

Revised tender document

Department of Mechanical Engineering
Indian Institute of Technology Kanpur
Kanpur (UP) 208016 India

Enquiry date: August 14, 2015

Enquiry No: IITK/ME/AKS/2015/01

Sealed quotations are invited for HPC Cluster. The detailed specification of the cluster is described in the attached sheet. The quotations should reach the undersigned by the date and time mentioned below.

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Terms and Conditions:

1. The OEM Submitting the proposal should be in the Top 500 list since last 3 years, they should have 5 or more clusters Installed in India out of which at least one cluster should be minimum of 25 TeraFlop rating. Details of these installations must be provided.
2. The OEM must have min 03 HPC installations within India in the Top Indian Supercomputing sites maintained by the IISc, Bangalore. Details of these installations must be provided.
3. The OEM should have direct support centre in India to provide Support for critical IIT Kanpur cluster infrastructure.
4. All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
5. Warranty & Support: Three years comprehensive on-site for both Hardware from OEM directly.
6. All quotations must reach the undersigned by 5 P.M., August 25, 2015.
7. Quotations must be valid till November 25, 2015.
8. Quotations shall be submitted in two parts.
 - Part-I (Technical) should contain all the technical details cum specifications of the offered solutions.
 - Part-II (Financial) should contain the prices of the offered solutions along with commercial terms and conditions. The prices should be quoted separately for each item.
9. Delivery period will be 8 weeks.

10. We have standard 42U server rack of dimension 2006 mm × 598 mm × 1125 mm (H×W×D) with PDU in our Data Centre. Cluster should be installed in this rack. If offered solution does not fit in this Rack, then vendor should provide the Rack according to the solution.
11. Heat load of per rack should be 12KW maximum. Details of heat load and power consumption including cooling requirement for the above system in the rack should be provided
12. IIT Kanpur is exempted from excise duty.
13. IIT Kanpur is exempted for partial custom duty (CD applicable to IIT Kanpur is 5.15%).

Specifications of the HPC Cluster:

1. Master Node (Quantity - 1): 2X10 core Intel Xeon E5-2660 V3 processor @ 2.6 GHz or higher with 25 MB L3 Cache, Intel C610 Series chipset, 64 GB DDR4 2133 MHz or higher ECC RAM, dual gigabit NIC, Management port, dual FDR Infiniband ports, 4 × 2TB 7.2K RPM hot swap MDLSAS Disk, DVDROM, OS: Cent OS latest version.

2. Compute Nodes (Quantity - 12): 2×10 core Intel Xeon E5-2660 V3 processor @ 2.6 GHz or higher with 25 MB L3 Cache, Intel C610 Series chipset, 64 GB DDR4 2133 MHz or higher ECC RAM, dual gigabit NIC, Management port, FDR Infiniband ports, 1 × 1TB SATA Disk, OS: Cent OS latest version.

3. Cluster Interconnect: Infiniband FDR (56 Gbps) compatible with OFED and open MPI

4. Cluster Interconnect Gigabit: The compute nodes and master node must also be connected through gigabit NIC with managed switches for OS provisioning and management purpose.

5. Software: Cluster monitoring and management software. Compilers: Free compilers, MPI, MKL; node level deployment tools etc. Open domain free software, if any must be specified. Intel compilers and any other softwares if provided by IIT Kanpur needs to be integrated by the vendor in the HPC cluster.

Optional Items:

1. Additional Compute Nodes: 2×10 core Intel Xeon E5-2660 V3 processor @ 2.6 GHz or higher with 25 MB L3 Cache, Intel C610 Series chipset, 64 GB DDR4 2133 MHz or higher ECC RAM, dual gigabit NIC, Management port, FDR Infiniband ports, 1 × 1TB SATA Disk, OS: Cent OS. The node should be provisioned to include required licenses of software, infiniband cable and other items so that it can be integrated seamlessly with the cluster. The price should be quoted per node basis.

Addendum: The infiniband ports have been modified to FDR Infiniband from QDR Infiniband.