

## Department of Electrical Engineering

Enquiry No.: EE/YSC/2017/03 (fourth revision)

Opening Date: 10<sup>th</sup> Feb., 2017

Revised on: 16<sup>th</sup> Feb., 2017

Revised again on: 22<sup>nd</sup> Feb., 2017

Closing Date: 27<sup>th</sup> Feb., 2017

### Sub.: Purchase of branded HPC Cluster

HPC cluster should consist of total six nodes (one master and five compute nodes). The specifications for master, compute node and accessories given below. Please send sealed quotation to undersigned for the same. The envelope should be marked as “HPC–EE/YSC/2017/03”.

Quotations should be submitted in two parts (Two Bid System): Technical bid and financial bid in two separately sealed envelopes.

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 the commercial terms and conditions.

Financial bids for products whose technical bid is not acceptable will not be opened. Any quote where the financial bid is included in the technical bid will be summarily rejected. The sealed envelopes with the quotes should be super scribed with Inquiry number and whether it is a technical or financial bid.

### Master Node:

Configuration	Description of Requirement
Chassis	1U Rack Mountable in 1075mm rack with mounting Rail Kit
CPU	Two numbers of Intel E5-2680v4 (14cores, 2.40GHz, 35MB cache) Processors
Motherboard	Intel® C610 Series Chipset
Memory	128GB DDR4 2400MHz ECC REGISTERED (must support at least up to 512GB)
HDD (Primary)	2X 300GB Enterprise 12G 10K-SAS
HDD (Secondary)	2X 1.2TB Enterprise 12G 10K-SAS
HDD Bays	Min. 4 hot swap HDD bays
RAID Controller	Must support RAID 0/1/5/10
Optical drive	DVD RW
On Board I/O	2x RJ-45 Lan Port, 1x RJ-45 Dedicated IPMI Lan Port, 2x USB 3.0, 1 x VGA port
Ethernet	2 x 1 Gigabit Ethernet (integrated) , 1 x Mgmt. LAN
Infiniband	1 x Single Port Mellanox ConnectX-3 FDR InfiniBand with QSFP

	interface
Management	IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Power Supply	1+1 Redundant Power Supply
OS Support	Red Hat Enterprise Linux (RHEL) 6/7, CentOS Server 6/7

**Compute Node:**

<b>Configuration</b>	<b>Description of Requirement</b>
Chassis	1U Rack Mountable in 1075mm rack with mounting Rail Kit
CPU	Two numbers of Intel E5-2680v4 (14cores, 2.40GHz, 35MB cache) Processors
Motherboard	Intel® C610 Series Chipset
Memory	128GB DDR4 2400MHz ECC REGISTERED (must support at least up to 512GB)
<b>Hard disk drive</b>	<b>1X 300GB Enterprise 10K-SAS</b>
HDD Bays	Min. 4 hot swap HDD bays
RAID Controller	Must support RAID 0/1/5/10
On Board I/O	2x RJ-45 Lan Port, 1x RJ-45 Dedicated IPMI Lan Port, 2x USB 3.0, 1 x VGA port
Infiniband	1 x Single Port Mellanox ConnectX-3 FDR InfiniBand with QSFP interface
Management	IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Ethernet	2 x 1 Gigabit Ethernet (integrated) , 1 x Mgmt. LAN
Power Supply	1+1 Redundant Power Supply
OS Support	Red Hat Enterprise Linux (RHEL) 6/7, CentOS Server 6/7

**Accessories:**

<b>Name of the item</b>	<b>Description</b>	<b>Quantity</b>
InfiniBand Switch	InfiniBand FDR Mellanox Switch 12 Ports with QSFP interface	1
InfiniBand Cable	InfiniBand Cable QSFP 1 meter (1 per node)	6
Ethernet Switch	24 Port Gigabit Ethernet 1U Switch Layer-2.	1
Patch Cord	CAT6 Ethernet Patch Cord 2 meters (2 per node)	12

Warranty	Warranty must include 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.
<b>Firm's authorization</b>	<p>1. The bidder must be authorized by the manufacturer or OEM to supply, install and maintain the system.</p> <p>2. The firm should have successfully delivered and installed at least 25 nos. similar systems in any Central Govt. Organization, preferable R&amp;D and Premier Educational Institutions (attach proof).</p>

**Note:**

- System should be factory assembled and tested at the OEM site.
- No on-site assembling or integration allowed. Only rack mounting and installation of OS and application and other services are allowed.

**Terms and Conditions:**

1. Your quotation shall contain Authorization Letter from manufacturer specifically for this tender.
2. Quotation must be valid for 90 days.
3. Delivery period should not be more than 6 weeks.
4. Payment Terms should be clearly mentioned.
5. Send complete detail of the product(s) including brochure etc.
6. Please mention the unit price separately for each product i.e. separate price for master node, compute node and each accessory.
7. All prices are to be FOR IIT Kanpur and must include all duties, taxes and delivery charges etc.
8. Institute is exempted for payment of Excise Duty under notification No. 10/97 & partially @ 5.15% Custom Duty exemption certificate under notification 51/96 and road permit will be provided if applicable.
9. Supplier must install open source compilers, libraries etc. He should also make sure that parallelization/job scheduling of open source software such Quantum-Espresso and other software is correctly working on the cluster.

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