



तेजपुर विश्वविद्यालय / TEZPUR UNIVERSITY  
(संसद के अधिनियम द्वारा स्थापित केंद्रीय विश्वविद्यालय)  
(A Central University established by an Act of Parliament)  
कुल सचिव का कार्यालय/ OFFICE OF THE REGISTRAR  
नपाम :: तेजपुर - 784028 :: असम  
NAPAAM :: TEZPUR - 784028 :: ASSAM

**SHORT QUOTATION NOTICE**

TU/11-24/Pur/Qtn/2017-18/2697-A. dated: 21.09.2017

Sealed quotations are invited from reputed manufacturers/authorized dealers/vendors for supply, installation & commissioning etc. of following items required for the DST-SERB Sponsored Research Project of Dr. Ashwini Kr. Phukan, Department of Chemical Sciences, Tezpur University. Those who have participated in response to our Earlier Notice Nos. TU/11-24/Pur/Qtn/2017-18/1824-A/2157-A/2330-A dated 26.07.2017/16.08.2017/28.08.2017 need not participate again. However, revised offer if any may be submitted and in such cases Tender fee and EMD not be submitted again.

**Item with Specification:**

**High Performance Computing Cluster (HPCC): Technical Specifications and Compliance**

1. Master Node:	
Item	Description
CPU	2 x Intel Xeon E5-2630 v4 (2.2GHz, 25M Cache, 10Core)
Chipset	Intel C610 chipset or Higher
Memory Requirement	96 GB to be configured using 2400MHz DDR4-ECC RDIMMs. Adequate DIMMs to be configured to populate all memory channels in a balanced manner. Compute node should be scalable to 12 DIMMs.
Memory protection	Advanced ECC
Memory scalability	Should be capable of scaling upto 384 GB Memory or more.
Disks scalability	Up to 6 numbers of SAS/SATA/SSD hot swap HDD Bays
Disks required	To be configured with six (06) numbers of 1.8TB SAS 10K rpm. <b>The Hard Disks should be configured with RAID-6 from DAY-1.</b>
Networking	2 x 1Gbps ports with PXE boot capability& 1 x 10Gbps Card
Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM; Must provide server Management software to remotely manage all servers from a Single console. Software must be from the same OEM.
Power Supply	1 + 1 Redundant rated efficient power supply to sustain above configuration. Power supply with 80+ certified for better utilization.
Cooling	Redundant Fans for sufficient cooling
Optical Drive	Internal DVD-ROM drive
Graphics controller	Integrated Graphics with at least 16MB Video Memory
Management Port	Min 3 USB ports (Out of which 1 Port should be USB 3.0), 1 Serial, keyboard, mouse, graphics (DB-15), 1Gbps Remote Management Port
PCI-Express 3.0 slots	Minimum 2xPCIe 3.0 slots.



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Industry standard certifications	<b>The quoted server models should have the following Certifications:</b> Microsoft Windows Server2008 R2, Microsoft® Windows® HPC Server 2008, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Sun Solaris, Microsoft® Windows Server® 2008 Hyper-V, VMware® ESXi Version 4.1, Citrix® XenServer 5, FCC, UL, ROHS
Industry standard support	User-selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 Compliant, PCI 2.3 compliant, PXE and WOL Support, IPv4 and IPv6 support
<b>Warranty</b>	<b>3 Years comprehensive onsite warranty with next business day response.</b>
<b>2. Compute Node:</b>	
<b>Item</b>	<b>Description</b>
CPU	2 x Intel® Xeon E5-2650 v4 (2.2GHz, 30M Cache, 12Core)
Chipset	Intel C610 chipset or Higher
Memory Requirement	96 GB to be configured using 2400MHz DDR4-ECC RDIMMs. Adequate DIMMs to be configured to populate all memory channels in a balanced manner. Compute node should be scalable to 12 DIMMs.
Memory	Advanced ECC
Disks scalability	Upto four (04) nos. of SAS/SATA/SSD hot swap HDD Bays
Disks required	To be configured with two (02) numbers 600GB SAS or SATA Enterprise 10K rpm.
RAID Levels	Integrated RAID Controller, Support for RAID 0,1 and 5
Networking	2 x 1Gbps ports with PXE boot capability and 1 x 10Gbps Card
Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM; Must provide Server Management software to remotely manage all servers from a Single console. Software must be from the same OEM.
PCI-Express3.0 slots	Minimum 2xPCIe 3.0 slots
Graphics	Integrated Graphics with at least 16MB Video Memory
Power Supply	(1+1) Dual, Hot-plug, Redundant Power Supply Platinum rated efficient power supply to sustain above configuration. Power supply with 80+ certified for better utilization.
Cooling	Redundant Fans for sufficient cooling
Industry standard certifications	<b>The quoted server models should have the following Certifications:</b> Microsoft Windows Server2008 R2, Microsoft® Windows® HPC Server 2008, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, Sun Solaris, Microsoft® Windows Server® 2008 Hyper-V, VMware® ESXi Version 4.1, Citrix® XenServer
Industry standard support	User-selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 Compliant, PCI 2.3 compliant, PXE and WOL Support, IPv4 and IPv6 support
<b>Warranty</b>	<b>3 Years comprehensive onsite warranty with next business day response.</b>
<b>3. Switches, Console, Rack &amp;Software:</b>	
<b>Item</b>	<b>Description</b>



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Switch	24-port 10 Gigabit Switch should be capable of minimum 1. 24 Dedicated 10GBase-T ports supporting 10G/1G speeds 2. Protocols: LACP, Spanning Tree, Network Access Control. 3. Jumbo Frame upto 10K. 4. Bandwidth minimum 480Gbps
KVM Switch	16-Port KVM Switch with related cables & accessories to support Master & Compute Nodes.
Console/Monitor	Slide IN and OUT type Rack mountable 19" TFT Display with Keyboard and TouchPad
Form Factor	1U/ 2U form factor. Each of the Server nodes should be individually serviceable, without shutting down the other Server nodes.
Server Rack	Height 42U with all accessories, Sufficient depth for Servers, Castor with brake, Server Power strip with at least 15 sockets, mounting hardware, Cooling Fans, Front & Rear perforated doors, detachable side panels, locking system, Cable entry provision at top & bottom, Powder coated, Vertical & Horizontal Cable Managers.
Cluster Management Software	Cluster Management (Open source), Cent OS (Open Source), Commercial Solution Optional. FORTRAN Compiler for the cluster MPI libraries, OPEN MPI libraries and other parallel Libraries.
Installation	Full Installation at the site & configuration of Hardware, OS, Cluster Management. Software with Queuing, Job Scheduling etc. Installation and integration of HPCC with network for remote access.
Training	Thorough training should be provided to the users about the HPCC Cluster
<b>Specific Terms and Conditions:</b>	
1. The Bidder must have been in the I.T Business for at least 3 years (36 months). Documentary Evidence like Company Registration Certificate etc. should be submitted along with the offer.	
2. The Bidder should submit an Undertaking confirming that they will maintain and provide after sales support for 3 years for the entire Systems including HPC Cluster.	
3. The OEM/Bidder should have their own service Centre in North East India or should have an authorized service provider who is having their registered office in North East India. Documentary evidence of the same should be enclosed with their Offer.	
4. The Servers whose Product has been quoted should have at least Three entry in Top 100 in the list for world's fastest super computers (refer <a href="http://www.top500.org">http://www.top500.org</a> )	
5. The Bidder should have an experience of supplying, installing & maintaining minimum 3 Nos of High Performance Computing (HPC) infrastructure in any Central Govt Institution/Govt Institution/ PSU etc in North-Eastern Region in the last 3 Years. The Bidder should submit proof of executing the order (like installation Certificates/Feedback Letter from Customer) and the HPC should be up and running and under maintenance of the bidder till the opening of the tender.	
6. OEM should be an established vendor with presence in India for the last 5 years.	



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<p>7. The Data sheets documents and technical documents submitted should be available on the global websites of the respective manufacturer and the URL links to the respective documentation should be provided in the compliance statement. Any document which is not available on the Global website of the OEM would be treated as invalid document submitted and noncompliance against the technical specification asked in the tender.</p>
<p>8. Please mention the unit price separately for each product i.e. separate price for master node, compute node and each accessory along with consolidated prices applicable for both Indigenous and Imported items.</p>
<p>9. (i) The warranty provided by the bidder should have a back to back arrangement with the OEM. The declaration should be the part of a Letter of Authorization and signed by competent authority at the OEM.</p>
<p>(ii) The warranty period of an item shall commence after receipt of the items in good working condition and from the date of its satisfactory installation at the project site in Tezpur University. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.</p>
<p>(iii) Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours.</p>
<p>(iv) The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes if any should be borne by the supplier or their agent. A clear confirmation should be given for this item.</p>

**GENERAL TERMS & CONDITIONS:**

1. No separate tender paper will be issued from the office; one should only download the specifications/List from the website.
2. **The rates should be preferably quoted in Indian Rupee and FOR Tezpur University, Napaam basis. Charges for clearing and transportation should be incurred by the supplier.**
3. *Quotations should be accompanied by i) An EMD (in the form of Demand Draft/Call Deposit/TDR) of ₹. 5000/- (Rupees Five Thousand) only drawn/pledged in favor of Registrar, Tezpur University, payable at Tezpur. **No request for consideration of earlier deposited EMD will be considered.** ii) A non-refundable application (quotation) fee of ₹.1000.00 (Rupees One Thousand) only must be paid only by Demand Draft drawn in favour of Registrar, Tezpur University payable at Tezpur.*
4. The rates should be exclusive of GST and applicable GST in % should be clearly indicated
5. Applicable levies, surcharge and discounts should be clearly indicated itemwise.
6. Quoted rates should be valid at least for a period of 01 year.
7. The rates should be quoted along with supporting documents of specifications and technical features and list of users.
8. The system must be installed at the laboratory, and after installation a basic training must also be provided by the supplier or their Indian counterpart without any additional costs.
9. All the quotations must be accompanied with supporting documents and / or literature.
10. Demonstration may be sought from the vendors for authentication of quoted specification.
11. Details of availability of after sales support will have to be furnished. After sales support, directly from manufacturer and from Assam (Guwahati / Tezpur) will be preferred.
12. The University is exempted from paying Custom and Excise duty.



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13. Proprietary items should be quoted with sole Manufacturer/Distributorship certificate.
14. Warranty/Gurantee period should be specifically mentioned in the quotation.
15. No Advance payment will be made. However, for foreign supplier, advance payment will be made either by FDD/Wire Transfer/LC. In such cases 10% Performance Bank Guarantee should be submitted before issuing FDD/Wire Transfer/LC, covering the warranty period.
16. Performance Bank Guarantee also must be submitted for Major equipments of Indian origin, covering the warranty period.
17. Items of Foreign origin should have Insurance up to installation on site.
18. The University reserves the right to accept or reject any or all the quotations without assigning any reason.
19. Quoted price should be inclusive of essential accessories and should be CIF Tezpur University, Tezpur
20. Applications for release of EMD should be submitted to the Registrar/ Joint Registrar.
21. Apart from the above terms and conditions the University has the right to include any other terms and conditions as and when felt necessary.
22. **Quotation should be submitted in the DROP BOX placed in the reception of the Administrative Building of the University within 30 days from the date of publication of this notice. If posted/courierred, should reach within 30 days addressed to "The Joint Registrar, Tezpur University". The Quotation Notice No. and date should be clearly superscribed in the envelope/packet containing the quotation.**

Sd/- Joint Registrar  
Tezpur University