

# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KALYANI

(Autonomous institution under MOE, Govt. of India & Department of Information Technology & Electronics, Govt. of West Bengal)

Campus: WEBEL IT Park, Block B, P.O. Kalyani, Dist. Nadia-741235, West Bengal

(Tender No. IIITK/Tender/2022/149) Dated: 03-02-2022

Last date of submission: 14-02-2022

For Supply and Installation of Server

# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, KALYANI NADIA – 741235, WEST BENGAL NOTICE INVITING TENDER FOR SUPPLY OF Server

TENDER NO.:

IIITK/Tender/2022/149

DATED:

03-02-2022

NAME OF WORK:

For Supply and Installation of 01 No. of Server at IIIT Kalyani.

LOCATION OF SUPPLY:

Indian Institute of Information Technology Kalyani (IIITK)

c/o WEBEL IT Park, 14, Adivasi Para, Opposite of Kalyani Water Treatment Plant, Near Buddha Park, Dist. Nadia, P. O

Kalyani, PIN - 741235, West Bengal.

#### LAST DATE AND TIME FOR RECEIVING THE BIDS:

14-02-2022 upto 2 pm in the Tender Box placed in Office of Indian Institute of Information Technology, Kalyani, (Room no. 106). Quotation received later will not be entertained.

Note: In case of any clarification in with regard to submission of bids please contact Deputy Registrar, the bidders are advised to read the "General Conditions and Important Instructions for Bidders" available at the end of this tender document before submitting their bids.

DATE AND TIME OF OPENING OF BIDS: 14.02.2022 at 3:00 pm at the same venue.

Deputy Registrar

Indian Institute of Information Technology, Kalyani

# **Tender Document**

# SECTION-I: General Conditions and Important Instructions for Bidders

- Bidders are invited to submit sealed quotations on official pad/letter head of the manufacturer/authorized distributor/bonafide supplier as per the Technical Specifications for tendered items to Office of Deputy Registrar, Indian Institute of Information Technology Kalyani , Webel IT Park, Kalyani, Nadia, Pin Code - 741235, West Bengal between 11.00 am to 3.00 pm.
- **2.** The last date of receipt of tender is 14.02.2022. Quotations received later will not be entertained under any circumstances.
- 3. Copy of similar type of order received from any other similar Educational Institute, during the last one year, can be submitted for credential.
- 3. Only branded item must be quoted as per annexure I.
- 4. Bidders are to submit the quotations in sealed envelopes at the office in the Following address.

Deputy Registrar, Indian Institute of Information Technology Kalyani, Webel IT Park, Kalyani Nadia, Pin Code- 741235 West Bengal.

- 5. All bidders should submit in ONE-BID (TECHO-COMMERCIAL BID) in sealed envelope (Tender Number must be mentioned on envelope). The price quoted should be inclusive of all Taxes, duties, levies or any other charges to deliver items at the premises of the Institute. All taxes, freight, insurance charges, installation charges or any other specified overheads etc. should be clearly indicated. Inclusion of Tax/levy or any other charges at a later stage will not be accepted. At the end, the total price of a single item must be indicated as TOTAL PRICE: Rs.....only INCLUDING ALL.
- **6.** Vendors must enclose attested copies of Trade licence, GST Registration, PAN Card or any other statutory testimonials etc. along with the bidding document, otherwise their tender will be cancelled.
- 7. A Bid Security of 3% of the quoted value is to be submitted by the L1 Bidder before the placement of Order. Bid Security have to be submitted through a Demand Draft in favour of "Indian Institute of Information Technology Kalyani".
- 8. The equipments are to be supplied at the Office of IIIT Kalyani between 11.00 am and 4.00 pm from Monday to Friday except holidays. The bidders will be responsible for any breakage, damage or defect in the equipment detected subsequently.
- 9. Period of delivery is 30 days from the date of issue of Purchase Order. If the supply is not completed within the stipulated period as indicated in the Purchase Order a Liquidated Damage @ 0.5 % per week will be imposed on the value of purchase order.
- 10. Bills in triplicate should be presented for payment within 15 days of supply/commissioning of work. No advance is paid for execution of the order. The Order No. is to be noted on both Challan and Bill. All bills are to be accompanied by order copies and Challan receipt.

- 11. Documents to be submitted with the tender . Tender documents/Terms & Conditions in Original duly signed by the Proprietor/Partner/Director of the company as a token of acceptance of terms & conditions of Tender.
- 12. Bidders are advised to clear all doubts (if any) before submitting quotations. After submission the same, they shall not be entertained / not eligible to re-consider any issues under any circumstances.

Deputy Registrar

Indian Institute of Information Technology, Kalyani

# Technical specification for Server:

Processor	
Processor Architecture	CISC(X86)
Processor Make	Intel
Number of Cores per Processor	12
Processor Base Frequency (GHz)	2.4
Processor Turbo Frequency (GHz)	3.5
Total Cache (L1+L2+L3)(MB)	16.5
Processor Description/ Number	Intel Xeon Silver 4214R
Chassis	
Form Factor	Rack
Size (RU)	2
Motherboard	
Chipset compatible with CPU	Intel C621

Expansion Slots Gen 3 (PCle x1)	0
Expansion Slots Gen 3 (PCle x4)	0
Expansion Slots Gen 3 (PCle x8)	4
Expansion Slots Gen 3 (PCle x16)	2
Maximum number of Sockets available on Server	2
Maximum number of Sockets populated with Processors available on Server	2
Co Processor / GPU	
Availability of Co Processor /GPU	No
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

Total Number of DIMM Slots available	24
Number of DIMM Slots populated with DDR SDRAM	4
Number of DIMM Slots populated with DDR NVRAM	0
DDR SDRAM Size(GB)	128
DDR NVRAM Size (GB)	0
DDR SDRAM upgradable upto using spare DIMM Slots (GB)	1280
DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0
SSD Storage	
Type of Interface for SSD	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
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
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 populated with NVMe SSD	0
Capacity Offered per NVMe SSD (GB)	0
Total Capacity Offered with NVMe SSD (GB)	0
HDD Storage	
Type of Interface for Hard Disk Drive	NL 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
Total number of slots available for SAS drive	0
Number of Slots populated with SAS Drive	0
Capacity offered per SAS Drive (GB)	0
SAS drive Speed (Hot plug or better) (RPM)	NA
Total Storage Capacity offered with SAS Drive (GB)	0
Total number of slots available for NL SAS drive	8
Number of Slots populated with NL SAS Drive	4
Capacity offered per NL SAS Drive	2000
NL SAS drive speed (hot plug or better) (RPM)	7200
Total Storage Capacity offered with NL SAS Drive (GB)	8000

RAID	
RAID level	1,5,6,0
No of RAID Controller Ports	8
Speed of RAID Controller Ports (Gbps)	12
RAID Controller Cache (GB)	2
Ports & Interfaces	
Network Card Supported	1G,10G,25G
Number of Networking Interface Cards (LAN)	1
Whether Network Interface Card Embedded	No
Total Number of Ethernet Ports required in Server	4x1G
Networking Interface Card Features	Asset Feature Tracking, Security Management, Remote Wake up, Each Adapter should support vNiCs
Server Network Ports should Support SR-IOV Feature	Yes

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
Number of Dual port FC HBA card	0
Number of Quad port FC HBA card	0
FC HBA Speed (Gbps)	NA
vHBA Card Features Supported	No
Number of Converged Network Adaptor (CNA)	0
Number of Ports per CNA card	NA
CNA Port Speed (Gbps)	0
Length of LC-LC Cable per SFP+ Port (meter)	0
Length of LC-LC Cable per HBA Port (meter)	0

Length of LC-LC Cable per CNA Port (meter)	0
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)	5
Total number of Spare Bays Available for Future Upgradation (Internal)	4
Total number of Spare Bays Available for Future Upgradation (Hot Plugable)	0
Certifications	
Certifications/Compliance (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 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, Platfrom inventory and helath 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 complatibilty test, Solution should be open and programmable providing Rest API, SDK for programming lanugaes like Python, power shell scripts etc., Should have customizable 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), Real-time out-of-band hardware performance monitoring & alerting

#### **Security Features-1**

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,, "Malicious Code Free design" (to be certified by OEM)

## **Security Features-2**

Generic

Provision for Cryptographic firmware updates, Capability to stop execution of Application/Hyperviser/ 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

Server scalability to be achived within the box & without adding nodes

Yes

support for high availability clustering and virtualization

Yes

Redundant Power Supply	Yes
Hot Swappable (Redundant Power Supply)	Yes
Power Supply Efficiency	Platinum
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

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before evaluation)	
SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)	145
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)	500
BIS Registration under CRS of MeitY	Yes
BIS Registration Number Under CRS of MeitY and its validity	9
Other Certifications Available	UL,CE
RoHS Compliance	Yes
Availability of the type test report from Central Government / NABL / ILAC acredited laboratory covering verification of all features & functional parameters & environmental tests sequence	No

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	NA s
Name & Address of Lab	NA
Scope Of Supply	
Installation and Commissioning shall be included in the scope of supply	Yes

#### Additional Specification:

On Site OEM Warranty (Year)

Warranty

- 1) MS-SQL Server must be installed with Mixed mode authentication.
- 2) Check the DSN connectivity from Client machine
  - a) The Server must have Server based Operating System (Server is to installed with server based Operating System).

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- b) Internet Information Service 7.0 & above must be installed.
- c) DotNet Frame Work 4.6 or above must be installed.
- d) Microsoft 4.6 and above OLE DB Provider must be available.
- e) Microsoft OLE DB Provider for SQL must be available. (In Case of SQL Installation)
- 3) The server should be installed with latest version of Microsoft Operating System (Server Version).

