



MACHINE DESIGN SECTION
MECHANICAL ENGINEERING DEPARTMENT
INDIAN INSTITUTE OF TECHNOLOGY (MADRAS)
I.I.T.P.O., CHENNAI – 600 036

Telephone: 2257 4741

Ref. No.:

ME/MDS	2013	CNDE	SPL
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Date: 22.03.2013

To

P.T.O.

Dear Sirs,

Due Date: 06.04.2013

1. Quotations are invited in duplicate for the various items shown ~~below~~ / ~~overleaf~~ / **Enclosed list**.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate contract, Rate contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price. If so, please send copy of the Rate contract (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms: Quotations should be for free delivery to this institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. Firms outside Chennai: Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. Technical bid and commercial (Financial) Bids may be put in separate sealed cover and both of them should be put in a bigger sealed cover.
9. The rate of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Tax.
10. Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have Concessional sales tax applicable to non-Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificates will be issued at the time of final settlement of the bill.
11. Goods should be supplied carriage paid and insured.
12. Goods shall not be supplied without an official supply order.
13. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of Bill / acceptance of goods, whichever is later.
14. Compliance statement MUST be enclosed regarding the follow-up of two bids system and other requirements.

Yours sincerely,

Dr. Prabhu Rajagopal
MDS, Mech. Engg. Dept., IIT (M)

Specification for the High Performance Computing Cluster

Head Node: Quantity 1

Processor: 2x Intel Xeon Processor E5-2670 (2.60GHz/8-Core/20MB/8GT-s QPI/115W) or better

Cache Minimum of 20MB L3 Cache required

Processor Minimum of 8 cores/processor

Memory: 256GB (16GB/core) with scalable to 512GB DDR3 Reg. ECC 1600MHz or higher

Internal Storage: 6TB SATA Enterprise class 7.2K rpm or higher

I/O Ports: Single-Port QDR 40Gbps Infiniband Adapter; 2x Gigabit Ethernet Port

Cable: Appropriate 2M QDR QSFP 40Gbps Infiniband Cable

Integrated IPMI and KVM with dedicated LAN

Power Supply: Redundant Power Supply

Warranty: 3 years on-site comprehensive warranty

Compute Nodes: Quantity 4

Processor: 2x Intel Xeon Processor E5-2670 (2.60GHz/8-Core/20MB/8GT-s QPI/115W) or better

Cache Minimum of 20MB L3 Cache required

Processor Minimum of 8 cores/processor

Memory: 128GB (8GB/core) with scalable to 256GB DDR3 Reg. ECC 1600MHz or higher

Internal Storage: 500GB SATA Enterprise class 7.2K rpm or higher

I/O Ports: Single-Port QDR 40Gbps Infiniband Adapter; 2x Gigabit Ethernet Port

Cable: Appropriate 2M QDR QSFP 40Gbps Infiniband Cable

Integrated IPMI and KVM with dedicated LAN

Power Supply: Redundant Power Supply

Warranty: 3 years on-site comprehensive warranty

Interconnect: Infiniband Switch

8-Port QDR 40Gbps Infiniband Switch

HPC Software:

Open Source Linux Operating System and Open Source Cluster Management Software

General Conditions

- 1.** The bidder should have proven skills in Linux and experience in configuring Infiniband based clusters.
- 2.** Installation and integration of all supplied hardware and software shall be done by the bidder. The vendor shall install and configure all required hardware and software suites, including but not limited to racking and stacking, cluster networking, configuring all nodes, execution and submission of jobs, installation of compilers and applications, configuration of environment variables and license utility configuration.
- 3.** The bidder should provide half-a-day training on usage and administration of the cluster. Charges, if any, should be included in the proposal.
- 4.** The bidder must have supplied, installed and integrated at least 5 HPC Clusters across India, out of which at least three must be Infiniband based, preferably in IIT Madras / other IITs and R&D labs. Please provide a list of your installations.
- 5.** Delivery time for the cluster, from the date of issue of PO, should be indicated by the vendor
- 6.** The period of warranty will be for three years comprehensive on-site from the date of acceptance.
- 7.** Total power consumption, electrical requirements and air conditioning requirement of the cluster should be specified by the bidder.
- 8.** The proposed cluster must be factory integrated and tested in the factory. A test certificate should be issued by the OEM along with the system.