



# Institute of Physics

Sachivalaya Marg  
Po-Sainik School  
Bhubaneswar-751005

## Notice Inviting Tender Tender No.NIT/IOP/16/2014-15 (2 Parts Tender)

**Description of the Service:** supply, installation, testing and commissioning of the following items from the manufacturers and/or their authorised agents only

Sl. No	Name of the Item	Qty.	EMD in Rs.
1.	HPC AMD SYSTEM	01 unit	80,000/-
2.	I7 DESKTOP PC	16 nos.	20,000/-

**Cost of Tender Paper** : Rs.500/- (Non refundable)

### Important Dates:

- (a) Sale of Tender : 21.07.2014 to 28.07.2014
- (b) Last date for submission of Tender : 05.08.2014 up to 1430 hours
- (c) Opening of tender(Technical bid) in the presence of attending bidders at Library Conference hall : 05.08.2014 at 1500 hours

For further details, please refer to the detailed NIT in IOP's website [www.iopb.res.in](http://www.iopb.res.in)

### NOTE:-

- 1) Parties may quote alongwith requisite amount of EMD indicated against above equipment. Party registered with SSI/DGS&D/DAE and foreign parties quoting directly are exempted from paying EMD only.
- 2) Bidder who submit the form downloaded from the web site must attach Demand Draft for Rs.500/- prepared in favour of "Director, Institute of Physics" with their bid towards the cost of tender documents.

DIRECTOR

## **INSTITUTE OF PHYSICS NIT OPEN DOCUMENT (2 PART BID)**

Institute of Physics(IoP), Bhubaneswar, India is an Autonomous Institute under Dept of Atomic Energy, Government of India. IOP would like to procure the following equipment. The Technical Specifications, Schedule of Requirements and Allied Technical details are given in Part-1 of tender document.

- **Item: 1) HPC AMD System**
- **Tender Enquiry No: NIT/IOP/16/2014-15**
- **Due Date & Time: 05.08.2014 up to 1430 hours**
- **Opening of Technical Bids: 05.08.2014 at 1500 hours.**

Sealed tenders are invited for supply, installation, testing & commissioning of above items/equipment in the Institute of Physics, Bhubaneswar. The tender document consists of the following two parts.

Part-1: "TERMS & CONDITIONS" & "TECHNICAL BID" of the tender. Part-2:

"COMMERCIAL BID" of the tender.

The sealed envelope containing "Terms & Conditions", "Technical Bid" and "Commercial Bid" on prescribed tender document should reach the Director, Institute of Physics, Bhubaneswar on or before **05.08.2014 up to 1430 hours** otherwise the tender will not be accepted.

The sealed envelope of the bidders containing Part-1 "Terms & Conditions" and "Technical bid" shall be opened on **05.08.2014 at 1500 hours**. One authorized representative of each vendor may participate at the time of opening the bids. The Part -2 "Commercial Bid" of only those parties who qualify in Part - 1 will be opened on a later date. The date of opening of Part-2 of the tender will be informed to each qualified party separately.

**DIRECTOR**

**The Institute can provide the following documents.**

- 1. Custom Duty / Excise duty exemption certificate.**
- 2. Road permit for entering in Odisha.**

**The Institute cannot provide the following documents.**

- 1. Form D for Central Sales tax/IIID for UP Trade Tax.**

**COST OF TENDER PAPER IS Rs.500/- (NON REFUNDABLE).**

**This is payable in cash or Demand Draft of a Scheduled Bank drawn in favour of the Director, Institute of Physics, Bhubaneswar.**

## PART-I

1. Director, Institute of Physics, Bhubaneswar invites sealed tenders for HPC AMD System from ISO certified manufacturers and their authorized agent having following credentials.

A. Should have satisfactorily completed **similar supply** (at least one of them in Central Government/Central Autonomous Body/Central PSU)

B. **Similar or Similar Nature of work means** Supply, Installation, testing and commissioning of such Equipments for any of the following:

a) **Government/Autonomous Institutions**

b) **Government Research Centres**

c) **Universities**

d) **Autonomous/Reputed Private Research Centres**

C. Purchase Orders / Completion certificates, if any, for supporting above requirements.

2. The Bidders are requested to give detailed tender or its own form in **Two Bid** format, i.e.  
Part - I Technical Bid  
Part - II Commercial Bid.

### 3. Supply Means:

“Supply, Installation, Testing & Commissioning and satisfactory demonstration of the whole equipments”. If any charges extra are payable for Installation and Commissioning, the same should be specified in the commercial offer.

### 4. Submission of Bids:

(a) Place: Office of Director, Institute of Physics, Bhubaneswar

(b) Time and Date of Submission: **05.08.2014 up to 1430 hours**

(c) Time and Date of opening Technical Bid: **05.08.2014 at 1500 hours**

IOP will not be responsible, for submission / delivery of quotation at wrong places other than the Director, Institute of Physics, Bhubaneswar. IOP will also not be responsible for any postal delay.

### 5. Two Bid System: (For each equipment separately)

The two bid system should be followed for this tender. In this system the bidder must submit his offer in two separate sealed envelopes. Both the technical bid and commercial bid envelopes should be securely sealed and stamped separately and clearly marked as “Envelope No.1 – Technical Bid” and “Envelope No.2 – Commercial Bid” respectively. Both the sealed envelopes should be placed in a third larger envelope. The main envelope which will contain both the bids should be super scribed with our tender enquiry No. **NIT/IOP/16/2014-15** due on **05.08.2014** and to be submitted to the address given below so as to reach on or before **05.08.2014 up to 1430 hours**.

Director  
Institute of Physics  
Sachivalaya Marg  
Bhubaneswar – 751 005  
Odisha  
India

**The envelopes must be super-scribed with the following information:**

- Tender Reference Number
- Name of the Equipment and Item No.
- Due Date
- Name of the Vendor
- Envelope No. 1: Shall contain “Acceptance of Terms & Conditions”, “Technical Bid” and Earnest Money Deposit (EMD)  
The technical offer should not contain any price information.
- Envelope No.2: Shall contain “Commercial Bid” only.

The Technical Bid must be submitted in an organized and structured manner. No brochures/leaflets etc. should be submitted in loose form. Please indicate page nos. on your quotation eg. If the quotation is containing 25 Pages, please indicate as 1/25, 2/25, 3/25 ----- 25/25.

**Printed conditions of the vendor submitted with the tender will not be binding on** Director, Institute of Physics, Bhubaneswar.

**Important Instruction**

The bidders are requested to make separate bids (technical & financial both) for each quoted equipment along with the requisite amount of EMD.

**The Technical Offer should comprise of the following:**

a) Tenders, which are submitted without following the Two-Bid Offer System, will summarily be rejected.

b) The technical offer should be complete to indicate that all products and services asked for are quoted. Each page of the bid and cutting/corrections shall be duly signed and stamped by the bidder. Unsigned Tenders will also be rejected. Failure to comply with this requirement may result in the bid being rejected.

c) The purpose of certain specific conditions is to get or procure best product/service etc. for IOP. The opinion of Technical Committee shall be the guiding factor for technical short listing.

d) The earnest money deposit as indicated against each items should be enclosed along with the terms & conditions & technical bid duly signed and stamped in the form of Account Payee Bank Draft payable on any branch of Nationalised/Schedule Bank at Bhubaneswar in favour of

Director, Institute of Physics, Bhubaneswar, in a separate sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bids shall not be opened. No interest is payable on EMD.

The EMD will be returned to the bidders(s)/Agents whose offer is not accepted by IOP within one month from the date of the placing of the final order(s) on the selected bidder(s). In case of the bidder(s) whose offer is accepted the EMD will be returned on submission of Security Deposit (SD). However, if the return of EMD is delayed for any reason, no interest / penalty shall be payable to the bidders.

**The EMD shall be forfeited:** If the bidder withdraws the bid during the period of bid validity specified in the tender. In case a successful bidder fails to furnish the Security Deposit

a) Undertaking that the successful bidder agrees to give a performance Bank Guaranty of 10% of the purchase order value in favour of “Director, Institute of Physics, Bhubaneswar” valid till warranty period.

b) Duly filled in Technical Bid with proper seal and signature of authorized person on each page of the bid should be submitted and the same should accompany with complete specifications and drawings, Manufacturer’s name, address and relevant Technical Literature/Brochures with warranty Terms and EMD.

c) If the bid is for branded makes, authorization letter from principals clearly indicating that the vendor is the competent authority to sell and provide services towards the items mentioned in the scope of supply given in this tender document.

d) Copy of LST/CST/WCT No. PAN No. and TIN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration and a copy of DGS&D registration wherever it is applicable should also be provided in Technical Bid.

e) List of deliverables / Bill of materials and services.

f) Compliance sheet with any deviation with reference to the terms and specifications.

g) Indicate the names of the Indian reputed Organizations where you have supplied similar/related items/equipments and may attach the satisfactory performance report of the equipments from user Organization.

h) The vendor must provide hard copies of all technical documents, including that for OEM products. This should include manuals, drawings, designs, electrical diagrams, etc. This should be specific to the instrument provided, and not generic. All manuals should be written in English and the manuals including technical drawings should be complete in all respects to operate the system without any problem.

i) Bid documents should be submitted as per the above sequence with Index page and page numbers (including technical literature). Each page of the bid should be signed & stamped in original. Unsigned bids will not be considered for evaluation.

• **Envelope 2: “Commercial Bid” shall contain:**

- a) Price schedule complete in all respects with proper seal and signature of authorized person. Tender with any condition including conditional rebate shall be rejected forthwith.
- b) Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only.
- c) **The Bidders are requested to quote for Educational Institutional Price for Machine/ Equipment and, since we are eligible for the same.**

**6. Date of opening the Technical Bids.**

Technical Bids will be opened on – **05.08.2014 at 1500 hours** at office of the Director, Institute of Physics, Bhubaneswar

The Technical bids will be opened in the presence of the bidders on the specified time and date. Bidders/Agents who have responded to the tender only will be allowed to be present.

The technical bids will be evaluated to shortlist the eligible bidders. The bidders should be available for technical presentations, if required, on an earliest possible date (determined by the committee) following the opening of the technical bids. The commercial bids of only the short listed bidders shall be considered for further processing. Bidders whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be informed about the date and time of the opening of the commercial bid.

**Note: (1)** Please do not insert “Commercial Bid” (prices quoted) in the technical bid envelope. If the same is submitted with the technical bid, the tender may be rejected.

**(2)** No camera mobiles / mobiles are allowed during tender opening.

**7. Opening of Commercial Bids**

IOP will open the commercial bids of only the short listed bidders, in the presence of the bidders or their authorized representatives who choose to attend the commercial bid opening. The Date and Time of opening the Commercial Bid will be intimated only to pre-qualified and technically acceptable Bidders for the item at a later date.

The representatives of short listed firms only will be allowed for commercial bid opening.

ONLY TECHNICALLY accepted competitive bids will be considered for placing Purchase Order. The commercial offers of the vendors whose technical offers are found to be technically deficient or do not meet the qualification criteria as specified in this tender will be returned to them without opening.

The bid can be submitted in person or through post/courier (IOP will not be responsible for delayed / late quotations submitted / sent by Post / Courier etc. resulting in disqualification/ rejection of any bid) so as to reach IOP on or before the due date and time. Fax / E-mail / Telegraphic / Telex tenders will not be considered unless it is asked for. The bidders 'authorized representative can attend the bid opening.

**8. Director, Institute of Physics, Bhubaneswar reserves the right to accept the offer in full or in parts or reject summarily or partly.**

**9. Delivery Period / Timeliness**

The deliveries, installation must be completed within 90 days, after placement of purchase order. The time is the essence of the contract. It is mandatory for the bidders who respond to this bid to meet these expectations, as they are tightly linked to IOP's plans of completing the project within the time frame.

**10. Locations for the Supply / Services**

The Laboratory Equipments covered by this document is required to be supplied and installed at Institute of Physics, Bhubaneswar.

**11. Order Placement and Release of Payment**

The Purchase Order and payment shall be processed by –

Director

Institute of Physics

Bhubaneswar-751 005

Odisha, India.

Payment for the items to be supplied by the vendor against the purchase order shall be made by Institute of Physics as follows:-

For indigenous supplies, 80% payment will be made after 100% delivery of the material on submission of original invoice and delivery challans duly signed and stamped by the authorized representative of IOP along with Performance Bank Guarantee. Balance 20% payment will be released on submission of installation and warranty certificate duly signed and stamped by the authorized representative of the user department.

In case of imports, 100% payment will be made through Letter of Credit. 80% will be paid after delivery of the materials (equipments) and necessary documents preferably through bank. whereas the balance 20% will be released after satisfactory installation and commissioning along with submission of mandatory 10% Performance Bank Guarantee favouring Director, Institute of Physics, Bhubaneswar valid till warranty period. Any deviation requested in payment terms need justification

**12. IOP** will not provide any transportation for the engineers / representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the Principal Supplier/Indian Agent to make their own arrangements.

**13. The successful bidder**, on award of contract / order, must send the contract / order acceptance

in writing, within **two weeks** of award of contract / order failing which the EMD will be forfeited.

#### **14 Period of validity of bids**

Bids shall be valid for a period of 90 days from the date of opening the Technical bid.

IOP may ask for the bidders' consent to extend the period of validity. Such request and the response shall be made in writing only. The bidder is free not to accept such request without forfeiting the EMD. A bidder agreeing to the request for extension will not be permitted to modify his bid.

Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

#### **15. Award of Purchase Order**

IOP shall award the contract to the eligible bidder whose bid has been determined as the lowest evaluated commercial bid. If more than one bidder happens to quote the same lowest price, IOP reserves the right to award the contract to more than one bidder or any bidder.

**Purchaser's Right to vary Quantities at the time of Award:** IOP reserves the right at the time of award of Contract to increase or decrease the quantity of items specified in the Schedule of Requirements without any change in price or other terms and conditions.

#### **16. Corrupt or Fraudulent Practices**

IOP requires that the bidders who wish to bid for this project have highest standards of ethics. IOP will reject a bid if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract. IOP may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the execution of contract.

#### **17. Interpretation of the clauses in the Tender Document / Contract Document**

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, Director, IOP's interpretation of the clauses shall be final and binding on all parties.

#### **18. Price**

The price quoted shall be considered firm and no price escalation will be permitted at any time. The quotation should be in Indian Rupees or any known foreign currency. Packing, forwarding, freight, insurance, **Agency commission** and commissioning charges, if any, may be quoted separately in the "Commercial Bid".

In case of Foreign Currency bids, price criteria should be Ex-works / CIP Kolkata / CIP Bhubaneswar airport with detail break up of Price, FCA cost, **Agency Commission**, Insurance, Freight up to Kolkata / Bhubaneswar Airport is required.

#### **19. Pre-installation**

Pre-installation facilities required for installation may please be intimated in the technical bid. Subsequently, before the consignment lands in IOP, Bhubaneswar the bidder shall confirm that the pre-installation requirements are sufficient for installation of the equipments. In other words



the bidder should continuously monitor the pre-installation requirements and see that everything is ready before the consignment is taken to the site for installation. The vendor must arrange for at their expense a factory visit after completion of the manufacturing process but before shipment and demonstrate that the benchmarks are met. All utilities must be specified *a priori*, and the vendor must visit the installation site to ensure that the facilities are adequate.

## **20. Installation**

Bidder shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter. The vendor must install and commission the system within one month from delivery. Failure to do so may incur a penalty (unless the delay is requested from IOP, Bhubaneswar).

## **21. Warranty / Support**

**The items covered by the schedule of requirement shall carry minimum one year of comprehensive warranty from the date of acceptance of the equipments by IOP.** 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. The comprehensive warranty includes onsite warranty with parts. **Three-year comprehensive warranty may please be quoted as an option.**

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 beneficiary or his agent. A clear confirmation should be given for this item.

The bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.

The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.

## **22. Indemnity**

The vendor shall indemnify, protect and save IOP against all claims, losses, costs, damages, expenses, action suits, and other proceedings resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements with respect to all the equipments supplied by him.

The successful tender should give an undertaking that the staff deployed at the centre in terms of this contract at all time will be employees of the agency exclusively and they shall not be entitled to any claim of employment or permanency of job with IOP.

IOP reserves the right to forfeit whole or part of the security money towards any damage/loss caused due to the negligence on the part of the agency engaged.

## **23. Insurance**

The equipments to be supplied will be insured by the vendor (till IOP will take over the consignment) against all risks of loss or damage from the date of shipment till such time it is delivered at IOP site in case of Rupee/Foreign currency transaction.

**24. Penalty for delayed Services / LD**

As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise EMD/SD of the bidder will forfeited and also LD clause will be applicable /enforced.

If the supplier fails to Supply, Install and Commission the equipment as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

IOP reserves the right to cancel the order in case the delay is more than 60 days Penalties, if any, will be deducted from the Security Deposit.

**25.** If a dispute arises out of or in connection with the contract, or in respect of any defined legal relationship associated therewith or derived there from, the parties agree to submit that dispute to arbitration under the ICADR Arbitration Rules, 1996. The authority to appoint the arbitrator(S) shall be the International Centre for alternative dispute resolution. The International Centre for Alternative Dispute Resolution will provide administrative services in accordance with the ICADR arbitration Rules, 1996.

**26. Jurisdiction**

The disputes, legal matters, court matters, if any, shall be subject to Bhubaneswar Jurisdiction only.

Director  
Institute of Physics, Bhubaneswar

### **DECLARATION BY THE VENDOR**

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the tender document for which I/We have signed and submitted the tender under proper lawful Power of Attorney. It is also certified that all the terms and conditions of the tender document are fully acceptable to me/us and I/We will abide by the conditions from serial no. 1 to 26. This is also certified that I/We/our principal manufacturing firm have no objection in signing the purchase contract if the opportunity for the supply of the items against this tender is given to me/us.

Date:

Signature: Address:

Name:

## GENERAL INFORMATION

1.	Name of the Company	
2.	Full address of company alongwith  Telephone no. Fax no. E-mail address :	
3.	Local address of company for communication, if any	
4.	Are you a manufacturer or dealer/reseller	
5.(a)	Annual turnover in last 3 financial years in Rs. Crores.  (i) year 2011-2012 (ii) year 2012-2013 (iii) year 2013-2014	
5.(b)	<b>Supply, Installation, and Commissioning of</b> <b>I) HPC AMD System</b> <b>II) i7 Desktop PC</b> <b>Last 3 financial years in State Government or Govt. of India Department(s) /Reputed Organisation(s) (in Nos. and Value) (Please attach list of clients)</b> <b>(i) Year 2011-2012</b> <b>(ii) Year 2012-2013</b> <b>(iii) Year 2013-2014</b>	
5.(c)	Trade Tax / Sales Tax Registration no. with Place	
5.(d)	Income Tax Registration no. with place	

## HPC AMD SYSTEM TECHNICAL SPECIFICATION

Server:	Master Node & Compute Node
Item	Description of Requirement
Form Factor	2 U Rack Mountable
Processor Type and Speed	2*AMD Opteron™ 6320 (2.8GHz/16-core/16MB/115W TDP) Processor
Chipset	AMD SR5690 Northbridge and SP5100 Southbridge
Memory & Graphics	64GB DDR3 RDIMM, scalable to 768 GB @1600MHz, Integrated Matrox G200
Memory Protection	Proposed memory should support identifying itself and authenticate with the server installed to increase reliability of the server Advanced ECC Online Spare
Bays	12 Hot Plug 3.5" drive bays Or 25 Hot Plug 2.5" drive bays
Hard Disk Drives	2* 1TB SATA , 7.2K RPM, Hot Plug HDD
HDD carrier	Hard disk drive should support "Do Not Remove" caution indicator to avoid human errors in replacing failed HDD
Controller	SAS Raid Controller with RAID 0/1. Controller should support 512MB/1GB/2GB flash backed write cache
Networking features	1Gb 4-port network adaptor supporting advanced features such as Large Send offload capability, TCP checksum and segmentation, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMware Net Queue and Microsoft VMQ.
Ports	USB 2.0 support With 6 Total: (2) front, (2) internal and (2) rear accessible ports and 1 internal Secure Digital (SD) slot
Bus Slots	Up to Six PCI-Express slots, offering PCI-e with x4, x8 and x16 PCI configurations. Each server to be populated with Dual Port FDR HCA with cables.
Power Supply	Redundant Platinum Power Supplies offering at least 93% efficiency
Fans	Hot Swap Redundant Fans
Industry Standard Compliance	ACPI 2.0b Compliant, PCIe 2.0 Compliant, PXE Support, WOL Support, Microsoft® Logo certifications, USB 2.0 Compliant
Security	Power-on password Serial interface control Administrator's password
OS Support	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), VMware, Citrix Xen Server
Warranty	3 year warranty. Pre failure warranty on CPU, Memory and Hard disks

Provisioning	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server. There should be a built -in Update manager that can update firmware of system by connecting online.
Remote Management	<ol style="list-style-type: none"> <li>1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.</li> <li>2. Remote management port should have at least 4GB of NAND Flash to download the firmware from the website directly or from internal system. Server should support automated firmware update.</li> <li>3. Server should have dedicated 1Gbps remote management port</li> <li>4. Server should support agentless management using the out-of-band remote management port.</li> <li>5. The server should support Active Health System which monitors and records changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur.</li> <li>6. Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available.</li> <li>7. Remote console sharing up to 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console.</li> </ol>
Server Management	<p>The Systems Management software should provide Role-based security</p> <p>Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. Should support automatic event handling that allows configuring policies to notify failures via e-mail, pager, or SMS gateway or automatic execution of scripts.</p> <p>Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status. The Portal should also provide a Personalized ask board to monitor device health, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be accessible on premise (at customer location - console based) or off premise (using internet).</p> <p>Should support scheduled execution of OS commands, batch files, scripts, and command line apps on remote nodes</p> <p>Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices. Should support the reports to be saved in HTML, CSV or XML format.</p> <p>Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components.</p> <p>The Server Management Software should be of the same brand as of the server supplier.</p>

## **INFINIBAND SWITCH: 36 PORT FDR INFINIBAND SWITCH**

<b><u>DATA STORAGE</u></b>	
Heterogeneous Support	The storage array should support industry-leading Operating System platforms & clustering including Windows Server (Enterprise Edition) and Linux.
Storage Capacity	10 TB usable space after RAID 5 implementation using NL/MDL SAS drives. SAN disk storage.
Scalability	Offered storage enclosure should be scalable up to a minimum of 80 number of drives
Controllers	Dual, redundant, hot-pluggable; active-active array controllers.
Cache memory	Minimum of 2GB cache per controller in a single unit after removing the operating system overhead. Cache shall be backed up in case of power failure for 7 days or equivalent functionality.
Multiprotocol support	4 number of native FC ports running at 8Gbps speed and 4 number of Native ISCSI ports running at 1Gbps speed.
RAID Support	Should support Raid 0, 1 , 1+0 , 3, 5, 5+0 and Raid 6 with Dual Parity Protection
Availability	No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.
Balanced Performance	Multi-path and load balancing software shall be provided, if vendor does not support MPIO functionality of Operating system.
LUN support	Minimum of 512 Logical Units. Should support creation of more than 12TB volume at controller level.
Snapshot/Clones	Array based Snapshot and clone functionality and shall be configured for minimum of 60 snapshot licenses
Management software	Storage shall be offered with necessary management software.
Warranty	Warranty: Shall have 3-years onsite warranty
OEM Support	OEM shall have spares and support center in Eastern region.

### **Qualifying criteria for HIGH PERFORMANCE COMPUTING REQUIREMENT**

*Quotations are invited for HPC systems where only those OEM products will be accepted that satisfy the following:*

- OEM should have at least 5 similar system listed within top 100 in the Nov2013 supercomputer list in [top500.org](http://top500.org)

- OEM must have a regional office in Eastern India for sale and support with at least one HPC installation of similar system within Orissa
- Systems being offered should have minimum 5 installations in India
- Quotations must be accompanied with tender specific OEM authorization for the server hardware and software.
- Bidder should have at least two such customers where they have supplied such equipment
- OEM should have more than 5 years presence in India supporting HPC customers
- OEM Warranty for minimum 3 years on all hardware is a must.

**Requirements of Hardware in detail:**

SI No	Item Make & Model	Qty.	
1	Master Node	01	
2	Compute Node	06	
3	FDR Infiniband Switch with cables	01	
4	Storage Array	01	
5	42U Rack with Rail Kit & all required accessories	01	
6	FC HBA cable for Master Node	01	

**HPC software:**

**Open source Linux operating system & open source cluster management software, should support Gfortran & GCC, should support Open source libraries LAPACK, BLAS & FFTW with their parallel versions. Should support Microsoft & Linux server software.**



## TECHNICAL BID FOR INTEL CORE i7 DESKTOP PC

Required Quantity : 16 sets

Quotation No:

Date:

SI No	Description	Specification	Compliance	Deviation
1.	Make (to be specified by firm)			
2	Model (to be specified by firm)			
3	Processor	Intel 4 <sup>rd</sup> Gen core i7 -4770, 3.4 GHz (3.4GHz, 8MB Cache) or better		
4	Motherboard	OEM motherboard		
5	Memory	8GB DDR-III 1333 MHz dual channel Expandable up to 32GB with 4DIMM Slots		
6	Hard Disk Drive	500 GB SATA III		
7	DVD Writer	16 X or better		
8	Graphics	Integrated Intel High Definition Graphics 4600		
9	Ethernet	Integrated 10/100/1000 Mbps ethernet controller		
10	Slots	4 PCI Slots		

SI No	Description	Specification	Compliance	Deviation
11	I/O Ports	2PS/2, 1 Serial, 1 Parallel, 1VGA, 1 RJ-45, 2 USB 2.0, 2 USB 3.0, Front : 2 USB 2.0		
12	Audio Port	Front and Rear		
13	Power Supply	250 W Surge Protected Power Supply		
14	Monitor	23" wide screen Color TFT/LED with FHD resolution, Brightness 250 cd/m <sup>2</sup> Dynamic contrast ratio 100000:1		
15	Mouse	2 Button Optical USB mouse with scroll		
16	Operating System & AV	Compatible with Linux and MS Windows		
17	Warranty	3 Years, Comprehensive On site		
18	Additional features offered: not listed above (Add extra sheets if necessary)			
19	Delivery time	Maximum six weeks		
20	Validity of Price	Three months		
21	Technical brochures on product	To be enclosed by firm		
22	Copy of PAN Card	-do-		
23	Copy of TIN/VAT Clearance Certificate	-do-		
24	Authorisation from OEM for sale	-do-		

Telephone:

Authorised signature  
with seal of the firm

Fax:

Name:

Mobile:

Name & Address of firm :

Email:

**PART-2**  
**COMMERCIAL BID FOR HPC AMD SYSTEM**

Sl. No.	Systems	Approx. Qty.	Unit Price FOB in Foreign currency	Unit Price including all taxes, freight and Insurance (delivered at IOP, Bhubaneswar service charges, installation and warranty charges (as applicable) in INR
(1)	(2)	(3)	(4)	(5)
1.	HPC AMD System As per specification mentioned in the technical bid	01 Unit		
2.	<b>Above item should carry three year onsite comprehensive warranty. two years comprehensive warranty should be quoted as an optional item.</b>			
3.	FCA Charges Included/Excluded in the quoted price	Amount		
5.	CIP Kolkata / CIP Bhubaneswar Charges Included/Excluded in the quoted price	Amount		
6.	Excise Duty Included/Excluded in the quoted price	____ . ____% of basic price ( <b>Excise duty exemption certificate will be issued</b> )		
7.	Custom Duty Included/Excluded in quoted price	____ . ____% of basic price ( <b>Custom Duty exemption certificate will be issued</b> )		
8.	Clearing Charges from Airport and delivered to IOP Bhubaneswar <b>Included/Excluded in the quoted prices.</b>	Amount		
9.	Any other charges Included/Excluded in the quoted price (i) Trade tax/Sales tax (Institute will not issue any Sales Tax concession form) (ii) Any other levies	____ . ____% of (basic price + excise duty) ____ . ____%		
10.	AMC charges	____ . ____%		

Date:  
Signature: Address:  
Name:

**COMMERCIAL BID FOR INTEL CORE I7 DESKTOP PC**

**Quotation No :**

**Date:**

**Required Quantity : 16 sets**

<b>SI No</b>	<b>Description</b>	<b>Compliance</b>
1	Make	
2	Model	
3	Rate per set excluding tax	
4	Tax	
5	Rate per set including tax	
6.	Total Amount for 16 sets of Desktop PC including tax with 3 years of comprehensive on site warranty	

Authorised Signature with seal of firm:

Name:

Name & Address of firm:

Telephone:

Fax:

Mobile: