Tender No. IIT/ECE/ENQ/SC/ESL/2020-10/1 Date: 10/08/2020

Sub: Procurement of “8051 In-Circuit Emulator for Embedded System Laboratory, Department of Electronics and Electrical Communication Engineering.”

Indian Institute of Technology, Kharagpur, invites sealed bids from reputed manufacturer or their authorised Distributor/Dealer (foreign firms or their Indian Representative company) or suppliers who have adequate credential for supply, installation and commissioning of “8051 In-Circuit Emulator”, required for dedicated use in relevant research purposes, as per Annexure-I for Department of E & ECE, Indian Institute of Technology, Kharagpur, India.

Interested parties may submit their sealed bids under Two-Cover system as per Technical Specifications given at Annexure I, and General Terms & Conditions given at Annexure II. A Checklist and Compliance statement against each item of Annexure I shall also be submitted. Kindly refer to the Institute website www.iitkgp.ac.in [link: Tenders] for complete tender document. The same is also available in the CPP Portal [https://eprocure.gov.in/epublish/app]. If there is any corrigendum/addendum, it shall only be published on Institute’s Website and Central Public Procurement Portal. The Financial bid must be submitted in the format as per Annexure III.

The tender is to be submitted in a sealed packet, containing two separate sealed envelopes (one each for Technical Bid and Price Bid) to the Office of Department of E & ECE, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India.

The technical bid will be evaluated first and price bids will be opened in respect of those bidders, who are found technically qualified after evaluation of Technical bids. Date for opening price bids will be intimated later.

Head of Department
Department of E & ECE
IIT Kharagpur

Copy to:–
1. Head, Institute Information Cell
2. Institute Website
3. CPP Portal
SCHEDULE OF EVENTS

<table>
<thead>
<tr>
<th>Tender Reference</th>
<th>IIT/ECE/ENQ/SC/ESL/2020-21/1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date: 10/08/2020</td>
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</table>

<table>
<thead>
<tr>
<th>Tender fee</th>
<th>NIL</th>
</tr>
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<tbody>
<tr>
<td>Earnest Money Deposit (EMD)</td>
<td>Rs. 2000.00</td>
</tr>
<tr>
<td>Last Date and Time for submitting the tender document</td>
<td>07-09-2020 12.00 PM</td>
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<tr>
<td>Time and Date of Opening of Technical Bids</td>
<td>08-09-2020 03.00 PM</td>
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<td>Place of Opening tender offers</td>
<td>Department of E&amp;ECE</td>
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<td>Indian Institute of Technology</td>
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<td></td>
<td>Kharagpur, West Bengal, INDIA,</td>
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<td></td>
<td>PIN- 721302</td>
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<tr>
<td>Name of the contact person</td>
<td>Prof. Santanu Chattopadhyay</td>
</tr>
<tr>
<td></td>
<td>Mr. Arindam Mondal</td>
</tr>
<tr>
<td>Contact Telephone Numbers</td>
<td>(03222)-283564 / (03222)-281482 / 9433213551</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:santanu@ece.iitkgp.ac.in">santanu@ece.iitkgp.ac.in</a> / <a href="mailto:amd@ece.iitkgp.ac.in">amd@ece.iitkgp.ac.in</a></td>
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</tbody>
</table>

NOTE:

a. In case the due date for submitting and opening tender happens to be a holiday, the same will be happened on the next working day. The timings will however remain unchanged. Please note that the Institute remains closed during Saturdays & Sundays.
Technical specifications of **“In-Circuit Emulator for 8051 Microcontroller”**

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>Specification</th>
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</thead>
</table>
| 1  | In-Circuit Emulator for 8051 Microcontroller with power adapter, serial cable and target connector cable and Windows 10 based software for source level debugger. | [1] The Emulator must support Intel 80C51BH microcontroller with 5V operation. It is to be reflected in the supported devices list in the data sheet of the emulator. The quoted price shall include the cost of power adapter (if required).  
[2] Real time operation up to 24 MHz.  
[3] Internal Memory: 128K internal memory (64K Code memory and 64K data memory) with software mapping and banking capabilities.  
[4] Hardware and conditional breakpoints: 64K.  
[5] Trace buffer: 32K and trace should be displayed during execution.  
[6] The Emulator is to be connected to PC through RS232C / USB cable.  
[7] Target connector cable with 40 pin DIP header for connecting emulator to the target microcontroller board.  
[9] The software should support the files generated by the most common 8051 assembler (e.g. Intel Hex format) and high level language (e.g. C/C++) compilers.  
[10] The operation manual (both for hardware and software) with detail description of operation and necessary circuit diagram (schematics) is to be supplied in hardcopy without any extra cost. |

**Quantity of the equipment**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>QUANTITY</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>In-Circuit Emulator for 8051 Microcontroller with power adapter, serial cable and target connector cable and Windows 10 based software for source level debugger.</td>
<td>Nos.</td>
<td>2</td>
</tr>
</tbody>
</table>
GENERAL TERMS & CONDITIONS

1) Payment Terms: After successful installation and commissioning, duly certified by the concerned Head of the Department/Centre. Vendor should submit the Bill along with Warranty Certificate duly sealed and signed.

- 90% payment will be made on submission of shipping documents and balance 10% payment will be made on installation, commissioning and submission of PBG for performance period if the payment is made by LC.
- Otherwise 90% will be released after receipt and successful installation of stores and 10% after submission of PBG for the performance period. The security deposit so retained may be refunded on submission of Bank Guarantee towards Performance Guarantee valid for comprehensive warranty period plus sixty days drawn on any commercial bank.

Note: PBG Format as per ANNEXURE -IV

No advance/mobilization support, is payable against supply of stores.

In the event of failure to deliver the stores beyond the specified date, the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.

Promptly make arrangement for replacement of any damaged item(s) irrespective of settlement of claim. If proper replacement is not done, P O may be cancelled.

Alternately late delivery penalty@1%-5% per month of the value of stores will be deducted subject to proper justification and approval from I.I.T Kharagpur.

2) Warranty and Guarantee: 1 (One) year on-site comprehensive OEM warranty from the date of successful installation and commissioning.

3) Installation: Installation and commissioning of the equipment shall be under the scope of work free of cost at Embedded System Lab, E & ECE Department, IIT Kharagpur.

4) Delivery of the Store Item: The item should be delivered within 30 days from the date of issue of the purchase order.

5) Price: Price should be quoted only in Indian Rupees on free delivery at site. Tax component should be shown separately.

6) Demonstration of the equipment may be requested, failing which the proposal may be rejected. Timeline to be intimated later by the indenter.

7) Technical Catalogue should be enclosed without fail.

8) Conditional Offer: No Conditional offer will be accepted. No advance is payable against supply of stores.

9) Period of Validity: Bids shall remain valid for acceptance, at least for a period of 90 days from the date of opening of the price bid.
10) **Past Performance and Experience** of the Vendors may be judged at the time of Technical Evaluation. Documentation in this respect may be provided.

11) The Institute does not bind itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Evaluation Committee of the Institute.

6) Bidders should enclose the following documents in the technical bid:

- GST registrar No. and PAN No.
- Signed Tender document as a token of acceptance of all the terms and conditions.
- Full name and address of the beneficiary
- Bank details

**Vendor Code of IIT Kharagpur**

7) The bid should also contain a signed “compliance certificate” duly signed by the bidder the effect that items offered meet the tender specifications of the Institute.

8) All tenders are to be submitted over to the office of the **Head, E & ECE IIT Kharagpur, P.O.-Kharagpur Technology-721302** before the due date and time and acknowledgement to be obtained. In case due date happens to be a holiday, the tender will be accepted on the next working day.

9) Tenderer or his/her authorized representative (with proper authorization letter for opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.

10) IIT Kharagpur may provide Customs Duty exemption certificate (in terms of Notification No. 51/96 – Customs dt: 23.07.1996) on vendor request.

11) IIT Kharagpur may provide Concessional GST Certificate i.e GST 5% ( in terms of Notification no. 47/2017 – Integrated Tax (Rate) dt. 14.11.2017 and Notification No. 45/2017 – Central Tax (Rate) dt: 14.11.2017) on vendor request.

12) **IMPORTANT**

   a. The Director, IIT Kharagpur, may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid.

   b. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof, at any time before placing the Purchase Order. Institute at its discretion also reserves the right to verify information submitted and inspect the manufacturer facilities, if required to confirm their capabilities.

   c. In case of any dispute, the decision of the Director, IIT Kharagpur shall be final and binding on the bidders.

   d. For any query pertaining to this Bid document, correspondence may be addressed to:

      Prof. Santanu Chattopadhyay / Mr. Arindam Mondal
      Indian Institute of Technology
      Kharagpur - 721 302 (W.B)
      Telephone: (03222) – 283564 / (03222) – 281482 / 9433213551
      Email: santanu@ece.iitkgp.ac.in, amd@ece.iitkgp.ac.in
FINANCIAL BID

Tender No.
Date:

The Bidder shall fill all the required columns of Financial Bid:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Qty</th>
<th>Unit Price without taxes (in Rs.)</th>
<th>Taxes Rs</th>
<th>Unit Price with Taxes (in Rs.)</th>
<th>Total Amount (in Rs.)</th>
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Total Price

Total Price in words

Note:-
1. In case of discrepancies between words and figures, the bid which is least of the two versions will be confirmed.
2. Indian Institute of Technology Kharagpur is a Public Funded Academic & Research Institute under the Ministry of Human Resource Development and is eligible for
   a. Customs Duty exemption (in terms of Notification No. 51/96-Customs dt.23.07.1996)
   b. Concessional GST @5% in terms of Notification No: 47/017-Integrated Tax (Rate) dated 14/11/2017 and Notification No. 45/2017-Central Tax (Rate) dt. 14/11/2017 by the Ministry of Finance, Department of Revenue.

Signature of the bidder along with seal
PERFORMANCE SECURITY FORM

To: (Name of Purchaser)

WHEREAS .................................................. (Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract No. ............ dated ......... 20, to supply ........................................ (Description of Goods and Services) hereinafter called "the order" AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order. AND WHEREAS we have agreed to give the Supplier a Guarantee: THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of ........................................ (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the order and without cavil or argument, any sum or sums within the limit of ........................................ (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. This guarantee is valid until the ........ day of ........ 20.

Signature and Seal of Guarantors ........................................

........................................

Date ........ 20.

Address ........................................

All correspondence with reference to this guarantee shall be made at the following address:

(Name & address of the Institute)