

Bid Document

Bid Details	
Bid End Date/Time	03-08-2020 11:00:00
Bid Opening Date/Time	03-08-2020 11:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	60 (Days)
Ministry/State Name	Ministry Of Human Resource Development
Department Name	Department Of Higher Education
Organisation Name	National Institute Of Technology (nit)
Office Name	Tiruchirappalli Tamilnadu
Total Quantity	3
Item Category	Server , Small form-factor pluggable transceiver
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	OEM Authorization Certificate *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	No
Primary product category	Small form-factor pluggable transceiver
Inspection Required	No
Estimated Bid Value	750000

EMD Detail

Advisory Bank	State Bank of India
EMD Percentage(%)	2.00
EMD Amount	15000

ePBG Detail

Advisory Bank	State Bank of India
ePBG Percentage(%)	5.00

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:

Director, National Institute of Technology Tiruchirappalli
The Director, National Institute of Technology Tiruchirappalli, Tamilnadu, Department of Higher Education, , Ministry of Human Resource Development.
(The Director)

Splitting

Bid splitting not applied.

Server (1 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Processor	Processor Architecture	CISC(X86)	*
	Processor Make	Intel	Intel
	Number of Cores per Processor	8	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 64, 11 Or higher
	Processor Base Frequency (GHz)	2.1	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4 Or higher
	Processor Turbo Frequency (GHz)	3.2	*
	Total Cache (L1+L2+L3)(MB)	11	11.0 - 256.0 Or higher
	Processor Description/ Number	Intel Xeon Silver 4208	*

Chassis	Form Factor	Rack	*
	Size (RU)	2	*
Motherboard	Chipset compatible with CPU	Intel C621	*
	Expansion Slots Gen 3 (PCIe x1)	0	*
	Expansion Slots Gen 3 (PCIe x4)	0	*
	Expansion Slots Gen 3 (PCIe x8)	1	*
	Expansion Slots Gen 3 (PCIe x16)	4	*
	Maximum number of Sockets available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
	Maximum number of Sockets populated with Processors available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
Co Processor / GPU	Availability of Co Processor /GPU	No	Yes, No Or higher
	If Yes, Maximum Number of Slots available for Co-Processor/GPU	0	*
	If Yes, Maximum Number of slots populated with Co processor/GPU	0	*
	If Yes, Co Processor /GPU Description	NA	*
Memory	Type of RAM	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC
	Total Number of DIMM Slots available	16	*
	Number of DIMM Slots populated with DDR SDRAM	4	*
	Number of DIMM Slots populated with DDR NVRAM	0	*
	DDR SDRAM Size(GB)	128	128.0 - 6144.0 Or higher
	DDR NVRAM Size (GB)	0	0.0 - 1600.0 Or higher
	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	384	*

	DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0	*
SSD Storage	Type of Interface for SSD	NA	NA
	Type of SATA SSD	NA	*
	SATA SSD Hot Swappable	NA	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SATA SSD	0	*
	Number of Slot Populated with SATA SSD	0	*
	Capacity offered per SATA SSD (GB)	0	*
	Total Capacity Offered with SATA SSD (GB)	0	More than 0.0 Or higher
	Type of SAS SSD	NA	*
	SAS SSD Hot Swappable	NA	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SAS SSD	0	*
	Number of Slots populated with SAS SSD	0	*
	Capacity Offered per SAS SSD (GB)	0	*
	Total Capacity Offered with SAS SSD (GB)	0	More than 0.0 Or higher
	Type of NVMe SSD	NA	*
	NVMe SSD Hot Swappable	NA	*
	Endurance for NVMe SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for NVMe SSD	0	*
	Number of Slots	0	*

	populated with NVMe SSD		
	Capacity Offered per NVMe SSD (GB)	0	*
	Total Capacity Offered with NVMe SSD (GB)	0	More than 0.0 Or higher
HDD Storage	Type of Interface for Hard Disk Drive	SAS	SAS
	Total number of Slots available for SATA Drive	0	*
	Number of Slots populated with SATA Drive	0	*
	Capacity offered per SATA Drive (GB)	0	*
	SATA drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with SATA Drive (GB)	0	More than 0.0 Or higher
	Total number of slots available for SAS drive	8	*
	Number of Slots populated with SAS Drive	8	*
	Capacity offered per SAS Drive (GB)	1200	*
	SAS drive Speed (Hot plug or better) (RPM)	10K	*
	Total Storage Capacity offered with SAS Drive (GB)	9600	More than 9600.0 Or higher
	Total number of slots available for NL SAS drive	0	*
	Number of Slots populated with NL SAS Drive	0	*
	Capacity offered per NL SAS Drive	0	*
	NL SAS drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with NL SAS Drive	0	More than 0.0 Or higher

	(GB)		
RAID	RAID level	5	*
	No of RAID Controller Ports	8	8 Or higher
	Speed of RAID Controller Ports (Gbps)	12	12 Or higher
	RAID Controller Cache (GB)	2	*
Ports & Interfaces	Network Card Supported	1G,10G	*
	Number of Networking Interface Cards (LAN)	3	3, 4, 5, 6, 7, 8 Or higher
	Whether Network Interface Card Embedded	Yes	*
	Total Number of Ethernet Ports required in Server	2x10G with SFP+,4x1G	2x10G with SFP+, 4x1G
	Networking Interface Card Features	Asset Feature Tracking,Security Management,Remote Wake up	*
	Server Network Ports should Support SR-IOV Feature	No	*
	Server network ports should support DPDK and it should deliver zero packet loss as per RFC 2544 and deliver 100% line rate for all the packet sizes over 64 Bytes, Vendor to submit latest DPDK test report for the same	No	*
	Number of Single port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	Number of Dual port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	Number of Quad port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	FC HBA Speed (Gbps)	NA	8, 16, 32, NA Or higher
	vHBA Card Features Supported	No	*
	Number of	0	0, 1, 2, 3, 4 Or higher

	Converged Network Adaptor (CNA)		
	Number of Ports per CNA card	NA	Dual Port, Quad Port, NA Or higher
	CNA Port Speed (Gbps)	0	10, 25, 40, 50, 100, 200, 0 Or higher
	Length of LC-LC Cable per SFP+ Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per HBA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per CNA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of Twinax Breakout Cables per Port (meter)	0	*
	Video Controller (support VGA or above resolution)	Yes	*
	Keyboard Port	No	*
	Mouse Port	No	*
	DVD ROM (Internal/Exrternal)	Yes	*
	USB Ports (version 2point0/3point0)	4	*
	Total number of Spare Bays Available for Future Upgradation (Internal)	0	*
	Total number of Spare Bays Available for Future Upgradation (Hot Pluggable)	0	*
Certifications	Certifications/Compliance (OS)	Windows,Red Hat Linux,Suse Linux,Ubuntu,Cent OS	Windows, Red Hat Linux, Suse Linux, Ubuntu, Cent OS
	Certification/Compliance (Virtualization/Cloud Platform)	VM ware,HyperV,Red Hat Virtualization	*
Features	Management Features-1	Remoter power On/ Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,,Should have	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,, Should have

	virtual Media support with all required licenses.,Remote KVM,Server Health Logging,Out of Band Management	virtual Media support with all required licenses., Remote KVM, Server Health Logging, Out of Band Management
Management Features-2	Management of multiple Servers from single console with single source of truth for multiple sites.,Automated infrastructure management for patch upgrades, version upgrades ,etc.,Simplified management with analytics driven actionable intelligence.,System tagging giving admin flexibility to provide metadata tags to each System to enable users to filter and sort systems based on user-assigned attributes,Hardware Profile based deployment to multiple Servers simultaneously,Policy template for deployment of single policy to multiple Servers simultaneously,Platform inventory and health status,Server utilization statistics collection (including firmware updates and diagnostic tools),Should provide an alert in case the system is not part of OEM hardware compatibility test,Solution should be open and programmable providing Rest API, SDK for programming languages like Python , power shell scripts etc.,Should have customizable	*

	<p>dashboard to show overall faults/health/inventory for all managed infrastructure the solution should provide option to create unique dashboards for individual users.the user should be flexibility to select name for dshasboards and widgets (viz. health, utilization etc),Single pane of glass for auto Provisioning across Multi vendor & multi hypervisor platform,Self service portal deployment for automated provisioning,Real-time out-of-band hardware performance monitoring & alerting</p>	
Security Features-1	<p>Secure Boot(Firmware and Bios Level Security),Provision to lock the system on breach,Hardware root of trust/Dual Root of Trust,Server should provide policy based security,Server should provide server intrusion detection,</p>	<p>Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,</p>
Security Features-2	<p>Provision for Cryptographic firmware updates,Capability to stop execution of Application/Hypervisor/ Operating System on predefined security breach,Secure /Automatic BIOS recovery,Network Card secure firmware boot,In case of any security breach system should provide the lock down feature</p>	*
Server scalability to be achived within the box & without adding nodes	Yes	*

	support for high availability clustering and virtualization	Yes	*
Generic	Redundant Power Supply	Yes	*
	Hot Swappable (Redundant Power Supply)	Yes	*
	Power Supply Efficiency	Gold	Gold, Platinum, Titanium Or higher
	Redundant Fan	Yes	*
	Hot Swappable (Redundant Fan)	Yes	*
	Server Main Supply	230 +/- 10%Vac	*
Benchmark	SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	More than 0.0 Or higher
	SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	More than 0.0 Or higher
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
Miscellaneous	Maximum power consumption of the system (Watts)	750	*
	BIS Registration under CRS of MeitY	Yes	*
	BIS Registration Number Under CRS of MeitY and its validity	-	*
	Other Certifications Available	UL,FCC	*
	RoHS Compliance	Yes	*
	Availability of the type test report from Central Government / NABL / ILAC accredited	No	*

	laboratory covering verification of all features & functional parameters & environmental tests sequence		
	a) Dry heat:test - for 16 hrs at 45 deg C as per IS: 9000/pt-3/sec-5/1977 b) Cold test - for 4 hrs at 0 deg C as per IS: 9000/pt-2/sec-4/1977 c) Damp Heat Cyclic Test - for 2 cycles of 24 hrs at 40 deg C & 95% RH as per IS: 9000/pt-5/sec-1/1981	NA	*
	The server has been checked for all the parameters before conditioning, After completion of the environmental tests sequence, with a recovery period of 1 to 2 hrs, the server found to be functional	NA	*
	Test Report Number & date	-	*
	Name & Address of Lab	-	*
Scope of Supply	Installation and Commissioning shall be included in the scope of supply	Yes	*
Warranty	On Site OEM Warranty (Year)	5	5, 7 Or higher

* Specifications highlighted in bold are the Golden Parameters.

* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Valarmathi Chellamuthu	620015,NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPAILI NEAR BHEL,	1	30

Small Form-factor Pluggable Transceiver (2 pieces)**Technical Specifications**

* [As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	Type of Transceiver	SFP+	SFP+
	SFP Mode	Single	*
	Supported Protocols	-	*
	Compatibility with OEMs Products	-	*
	Wavelength(nm)	1310	*
	Fibre Cable Type	-	*
	Core Size (Micron)	9	*
	Maximum Data Rate	3125	*
	Modal Bandwidth (MHz/Km)	60	*
	Max.Cable Distance	10	*
	Optical Component (nm)	1310	*
	Digital Optical Monitoring (DOM) Support	Yes	*
	Interface	-	*
	Tx Power (dBm)	5	*
	Receiver Sensitivity (dBm)	-20	*
	Operating Temperature Range(Degree C)	-	*
	Operating Humidity (RH) (%)	-	*
On Site OEM Warranty (Year)	5	5	

* Specifications highlighted in bold are the Golden Parameters.

* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents**Consignees/Reporting Officer and Quantity**

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Valarmathi Chellamuthu	620015,NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI NEAR BHEL, THUVAKUDI	2	30

Bid Specific Additional Terms and Conditions

1. Warranty period of the supplied products shall be 5 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid
2. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods
3. Bidders can also submit the EMD with Account Payee Demand Draft in favour of The Director National Institute of Technology Tiruchirappalli payable at Tiruchirappalli. Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.
4. Successful Bidder can submit the Performance Security in the form of Account Payee Demand Draft also (besides PBG which is allowed as per GeM GTC). DD should be made in favour of The Director National Institute of Technology Tiruchirappalli payable at Tiruchirappalli. After award of contract, Successful Bidder can upload scanned copy of the DD in place of PBG and has to ensure delivery of hard copy to the original DD to the Buyer within 15 days of award of contract.
5. Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.

[This Bid is also governed by the General Terms and Conditions](#)

---Thank You---