

**Tender No. IITH/EE/KKUCHI/2019/T331**

**Date: 27<sup>th</sup> Dec 2019**

To

Dear Sirs,

On behalf of the Indian Institute of Technology Hyderabad, Tenders are invited for supply of “**SECURE BOOT IP (SOFT IP)**” conforming to the specification given in

**I) Instruction to the Bidder**

- (i) **Preparation of Bids:** - The tenders should be submitted under two bid system (i.e.) Technical bid and Financial bid. Both Technical Bid and Financial Bid should be sealed and clearly superscribed with Technical Bid/Commercial Bid (as applicable) along with the Tender No. and Due Date. Both Technical and Commercial Bid must be sealed inside a big envelope and superscribed Tender No. and Due Date clearly. Tenderer's name must be written on all the three envelopes. All pages of the both the bids must be signed by the Authorized signatory of the Tenderer. The Earnest Money Deposit (refer point 3 of Schedule of Invitation of this Tender) in original must be submitted along with the Technical Bid.
- (ii) **Bid Validity-** Bid should be valid for a period of 90 days from the due date of Tender submission. Bidder should clearly indicate validity of the bid.
- (iii) **Delivery of the tender:** - The tender shall be sent to “**Stores & Purchase Office, 2<sup>nd</sup> Floor, Academic Block A, I.I.T Hyderabad, Kandi, Sangareddy- 502 285, Telangana State, India**” either by Post/Courier/By Hand so as to reach our office before the due date and time specified in our Schedule. The Institute shall not be responsible for any Postal/Courier delay.
- (iv) **Opening of the tender:** - The offer/Bids will be opened by a committee constituted for this purpose. The Technical bids will be opened first and it will be examined and evaluated by a Technical committee and give its recommendation about qualification/disqualification of Technical Bid. The financial bids will be opened only for the offer/bids of technically qualified bids. The bidders, if interested may participate on the tender opening Date and Time. The bidder should produce authorization letter from their company to participate the tender opening. Only one representative will be allowed to participate the tender opening.



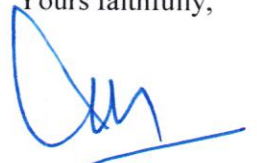
- (v) **Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However, the percentage of Taxes, Duties, Cesses etc. shall be clearly indicated.

The price should be quoted without Customs Duty and Excise Duty, since I.I.T. Hyderabad is exempted from payment of Excise Duty (if applicable) and the Custom Duty will be paid at concessional rate against Customs Duty Exemption Certificate i.e. 5.5%. In case of import supply both FOB/FCA & CIF/CIP prices should be provided. All Payment, including Service Tax shall be made in accordance with the prevailing Taxation Rules/laws of Government.

- (vi) **Agency Commission:** - Agency commission if any will be paid to the India Agent Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.

- (vii) **Terms of Delivery:** - The item should be supplied to our destination in case of local supply. In case of import supply, the item should be shipped only to Hyderabad Airport. The Installation/Commissioning should be completed as specified in our important conditions.

Yours faithfully,



Joint Registrar  
IIT Hyderabad

For any technical query related to enquiry you may feel free to contact  
Dr Kiran Kumar kuchi Dept. of EE Ph No. 040 2301 7054  
Email: [kkuchi@iith.ac.in](mailto:kkuchi@iith.ac.in)





**II) Important Conditions of the tender to be abide by the tenderer**

1. The due date for the submission of the Tender is on or before **“10.01.2020 by 02:30 pm”** on all working days except holidays. Tender Opening shall be held on **“10.01.2020 at 03:30 pm”**. If the Due Date is declared as Public Holiday, the next working day shall be treated as Due Date for Tender Submission and Tender Opening.
2. The offer/bids should be submitted in two bid systems (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. The Technical bid and the financial bid should be put in separate covers and sealed. Both the sealed covers should be put into a bigger cover along with letter of EMD and to be sealed. The tender number and **“Tender for SECURE BOOT IP (SOFT IP)”** should be superscribed on the left side of the outer cover.
3. Earnest Money Deposit (EMD): The tenderer should submit an EMD amount of Rs. 3,00,000/- (Rupees Three Lakh Only) along with the Technical Bid by way of original Bank Guarantee (BG) from any Nationalized/Scheduled Bank, valid for 90 days from the due date of tender submission as per format of BG given in Annexure II to this Tender Document. The EMD may also be submitted by way of Demand Draft drawn in favour of “DIRECTOR, IIT HYDERABAD”. The Technical Bid without EMD would be considered as summarily rejected. The EMD will be returned without any interest to the unsuccessful bidders within 30 days from evaluation of Tenders. EMD for successful bidder shall be returned after submission of Performance Security. Indian Agent may submit the EMD on behalf of their foreign Principal. If any firm withdraws/alters his submitted Tender after Due Date, the EMD shall be forfeited.

**Exemption from submission of EMD (Only for Indigenous Purchases in INR Only) -**

The technical bid should clearly indicate the currency in which the financial bid is submitted.

Bidders registered with any of the following agencies/ bodies as per Public procurement policy for Micro & Small Enterprises (MSE) order are exempted categories from payment of EMD provided that the registration certificate issued by any one of these below mentioned agencies must be valid as on close date of tender.

Micro small or medium enterprises who have applied for registration or renewal of registration with any of these agencies/bodies but have not obtained the valid certificate as on close date of tender are not eligible for exemption.

i) Khadi and Village Industries Commission (KVIC)



- ii) National Small Industries Corporation (NSIC)
- iii) Any other body specified by Ministry of MSME/GOI

The exemption of EMD against the above certificates shall be subject to scrutiny by the IITH and if during scrutiny, it is found that the Certificate is invalid and/or irrelevant, then that bid is liable to be rejected as “not-accompanying EMD”. Therefore, firms claiming exemption from EMD should ensure the same carefully, while submission of the bids.

Note: If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

**4. Performance Security:**

4.1 Within fifteen (15) days of the award of contract, the vendor shall furnish a Performance Bank Guarantee amounting to 10% of the purchase order value in the form of Demand Draft/Bank Guarantee (from scheduled Bank only) favoring the Director, Indian Institute of Technology, Hyderabad.

4.2 IIT Hyderabad will forfeit the 10% Performance Bank Guarantee if vendor fails to execute the order as per the Purchase Order. This Security Deposit will be refunded to the vendor only on successful installation, commissioning and training of the supplied equipment / system.

4.3 The Performance Security should be valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations, since the same Performance Security will be extended as Warranty Bank Guarantee.

4.4 Performance Security will be refunded to the contractor/Supplier without interest, after he duly performs and completes the contract in all aspects but not later than 60 days of completion of all contractual obligation including the warranty clause.

**5. If an Indian agent is involved, the following documents must be enclosed:**

- a. Foreign principal's Proforma invoice indicating the Commission payable to the Indian Agent and nature of after sales service to be rendered by the Indian Agent.
- b. Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.

**6. The offer/bids should be sent only for a machine that is available in the market and supplied to number of customers. A list of customers in India and abroad with details is to accompany with the quotations. Quotations for a prototype machine will not be accepted.**





7. Copies of catalogue of the quoted model duly signed by the principals must accompany the quotation. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.
8. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
9. **Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages @ 1% per week (maximum up to 10% of PO Value) clause will be enforced or penalty for the delayed supply period will be levied.
10. **Risk Purchase Clause:** - In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.
11. **Payment:** - No Advance payment will be made. 90% Payment after Delivery and 10% after installation wherever installation is applicable. In case of import supplies the payment will be made only through Letter of Credit and 90% payment will be released against delivery and 10% after installation wherever the installation is applicable.
12. **Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at I.I.T. Hyderabad stores.
13. **Warranty/Guarantee:** - The offer should clearly have specified the warranty or guarantee period for the machinery/equipment. Any extended warranty is offered the same has to be mentioned separately.
14. **Late Tenders:** - Tenders received after Due Date and Time shall not be considered and shall be returned unopened in the original envelope only.
15. **Acceptance and Rejection:** - I.I.T. Hyderabad has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
16. **Disputes and Jurisdiction:** - Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Sangareddy in Telangana State.



17. Amalgamation/Acquisition etc.: In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the BUYER/Successor of the Principal Company are liable for execution of the contract and also fulfillment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. while submitting your bid, you may confirm this condition
18. **Acknowledgement:** - It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE**



## **Specifications:**

### **SECURE BOOT IP (SOFT IP)**

#### 1) IP Description.

- a) Crypto DMA supporting Secure Boot
- b) Qual-SPI controller with ECC
- c) APB Bus Arbiter / Mux

For both the IP - RTL, test benches, testcases for integration, synthesis scripts, software and documentation.

#### 2) Embedded Software Module and Development

##### a) Embedded Development

- Tool Chain Scripts - Compiler, Assembler for ARM CM4
- FreeRTOS Boot
- Drivers for the peripherals connected to ARM and QSPI (in addition to UART, Timer and Watchdog)

##### b) Secure Boot implementation.

- Boot Code in Boot ROM (boot from QSPI)
- ECC based signature validation
- DMA from QSPI and validate the boot code. The Keys and signature will be in the QSPI.
- There is a Crypto DMA for Hash computation
- The ECC code is to be part of the boot code.

##### c) Help architecture

- Size of the data memory, cache size, Program memory size for ARM based on the 4-5 use cases.

d) Implement items a-c on FPGA & SoC bring up including implementation of test cases





Indian Institute of Technology Hyderabad, Kandi, Sangareddy- 502285

**BANK GUARANTEE FORMAT FOR FURNISHING BID SECURITY (EMD)**

Whereas ..... (hereinafter called the “tenderer”) has submitted their offer dated.....for the supply of ..... (hereinafter called the “Tender”) against the Purchaser’s tender enquiry No. ....  
KNOW ALL MEN by these presents that WE..... of ..... having our registered office at..... are bound unto ..... (hereinafter called the “Purchaser”) in the sum of .....  
for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this..... day of .....20.....

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity: -
  - a) If the tenderer fails to furnish the performance security for the due performance of the Contract.
  - b) Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser (IIT Hyderabad) having to substantiate its demand, provided that in its demand the purchaser will note that the amount claimed by it is due to it owing the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the bank not later than the above date.

Signature of the authorized officer of the bank

Name and designation of the officer

Seal, name and address of the Bank and address of the Branch.

