



तेजपुरविश्वविद्यालय/ TEZPUR UNIVERSITY

(केंद्रीयविश्वविद्यालय/A Central University)

कुलसचिवकाकार्यालय/OFFICE OF THE REGISTRAR

तेजपुर-784028 :: असम/ TEZPUR-784028 :: ASSAM

NOTICE INVITING BID

TU/GeM/BoQ-Bid (106)/2021-22/ 1818 Date 15/09/2022

Bids in 02 Bid System (Technical and Financial) are invited on GeM from reputed manufacturers/ authorized dealers for setting up a state of the art Machine Learning on FPGA Laboratory for Dr. Bhabesh Deka, Department of Electronics and Communication Engineering, Tezpur University.

Please read the Bid document carefully before participating. It shall be deemed that submission of bid by the bidder has been done after their careful study and examination of the Bid terms with full understanding to its implications. Any lack of information shall not in any way relieve the bidder of its responsibility to fulfill its obligations under the Bid.

The University will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for, or in executing, the Purchase Order. Fraudulent Practice means a misrepresentation of facts in order to influence a procurement process and includes collusive practice among bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive Tezpur University of the benefits of free and fair competition. Corrupt Practice means offering, giving, receiving or soliciting of anything of value, pressurizing to influence the action of a public official in the process of this purchase execution.

For any queries/doubt please contact the Stores & Purchase Section (e-mail: snp@tezu.ernet.in) or in the email id mentioned in the GeM Bid.

GENERAL TERMS & CONDITIONS:

1. **Rates:** Rates quoted should be on FOR Tezpur University, Napam, Tezpur, Door Delivery Basis, for indigenous items and CIP Tezpur University, Napam, Tezpur or Delivered Duty Paid, for imported item. Failure to comply with this term may lead to rejection of the quotation.
2. **Quotations should be accompanied by** i) An EMD (in the form of Demand Draft/Banker Cheque) for ₹ 22,000.00 (Rupees twenty two Thousand) only drawn in favor of Registrar, Tezpur University, payable at Tezpur. **No request for consideration of earlier deposited EMD will be considered.** ii) Bidders who are MSME/NSIC registered needs to furnish a "Bid Security Declaration" (format enclosed at Annexure – I) in lieu of EMD accepting that if they withdraw or modify their bids during period of validity etc., they will be suspended for a period of Three (03) years from participating in any future bid invited/published by Tezpur University. Bidders who are MSME/NSIC registered seeking exemption from payment of EMD are to submit valid documents in support of their claim. Bidders seeking exemption are asked to clearly mention the category under which exemption is claimed. The category of exemption under MSME/NSIC will be strictly adhered to. iii) **The original copies of the EMD/Bid Security Declaration should be deposited/submitted/reach the office of the undersigned before opening of the Bids in an envelope superscribed as "Quotation/Participation Fee and EMD for TU/GEM/BOQ-BID/(106)/2021-22/...1818.....DT-15/09/22... addressed to the Assistant Registrar- GA, Tezpur University. Failure to do so may result in rejection of the bid.**

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3. Bidders/Tenderers are to ensure that they are GST compliant and that their quoted tax structure/rates are as per GST law. The rates should be exclusive of taxes and applicable tax percentage should be clearly indicated. Financial/Price Bid format where taxes cannot be mentioned separately, in such cases, the percentage of taxes applicable should be mentioned in the Technical Bid document.
4. **Validity of Quotation:** Quoted rates must be valid for at least **180 days** from the last date of submission of quotation.
5. Applicable levies, surcharge and discounts should be clearly indicated item wise.
6. The rates should be quoted along with supporting documents of specifications and technical features and list of users, wherever applicable.
7. **Literature a must:** All the quotations must be supported by technical leaflet/literature and the specifications mentioned in the quotation must be reflected/ supported by such technical leaflet/literature. The model and specifications quoted should **invariably be highlighted** in the leaflet/literature for easy reference.
8. **After Sales Service Guidelines:** In case of imported goods, bidders should clearly state the detailed address, contact number and email ids of 'after sales service centre' preferably in Tezpur/Guwahati, India or any place in Assam without which their offers shall be liable for rejection. Service against any complaint must be provided within 24hours.
9. **Dealership Certificate:** Dealers or Agents quoting on behalf of Manufacturer must upload valid dealership certificate.
10. **Quality Certificates:** Valid certificate to prove that the products are genuine and of international standard, as mentioned below, must be uploaded: (a) Manufacturer's certificate; (b) ISO/ISI certificate.
11. **Genuine Pricing:** Vendor is to ensure that quoted price is not more than the price offered to any other customer in India to whom this item has been sold, particularly to Universities/IITs/Institutes and other Government Organization.
12. **Payment:**100% payment after successful delivery, installation and commissioning (if required in the scope of supply) and acceptance by the user.
13. **PENALTY FOR DELAYED DELIVERY:** The date of delivery should be strictly adhered to. In the event of delayed delivery, installation & commissioning, the vendor shall be liable for a penalty deduction as per prevailing rule.
14. As per GoI Notification dated 14.11.2017 GST % for Public Funded Research Institution or a University has been reduced to 5%. Hence, rate of GST may be charged as per reduced rate. Exemption Certificate will be provided on request.
15. The University is exempted from paying Custom and Excise duty.
16. Warranty/Guarantee applicable if any, period should be specifically mentioned in the quotation.
17. Irresponsive/incomplete quote will be rejected.
18. **Conditional tenders not acceptable:** All the terms and conditions mentioned herein must be strictly adhered to by all the vendors. Conditional tenders shall not be accepted on any ground and shall be rejected straightway. Printed conditions mentioned in the tender bids submitted by vendors will not be binding on Tezpur University.
19. **Enquiry during the course of evaluation not allowed:** No enquiry shall be made by the bidder(s) during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative (Tezpur University) can make any enquiry/seek clarification from the bidders. In such a situation, the agency shall

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extend full co-operation. The bidders may also be asked to arrange demonstration of the offered items, in a short period notice, as such the bidders have to be ready for the same.

Termination for default: Default is said to have occurred

- a. If the equipment or any of its component is found having poor workmanship, faulty designs, poor performance and bad quality of materials used.
- b. If the supplier fails to deliver any or all of the services within the time period(s) specified in the purchase order or any extension thereof granted by Tezpur University.
- c. If the supplier fails to perform any other obligation(s) under the contract.
- d. Under the above circumstances Tezpur University may terminate the contract / purchase order in whole or in part and forfeit the EMD/PBG as applicable. In addition to above, Tezpur University may at its discretion also take the following actions: Tezpur University may procure, upon such terms and in such manner, as it deems appropriate, goods similar to the undelivered items/products and the defaulting supplier shall be liable to compensate Tezpur University for any extra expenditure involved towards goods and services obtained. Besides, the Vice-Chancellor, Tezpur University, and reserves the right to impose any other form of penalty as deemed fit including blacklisting of the vendor.

20. **Selection criteria:**

i. **Evaluation Criteria:**

To ensure that each bidder has the necessary qualifications and resources to full fill its obligations under the contract, the following criteria shall be evaluated. The Eligibility, Financial, Experience & Support criteria should be passed before the technical criteria. Technical criteria will be evaluated and ranked by the award of ACCEPT and/or REJECT. Only the ACCEPTED vendors will be considered for price bid. In case a joint venture makes a bid, any one of the members of the joint venture need to be qualified for each of the criteria mentioned below.

ii. **Eligibility Criteria:**

- a. The bidder or the OEM should not be blacklisted by Tezpur University or any other Educational /R&D/ PSU/ Govt organizations. A certificate or undertaking to this effect must be submitted.

iii. **Technical Criteria**

Technical bids will be evaluated and ranked by the award Accepted & Rejected. The price bids of Accepted vendors would then be considered by the concerned Purchase Committee of the institute

Delivery Period

21. The delivery installation and commissioning should be completed with **60 Days** of the award of BID without any deviation.

Assistant Registrar-GA, i/c
Tezpur University



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Technical Specifications cum Compliance Report
(To be submitted on Company's/Firm's Letterhead Signed and Sealed)

Item No. 1 High-End FPGA Board-1 with installation kit for Machine Learning

Parameter	Description
High-End FPGA Board-1 with installation kit for Machine Learning	<p>Feature: Quad-core ARM Cortex- A53 application processor :Dual-core Cortex-R5 real-time processor :Mail-400 MP2 graphics processing unit : 4 KP60 capable integrated video code unit support H.264/H.265 :Optimized to work with SDSoc/revision development environment with OpenCV and Machine Learning libraries</p> <p>System Logic Cells: 504K DSP Slices: 1,728 Video Codec Unit:1 Maximum I/O Pins: 464 Memory: 38Mb : PS DDR4 64-bit Component : Quad-SPI flash</p> <p>Control & I/O:4x directional pushbuttons :DIP switches : PMBUS, clocks, and 12C bus switching</p> <p>Display: HDMI 2.0 video input and output (3x GTH) : Display Port (2x GTR)</p> <p>Communication and Networking : RJ-45 Ethernet connector :USB-UARTs with FT4232H JTAG/3xUART Bridge :SATA (M.2) for SSD access</p> <p>Expansion Connectors: FMC LPC (1x GTH), 3PMOD connectors :PL DDR4 SODIMM Connector-64 bit</p> <p>Accessories: 1080p60 USB3 Camera, 4-Port USB 3.0 Hub, Ethernet cable</p> <p>Software : Xilinx Vivado Prime Edition software with perceptual licence for the FPGA board</p>

Item No. 2. Workstation for high speed FPGA and Machine Learning

Parameter	Description
Workstation for high speed FPGA and Machine Learning	<p>Processor: Intel Core i9 Processor generation: 11th gen or latest OS: Windows</p>

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	<p>RAM: 32 GB HDD: any SSD: 1 TB Dedicated GPU: 6GB or above Monitor Resolution: 1980X1080 Processor Speed: 3.2 GHz and above Other features: Wireless monitor, wireless keyboard, wireless mouse, wireless adapter, Bluetooth, mousepad, digital writing pad, webcam, digital pen, wireless speaker</p>
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Item No. 3. Machine Vision Camera setup for FPGA board and Machine Learning

Parameter	Description
Workstation for high speed FPGA & Machine Learning	<p>Effective pixels: 1600x1200 (HxV)* Chroma: Color and Monochrome Pixels: 2MP and above No. of camera: Minimum 4 Camera setup with 2 integrated camera Cameras: 3D vision camera with short, medium & long distance version base plate : Digital camera with color and monochrome lenses of same model Lenses: High resolution, low distortion lenses, CCTV lenses Controllers: Box type controller with LCD monitor, Monitor Cable, Input Device : Controller integrated with LCD, touch pen, etc Others: 3D calibration tool, camera cable for bend resistance, right angle, long distance. Etc., lenses with extension tubes, camera stand, high luminance lighting</p>

Item No. 4. High-End FPGA Board 2 with installation kit for Machine Learning

Parameter	Description
High-End FPGA Board 2 with installation kit for Machine Learning	<p>Feature: Dual-core ARM Cortex-A9(HPS) : 110K PLEs : 5,761 Kbits embedded memory : 6 fractional PLLs : 2 hard memory controllers Memory device: 64 MB(32Mx16) SDFRAM for FPGA</p>

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	<p>: 1GB 92x256MBx16) DDR3 SDRAM for the HPS</p> <p>Display: 24-bit VGA DAC : 128x64 dots LCD Module with backlight on HPS</p> <p>Audio: 24-bit CODEC, Line-in, Line-out and microphone in jacks</p> <p>Video input: TV decoder (NTSC/ PAL/ SECAM) and video-in connector</p> <p>Switches: 5 user keys : 11 user LEDs : Six 7- segment displays</p> <p>Capacitive LCD Multi-touch screen: 7-inch TFT LCD with pixel resolution of 800x480 :16 million colors(24-bit RGB) : 5 point capacitive touch</p> <p>8-MP Digital Image Sensor :3264Hx2448V active pixels with Bayer color arrangement : Sensitivity 940mV/Lux-sec</p> <p>Other features: Ambient Light Sensor : MPU9250 Nine-Axis Sensor</p> <p>Software: Quartus Prime Edition Software with perceptual licence for the FPGA Board</p> <p>Accessories: Digital Camera Module (D5M)</p>
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Annexure-I

(To be submitted on Company's/Firm's Letterhead signed and sealed)

Bid-Security Declaration Form

Date: _____

Bid No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Security Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of three year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

(a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

(b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder) Dated on

_____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid).