuc/
- Manufacturer: IBM
- Cores: 147,456 Linpack Performance (Rmax) 2,897.0 TFlop/s Theoretical Peak (Rpeak) 3,185.1 TFlop/s
- Power: 3,422.67 kW
- Memory:
- Interconnect: Infiniband FDR
- Operating System: Linux

10 Tianhe-1A - NUDT YH MPP, Xeon X5670 6C 2.93 GHz, NVIDIA 2050

- Site: National Supercomputing Center in Tianjin
- Manufacturer: NUDT Cores: 186,368 Linpack Performance (Rmax) 2,566.0 TFlop/s Theoretical Peak (Rpeak) 4,701.0 TFlop/s Power: 4,040.00 kW
- Memory: 229,376 GB
- Interconnect: Proprietary
- Operating System: Linux
- Compiler: icc Math Library:
- MPI: MPICH2 with a custom GLEX channel