

Postgraduate Department of Electronics and Instrumentation Technology University of Kashmir, Hazratbal, Srinagar- 190 006

NOTICE INVITING E-TENDER

For and on behalf of Competent Authority of the University of Kashmir, e-tenders in two bid systems are invited from reputed manufacturers/authorized dealers for supply, installation and testing of different types of **DEVELOPMENT KITS, BOARDS and MODULES** as mentioned in the tender notice under the terms and conditions of the said notice. The bid/tender document consisting of qualifying information, eligibility criteria, specifications, bill of quantities (B.O.Q), terms & conditions and other details can be seen/downloaded from website www.jktenders.gov.in as per the schedule given below:

S. No	Activity	Date
1.	Date of issuance of tender notice	05/10/2017
2.	Date of downloading the bid documents	05/10/2017 (06.00PM)
3.	Bid Submission Start Date	05/10/2017 (06.00PM)
4.	Seek Clarification Last Date	10/10/2017 (06:00PM)
5.	Bid Submission Last Date	30/10/2017 (03:00PM)
6.	Last date for submission of hard copies	31/10/2017 (11:00AM)
7	Date and Time of Opening of Technical	31/10/2017 (03:00PM)
	bid	51, 10, 2017 (05.001 10)
8	Date and Time of opening of Commercial	To be intimated
5.	bid	10 Se intillated

Head, Department of Electronics and Instrumentation Technology University of Kashmir

No: F-TENDER (UOK/DOEIT/2017-III) Dated: 05/10/2017

e-TENDER FOR SUPPLY OF ELECTRONIC COMPONENTS AND TOOLS FOR CIRCUIT ASSEMBLY AT DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION TECHONOLOGY, UNIVERSITY OF KASHMIR

E-TENDER ENQUIRY NO: F-TENDER (UOK/DOEIT/2017-III) DATED 5th OCTOBER, 2017

1. This bid aims for purchase of various equipment and components for the conduct of Laboratory work of M. Tech. (Embedded Systems Solutions) Programme. Therefore, for and on behalf of University of Kashmir, Srinagar, Head, Department of Electronics and Instrumentation Technology invites e-tenders through www.jktenders.gov.in from eligible providers for "e-Tender for supply of DEVELOPMENT KITS, BOARDS and MODULES". Bidders are requested to quote their best possible prices with special discount, as the set-up is a non-commercial public service educational initiative supported by University Grants Commission (UGC) and Ministry of Human Resource Development (MHRD), Government of India (GOI).

2. The address and contact numbers for sending bids or seeking clarifications regarding this e-TENDER are given below:

- a) Bids/queries to be addressed to: Head, Department of Electronics and Instrumentation Technology, University of Kashmir, Hazratbal, Srinagar-190006
- b) Name/designation of the contact personnel: **Dr. Mohammad Tariq Banday, Head of the Department.**
- c) Telephone numbers of the contact personnel: 0194-2415610, 0194-2272315
- d) E-mail ID's of contact personnel: sgrmtb@kashmiruniversity.ac.in
- *3.* SCHEDULE OF VARIOUS ACTIVITIES:

S. No	Activity	Date
1.	Date of issuance of tender notice	05/10/2017
2.	Date of downloading the bid documents	05/10/2017 (03.30PM)
3.	Bid Submission Start Date	05/10/2017 (03.30PM)
4.	Seek Clarification Last Date	10/10/2017 (03:30PM)
5.	Bid Submission Last Date	30/10/2017 (03:00PM)
6.	Last date for submission of hard copies	31/10/2017 (11:00AM)
7.	Date and Time of Opening of Technical bid	31/10/2017 (03:00PM)
8.	Date and Time of opening of Commercial bid	To be intimated

- 4. This TENDER is divided into five Parts as follows:
 - a. **Part I**. Contains general information and instructions for the Bidders about the e-TENDER.
 - b. **Part II**. Contains essential details of the items/services required, such as the schedule of requirements (SOR), Technical specifications, delivery period, mode of delivery and consignee details.
 - c. Part III. Contains terms and conditions of the contract with the supplier.
 - d. **Part IV**. Contains special conditions applicable to this TENDER and which will also form part of the contract with the successful Bidder.
 - e. Part V. Contains evaluation criteria and format for Price

5. This TENDER is being issued with no financial commitment and the buyer reserves the right to change or vary any part thereof at any stage. Buyer also reserves the right to withdraw the TENDER, should it become necessary at any stage.

6. Prospective bidder may download the tender paper from the website (www.jktenders.gov.in) and submit the bid in the institute in due time & date as mentioned in the tender document.

Part I: General Information

1. Last Date and Time for Depositing the Bids: *As Given in the Front Page of the Tender.* The bids (both technical and commercial) should be deposited/submitted by the due date and time. The responsibility to ensure this lies with the bidder.

2. Manner of Depositing the Bids: The Technical Bid of the Tender should be submitted in a sealed cover super scribing the wordings -Technical Bid. Department of Electronics and Instrumentation Technology, University of Kashmir, Srinagar reserves the right to amend the Bid document, tentative schedule and critical dates. The bid document is available at department's office & can be downloaded from www.jktenders.gov.in. The cost of the bid document is Rs. 1000/- to be paid by Cheque/DD in favour of Head, Department of Electronics and Instrumentation Technology and must be submitted along with the Technical Bid otherwise the bid will be rejected. Technical Bid in sealed cover should be superscripted with the words "Technical Bid for Supply of DEVELOPMENT KITS, BOARDS and MODULES" against e-NIT No.: F-TENDER (UOK/DOEIT/2017-III) Dated: XX/09/2017". Commercial bid should be filled as per the BOQ on www.jktenders.gov.in. The prices should be quoted exclusive of taxes and all applicable taxes must be mentioned separately. In case, taxes are not mentioned in commercial bid, prices shall be considered inclusive of taxes. Prices are to remain valid for 90 days from the date of opening of Commercial Bid. No hard copy of commercial bids need to be submitted.

3. Time and Date for Opening of Bids: As Given in the Front Page of the *Tender.* If due to any exigency, the due date for opening of the Bids is declared a closed holiday, the Bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer through e- mail).

4. Place of Opening of the Bids: Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar. The bidders may depute their representatives, duly authorized in writing, to attend the opening of Bids on the due date and time. Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders after the commercial bid is opened. This event will not be postponed due to non- presence of your representative.

5. Two-Bid System: Technical Bid would be opened and the tenders found eligible will go for opening of Commercial Bid on the same day or the day as decided by the competent authority and commercial bids of Ineligible tenders will not be opened.

6. Clarification Regarding Contents of the TENDER: A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing about the clarifications sought as per the date given in the front page of the tender. Clarification if any shall be notified on the website in the form of Corrigendum and no separate paper publication shall be made.

7. Rejection of Bids: Canvassing by the Bidder in any form, unsolicited letter and posttender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected.

8. **Validity of Bids:** The Bids should remain valid till **90** days from the date of opening of the commercial bid.

9. Earnest Money Deposit: Bidders are required to submit Earnest Money Deposit (EMD) amounting to Rs. 50,000/= or 5% of the total bid value (whichever is higher) along with their bids. The EMD may be submitted in the form of an Account Payee Demand Draft, EMD is to remain valid for a period of 90 days. EMD of the unsuccessful bidders will be returned to them at the earliest. The Bid Security of the successful bidder would be returned, without any interest whatsoever, after the receipt of Performance Security from them as called for in the contract. The EMD will be forfeited if the bidder withdraws or amends impairs or derogates from the tender in any respect within the validity period of their tender.

10. **Cost of Tender**: Cost of Tender Document will be **Rs 1,000/-** (nonrefundable) in the form of a DD/ Banker Cheque (not personal Cheque) in favour of Head, Department of Electronics and Instrumentation Technology University of Kashmir, Payable at Srinagar and the same is to be submitted along with the Technical bid.

11. Eligibility Criteria: Firm/bidders blacklisted at any stage or by any State/Central Universities, NITs/IITs/IIITs, Central/State Government body/PSUs etc. need not to apply.

(a) The bidder should be an Indian registered company engaged in respective area of works. The bidder should have sufficient Infrastructure, technical expertise and financial strength to undertake the contract.

(b) **Minimum AVERAGE ANNUAL TURNOVER** of **Rs. 15 lakhs** in the last 3 financial years. (Balance sheet/CA certificate to be enclosed, duly supported by the income tax return for financial years 2014-15, 2015-16, 2016-17).

(c) The bidder should have experience of similar work with reputed organization. The nature of completed work should be supply & satisfactory completion of project in various Government Institutes/Reputed Firms/PSUs. [NOTE: The documentary proof of **Purchase orders** in respect of works mentioned in bid **must** be submitted along with the bid.]

(d) Tenderer should submit documents in support of minimum eligibility criteria along with the tender/bid. NO document in support of minimum eligibility criteria will be accepted / entertained after opening of tender.

(e) The Bidder/Tenderer should provide the following mandatory information:

i. Bidder/Tenderer must provide the information on the similar works completed successfully. Bidder/Tenderer must submit satisfactory documentary proof from end-users.

- ii. List of Organizations/Customers dealt by them.
- iii. Last three years copies of Income Tax Return Form and PAN number.
- iv. Copy of Registration of Firm.

(f) Tenders/bids not meeting any of the above Eligibility Criteria shall be rejected.

12. Performance Guarantee: Successful Bidders must have to submit the performance security @ 5% of the purchase order value or Contract value in the form of Fixed Deposit, Bank guarantee from a schedule commercial bank and will be retained up to the warranty Period.

Part II: Essential Details of Items/Services required

- Schedule of Requirements: List of items / services required is as mentioned in Annexure-B.
- 2. Technical Details/Scope of work: Technical Specification of required items is as mentioned in Annexure-B

Note: All equipment/ tools/ accessories/ safety gears in concern will be provided by the

firm.

- **3.** Delivery Period: Delivery period for supply and completion of works would be **30 DAYS** from the effective date of placing Work/Purchase Order. Please note that Purchase order can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Buyer.
- **4. Terms for Delivery and Transportation:** The definition of delivery period for the TENDER will be **on receipt of Purchase Order**
- **5.** Consignee Details. Head, Department of Electronics and Instrumentation Technology, University of Kashmir, Hazratbal, Srinagar 190006, 0194-2415542.

PART III – Standard Conditions of Tender Enquiry

1. The Firm is required to give confirmation of their acceptance of the Standard Conditions of the contracts which will automatically be considered as part of the Contract concluded with the successful Firm (i.e. Seller in the Contract) as selected by the Client. Failure to do so may result in rejection of the submitted Bid. The standard conditions of the contract may be perused in the office of tenderer prior to submission of quotation.

2. Law. The Contract shall be considered and made in accordance with the laws of the Republic of India. The Contract shall be governed by and interpreted in accordance with the laws of the Republic of India.

3. Arbitration. All disputes or differences arising out of or in connection with the tender shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Supply/Installation/performance, which cannot be settled amicably, may be resolved through arbitration. In case of arbitration with the firm and this unit on any issue the final decision would be of The Head, Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR. The arbitration will be governed by following: -

- (a) All disputes or differences arising out of or in connection with the present contract including the one connected with the validity of the present contract or any part thereof should be settled by bilateral discussions.
- (b) Any dispute, disagreement of question arising out of or relating to this contract or relating to construction or performance (except as to any matter the decision or determination whereof is provided for by these conditions), which cannot be settled amicably, shall within sixty (60) days or such longer period as may be mutually agreed upon, from the date on which either party informs the other in writing by a notice that such dispute, disagreement or question exists, will be referred to a sole Arbitrator.
- (c) Within sixty (60) days of the receipt of the said notice, an arbitrator shall be nominated in writing by the authority agreed upon by the parties.
- (d) The sole Arbitrator shall have its seat in Srinagar or such other place in India as may be mutually agreed to between the parties.
- (e) The arbitration proceedings shall be conducted under the Indian Arbitration and Conciliation Act, 1996 and the award of such Arbitration Tribunal shall be enforceable in Indian Courts only.
- (f) Each party shall have to bear its own cost of preparing and presenting its case. The cost of arbitration including the fees and expenses shall be shared equally by the parties, unless otherwise awarded by the sole arbitrator.
- (g) The parties shall continue to perform their respective obligations under this contract during the pendency of the arbitration proceedings except in so far as such obligations are the subject matter of the said arbitration proceedings.

(Note: In the event of the parties deciding to refer the dispute/s for adjudication to an

Arbitral Tribunal then one arbitrator each will be appointed by each party and the case will be referred to the Indian Council of Arbitration (ICADR) for nomination of the third arbitrator. The fees of the arbitrator appointed by the parties shall be borne by each party and the fees of the third arbitrator, if appointed, shall be equally shared by the buyer and seller).

- (h) The delivery of material is delayed due to causes of Force Majeure by more than (02 months) provided Force Majeure clause is included in contract.
- (i) The customer has noticed that the FIRM has utilized the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.
- (j) As per decision of the Arbitration Tribunal.

4. Penalty for use of Undue Influence. The Firm undertakes by bidding for the Tender Enquiry, that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the BUYER or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India for showing or forbearing to show favour or disfavor to any person in relation to the present Contract or any other Contract with the Government of India. Any breach of the aforesaid undertaking by the Firm or any one employed by him or acting on his behalf (whether with or without the knowledge of the Firm) or the commission of any offers by the Firm or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Client to cancel the contract and all or any other contracts with the Firm and recover from the Firm the amount of any loss arising from such cancellation. A decision of the Client or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Firm. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Firm towards any officer/employee of the Client or to any other person in a position to influence any officer/employee of the Client for showing any favour in relation to this or any other contract, shall render the Firm to such liability/ penalty as the Client may deem proper, including but not OPEN to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Client.

5. Access to Books of Accounts In case it is found to the satisfaction of the DOEIT, UNIVERSITY OF KASHMIR that the seller has engaged an agent or paid commission or influenced any person to obtain the contract as described in clauses relating to agents/agency commission and penalty for use of undue influence, the Seller, on a specific request of the DOEIT, UNIVERSITY OF KASHMIR, shall provide necessary information/ inspection of the relevant financial documents/information.

6. Liquidated Damages. In the event of the Firm's failure to provide services and maintain the agreed uptime etc. as specified in this contract, the Client may, at his discretion, withhold any payment until the completion of the contract. The Client may also deduct from the Firm as agreed, liquidated damages to the sum of 0.5% of the contract price of the delayed/undelivered stores/services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 10% of the value of payable amount as per the scheduled terms of payment.

7. Non-disclosure of Contract Documents. Except with the written consent of one party, the other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. Notices. Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by FAX or email or registered pre-paid mail/airmail, addressed to the last known address of the party to whom it is sent.

9. Premature Termination of Contract. A contract may be terminated in the following

circumstances: -

- (a) When the FIRM fails to honor any part of the contract including failure to deliver the contracted stores/render services in time.
- (b) When the FIRM is found to have made any false or fraudulent declaration or statement to get the contract or he is found to be indulging in unethical or unfair trade practices.
- (c) When both parties mutually agree to terminate the contract.
- (d) When the item offered by the FIRM repeatedly fails in the inspection and/or the supplier is not in a position to either rectify the defects or offer items conforming to the contracted quality standards.
- (e) Any special circumstances, which must be recorded to justify the cancellation or termination of a contract.
- (f) The delivery of the material is delayed for causes not attributable to Force Majeure for more than (01 month) after the scheduled date of delivery.
- (g) The Firm is declared bankrupt or becomes insolvent.

10. Transfer and Sub-letting. The seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present contract or any part thereof without prior consent in written from Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR).

- (a) The FIRM may subcontract any part of Scope of Work on mutual agreement with the CUSTOMER. The FIRM can under no circumstance sub- contract the complete Scope of Work to a Third Party.
- (b) The FIRM would be entirely responsible for quality / standard and timely execution of the sub-contracted work. The FIRM is to draw up a suitable Quality Assurance (QA) Plan with the Sub- FIRM and a copy of the same along with Record of Inspection in accordance with such QA Plan shall be submitted to the CUSTOMER.
- (c) The supervision of work for the sub-contracted jobs is to be done by the FIRM. The FIRM is not permitted to seek any extension of Completion Date citing delay on the part of Sub-FIRMs or rework arising out of Sub-Contracted work.

11. Patents and other Industrial Property Rights. The prices stated in the present Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial property rights. The Seller shall indemnify the Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies, irrespective of the fact of infringement of any or all the rights

12. Amendments. No provision of present Contract shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this Contract and signed on behalf of both the parties and which expressly states to amend the present Contract.

13. Taxes and Duties. All the rates quoted should be inclusive of all taxes including the GST.

14. Transportation and Material Handling. The FIRM (supplier) will arrange necessary transport and labour at own cost for loading and unloading the items.

PART IV - Special Conditions

1. Option Clause. This contract has an Option Clause, wherein the Client can exercise an option to procure an additional quantity of items in accordance with the same terms & conditions of the present contract. This will be applicable within the currency of contract. It will be entirely the discretion of the Client to exercise this option or not.

2. Repeat Order Clause. This contract has a Repeat Order Clause, where in the Client can order as desired quantity of the items / services under the present contract within six months from the date of successful completion of this contract, cost, terms & conditions remaining the same. It will be entirely the discretion of Client to place the Repeat order or not.

3. Tolerance Clause. To take care of any change in the requirement during the period starting from issue of Tender Enquiry till placement of the supply/work order, Client reserves the right to increase or decrease the quantity of the required goods/ services without any change in the terms & conditions and prices quoted by the Firm. While awarding the contract, the quantity/services ordered has been increased or decreased by the Client within this tolerance limit.

4. Payment Terms. It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through ECS/NEFT/RTGS mechanism instead of Payment through cheques. No Advance payment will be Made. 100% payment will be done on satisfactory completion of work.

5. Paying Authority. The payment of bills will be made by DOEIT, UNIVERSITY OF KASHMIR within 60 days of submission of the following documents by the SELLER to the Paying Authority:

- (a) 02 ink-signed copies of Commercial invoice / SELLER's bill.
- (b) A work completion certificate post Supply / Installation / User Satisfaction certificate from Department of Electronics and Instrumentation Technology, University of Kashmir.
- (c) Photocopy of Performance Bank guarantee.
- (d) Details for electronic payment viz Account holder's name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code (if these details are not incorporated in contract).

6. Risk & Expense Clause. Should the services or any installment there of not be delivered with the time or time specified in the contract documents, or if unsatisfactory delivery are made in respect of the services or any installment thereof, the BUYER shall after granting the SELLER 60 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, to declare the contract as cancelled either wholly or to the extent of such default.

7. Force Majeure Clause. Neither party shall bear responsibility for the complete or partial nonperformance of any of its obligations (except failure to pay any sum which has become due on account of receipt of goods under the provisions of the present contract), if the non-performance results from such Force Majeure circumstances as flood, fire, earth quake and other acts of God as well as other circumstances beyond the parties control that have arisen after the conclusion of the present Contract.

- (a) In such circumstances, the time stipulated for the performance of an obligation under the present contract is extended correspondingly for the period of time action of these circumstances and their consequences.
- (b) The party for which it becomes impossible to meet obligations under this contract due to Force Majeure conditions, is to notify in written form to the other party of the beginning and cessation of the above circumstances immediately, but in any case, not later than 10 (ten) days from the moment of their beginning.

- (c) Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be a sufficient proof of commencement and cessation of the above circumstances.
- (d) If the impossibility of complete or partial performance of an obligation lasts for more that 06 (six) months, either party hereto reserves the right to terminate the contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.

8. Quality Assurance. Assurance of quality is the responsibility of the firm and firms are to indicate exclusively and submit proofs of quality assurance norms being followed.

9. Inspection. The inspection of delivered items would be carried out by the representative/s of the DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION TECHNOLOGY, UNIVERSITY OF KASHMIR.

10. Period of Contract. The contract shall be valid for a period of **12 months**, from the date of issue of Purchase Order.

11. Extension Clause. The contract agreement may be extended further fora period mutually agreed between the buyer & seller, without any changes in rates quoted, and, on same terms and conditions mentioned in the extant tender document. However, charges in taxes/Government levies incorporated from time to time would be catered in concluding extension in contract. Any such extension would be processed only after submission of a certificate by the seller mentioning —No Downward trend in price and with the approval of the competent financial authority.

Part V – Other/Miscellaneous Information

1. The Broad Guidelines for Evaluation of Bids.

- (a) Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the tender Enquiry.
- (b) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.
- (c) Prices quoted by the FIRM should be precise and unambiguous. Rate per unit is to be quoted individually as per format for submission of "Q" bid at **Annexure "D**". Clarifications, if any, may be obtained from this office prior to submission of tender.
- (d) FIRM can quote for some or all categories mentioned in the "Q" bid submission format.
- (e) Evaluation of the bid shall be carried out basing on the cost of the financial bid.
- Price/Commercial Bid Format: The rates for Items /services & spares are to be quoted as per Enclosure to "Q" bid Format. CUSTOMERS are required to forwarded 'Q' bid (Annexure D) electronically.
- **3.** Technical Bid Format: The Technical Bid is to submitted as per format attached with this tender document appended at Appendix-E
- 4. CHECK LIST (ON THE LETTER HEAD OF THE BIDDER)

The Bid must include a check list in the following format. No document in support of minimum eligibility criteria will be accepted / entertained after opening of tender.

Sl. No	Documents	YES/No	Proof of Document Attached
1.	Cover letter by bidder (On the Letter		As per the format given in
	Head of the Bidder).		Annexure A
2.	Check List		As given in the tender document
3.	Tender Fee.		As given in tender document

4		
4.	Earnest Money Deposit (EMD), if	As given in tender document
	required.	
5.	Registration Certificate of the Bidder	Copy of Registration Certificate
6.	Documents in proof of Minimum	(Balance Sheet/CA Certificate, etc.)
	Average Annual Turnover as per tender	
	Documents	
7.	Documents in proof of Similar work	(Copy of Purchase Order, etc.)
	experience	
8.	Affidavit to the effect that the bidder is	Furnish details as per Annexure-C
	not Black Listed by any State/Central	
	Universities NIT/IIT/IIIT	
9.	Documents in proof of Availability of	Dealership/Distributor/OEM
	Technical and Financial strength to	Certificate, Any valid document in
	undertake the work	proof of financial strength
10.	Latest Income Tax Return (Last Three	Copies of Income Tax Returns filed
	Years)	for last three years
11.	List of Organization/Customer Dealt.	Furnish details as per Annexure-F
12.	Compliance Sheet	Furnish details as per Annexure-G
13.	Other Documents	As given in the tender

5. Cover *letter* by bidder (On the Letter Head of the Bidder).

To **THE HEAD**, Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar.

BID PROPOSAL SHEET (ON THE LETTER HEAD OF THE BIDDER)

Subject:Supply of DEVELOPMENT KITS, BOARDS and MODULES at
Department of Electronics and Instrumentation Technology,
UNIVERSITY OF KASHMIR, Srinagar

Dear Sir,

We, the undersigned Tenderers, having read and examined in detail the specifications as specified in this document in respect of **Supply of DEVELOPMENT KITS, BOARDS and MODULES at Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar** do hereby propose to supply the required products and services.

Tender	No.				
Tender Fees Submitted		YES/NO	(Please strike off whatever is no applicable		
Amount	Mode	Date of Issue	Name of Bank	Valid up to	
	Demand				
	Draft				
EMD sub	mitted	YES/NO	(Please strike off what	tever is no applicable)	
Amount	Mode	Date of Issue	Name of Bank	Valid up to	
	Demand				
	Draft				

ADDITIONAL PURCHASE/WORK ORDER: We understand that the Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar., in case of the requirements may also place repeat purchase order/work order. In such cases, we shall accept and execute all the purchase/work order placed on us by the Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar.

BID PRICING: We further declare that the prices stated in our proposal are in accordance with your Terms & Conditions in the bidding document. We further understand that the quantities as specified in this Tender may increase/decrease at the time of Award of Purchase Order as per the requirements of Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR.

QUALIFYING DATA: We confirm that we satisfy the qualifying criteria and have attached the requisite documents as documentary proofs. In case you require any further information/documentary proof in this regard during evaluation of our bid, we agree to furnish the same in time to your satisfaction.

CONTRACT PERFORMANCE SECURITY: We hereby declare that in case the contract is awarded to us, we shall submit the performance Guarantee Bond in the form of Bank Guarantee for the amount of 5% of the total order value.

PAYMENT TERMS: We hereby declare that in case the contract is awarded to us, we agree

with payment terms specified in the tender documents.

CERTIFICATE AND DECLARATION:

- (f) I/We certify that no addition/modification/alteration has been made in the Original Tender Document. If at any stage addition /modification /alteration is noticed in the Original Document. I/We will abide by the terms and conditions contained in the original tender document, failing which Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar reserves the right to reject the tender and/or cancel the contract.
- (g) It has been certified that all information provided in tender form is true and correct to the best of my knowledge and belief. We hereby declare that our proposal is made in good faith, without collusion or fraud. No forged /tampered document(s) are produced with tender form for gaining unlawful advantage. We understand that the Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar is authorized to make enquiry to establish the facts claimed and obtained confidential reports from clients.
- (h) In case it is established that any information provided by us is false / misleading or in the circumstances where it is found that we have made any wrong claims, the Department of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar is authorized to blacklist our firm/company/agency and debar us in participating in any tender/bid in future.
- (i) I / We assure the Institute that neither I /We, nor any of my/our workers, will do any act which is improper / illegal during the execution, in case the tender is awarded to us.
- (j) I / We assure the Institute that I / We will NOT be outsourcing any work specified in the tender document, to any other firm.
- (k) Our Firm / Company / Agency has not been blacklisted or banned by any Govt. Department, PSU, University, Autonomous Institute or any other Govt. Organization.
- (1) I/We certify that, I have understood all the terms & conditions, as indicated in the tender document, and hereby accept all the same completely.
- (m) I/We, further certify that I/We, possess all the statutory/non-statutory registrations, permissions, approvals, etc., from the Competent Authority for providing the requisite services,
- (n) I/We hereby declare that this tender on acceptance communicated by you shall constitute a valid and binding contract.
- (o) I/We certify that the submitted quotation duly paginated and contains from page no. 1 to.....

Date, Signature and Seal of the Manufacturer/Bidder

Technical Specifications of Required Items DEVELOPMENT KITS, BOARDS and MODULES

S No	Item Name	Brief Description	Quantity		
5.140	DIC Boardo Dobuccoro	and programment; DIC Development boards. De	Quantity		
1	and Davias Drograms	and programmers. FIC Development boards, De	buggers,		
	and Device Programm	MPLAD DW2 Hair and Darias Duranteers			
4.00	PIC Universal Device	MPLAB PM3 Universal Device Programmer			
1.00	Programmer	DV007004 (USB Interface) along with	2		
	- 8	accessories as given in the description			
Detail	ed Description				
Univer	sal Device Programmer op	perable with a PC or as a stand-alone unit, and capable	to program		
Microc	chip's entire line of PIC de	vices as well as the latest dsPIC DSC devices. Standalon	e operation		
where	data can be loaded and sav	red from/to SD/MMC card should be supported. The q	uote should		
include	e Cable for ICSP on the PM	3 (PM3 ICSP CABLE), SD Card and PM3 ICSP RJ11	Adapter.		
		PICkit 3 In-Circuit Debugger (PG164130)			
1.01	PIC Debugger	(USB Interface) along with accessories as	3		
		given in the description			
Detail	ed Description				
In-Circ	cuit Debugger/Programme	r featuring: USB, Real-time execution, MPLAB IDE	compatible,		
Built-in	n over-voltage/short circui	t monitor, Firmware upgradeable from PC/web downl	load, totally		
enclose	ed, supports low voltage to	2.0 volts (2.0v to 6.0v range), Diagnostic LEDs (power, 1	ousy, error),		
Read/	write program and data m	emory of microcontroller, Erase of program memory	space with		
verifica	ation, Freeze-peripherals	at breakpoint. It should also be able to reprogram	n any PIC		
microc	controller with a simple push	n of a button. The quote should include RJ-11 to ICSP Ad	lapter.		
		MPLAB ICD 3 In-Circuit Debugger			
1.02	ICD 3 In-Circuit	DV164035 along with accessories as given	2		
	Debugger	in the description			
Detailed Description					
In-Circ	cuit Debugger/Programme	er supporting the following feature set: Real-time	Debugging,		
Ruggeo	dized Probe Interface, Micro	ochip Standard Connectivity, High Speed Programming, L	low Voltage		
Emula	tion, Test Interface Modul	e, Ease of Maintenance and Feature Upgrade and debu	ugging with		
MPLA	B IDE, supporting multip	le breakpoints, stopwatch, source code file debugging in	n MPLAB's		
editor	for quick program modifica	tion/debug. The quote should include RJ-11 to ICSP Ad	apter.		
1.03	PIC Development Kit	Explorer 8 Development Kit (DM160228)	4		
Detail	ed Description				
A full-	featured development boar	rd and platform for 8-bit PIC® microcontrollers. The	kit must be		
versati	le development solution	featuring several options for external sensors.	off-board		
comm	unication and human inter	face. Additionally, it should offer ample room for expansion	ansion. The		
feature	es supported must include	: Support for all 8-bit PIC microcontrollers from 8	to 80 pins.		
Progra	mming headers and power	connections for all MCU sockets. Multiple power suppli	es. External		
connections for industry-standard communications and expansion interfaces RS232 and Bluetooth					
Low Energy interfaces, Push button switches for device reset and user-defined inputs.					
	PIC Development	PICDEM Lab II Development Platform	4		
1.04	Platform	(DM163046)			
Detailed Description					
The Lab II Development Board supporting development and teaching platform for use with 8-bit PIC					
microcontrollers (MCUs). It must contain a prototyping breadboard enabling users to easily experiment					
with different values and configurations of analog components for system optimization. It must have					
the fol	the following features: Support for all 8-bit PIC MCUs from 6 to 40 pins. Programming headers and				
power connections for all MCU sockets. Three individual power supplies and a breadboard area for					

extern	nal analog and sensor connec	ctions		
2	Development Boards, Arduino, Raspberry Pi Development Boards and			
Z	Modules and Devices	communication modules and support Devices	3	
		Arduino UNO Rev3 Boards with ATmega		
2.00	Arduino UNO Boards	328 Controller, preprogrammed with	10	
		bootloader		
Detai	iled Description			
Ardui	no UNO Rev3 Boards wit	h ATmega 328 Controller, preprogrammed with a boot	oader. The	
minin	num required specifications	of the board are: Microcontroller: ATmega328; Operation	ng Voltage:	
5V; Ir	nput Voltage: 7-12V; Input V	Voltage (limits): 6-20V; Digital I/O Pin: 14 (of which 6 pro	ovide PWM	
outpu	it); Analog Input Pins: 6; D	C Current per I/O Pin: 40 mA; DC Current for 3.3V F	Pin: 50 mA;	
Flash	Memory: 32 KB (ATmega3	28) of which 0.5 KB used by bootloader; SRAM: 2 KB (A	Imega328);	
EEPr	(OM:1 KB (A1mega528) an	a Clock Speed: 10 MHZ.		
2.01	Arduino TIAN Boards	SAMD21 MCU	10	
Detai	iled Description			
Ardui	no Tian board containing	Atmel's SAMD21 MCU, a 32-bit ARM Cortex® M0+	core and a	
Quale	comm Atheros AR9342. The	board must have the following specifications:		
Ardui	no Microprocessor: Process	or Atheros AR9342; Architecture MIPS; Operating Volt	tage: 3.3V;	
Flash	Memory: 16MB + 4GB eM	MC; Ram: 64MB DDR2; Clock Speed: 560 MHz; WiFi: 80	2.11 b/g/n	
2.4 G	Hz dual-band; Ethernet: 802	2.3 10/100/1000 Mbit/s; USB: 2.0 Host.	· ·	
Ardui	no Microcontroller: Microco	ontroller: SAMD21G18; Architecture: AKM Cortex-M0+;	Operating	
Volta	ge: 3.3V; Flash Memory: 250 $at a a 1/\Omega$ Diag $7m \lambda (1/\Omega)$	KB; SRAM: 32 KB; Clock Speed: 48 MHZ; Analog: 1/O I	Pins: 6; DC	
Curre	ht per 1/0 Pins: /IIIA (1/0	Mills).		
2.02	Arduino IoT Bundle	MKR1000	3	
Detai	iled Description			
The b	oundle should contain, 1Arc	luino MKR1000 board, with header soldered, 1 micro U	SB cable, 1	
400-p	oint breadboard, 70 solid-	core jumper wires, 1 9V battery snap, 1 stranded jump	per wire, 6	
photo	otransistors, 3 potentiometer	s (10 kilo-ohm), 10 pushbuttons, 1 temperature sensor (TN	4P36), 1 tilt	
senso	r, 1 alphanumeric LCD (16	x 2 characters), 1 bright white, 34 LEDs (1 bright white	, 1 RGB, 8	
red, t	3 green, 8 yellow, 3 blue),	I small DC motor $(6/9V)$, I small servo motor, I pic	zo capsule	
(PKN	11/EPP-4001-B0, 1 H-bri	dge motor driver (L293D), 1 optocouplers (4NE5), 2 $(400-E)$ 5 dia day (1014007) 2 transmission als (B C P	MOSFEI	
transis	(40×1) 20 resistors (220 c	(1000 G), 5 diodes (1114007), 5 transparent gets (R,G,D,	1 male pm	
kilo-o	(40×1) , 20 resistors (10 kilo-ob	(1) mm), 5 resistors (1 mega-ohm), 5 resistors (10 mega-ohm)	-5151015 (4.7	
KIIO O		Raspherry PL 3 Single-board computer		
2.03	Raspberry Pi	with wireless LAN and Bluetooth	10	
	Development Board	connectivity		
Detai	iled Description			
The I	Raspberry Pi third-generation	n development Board. The minimum required specificat	ions of the	
board	are: Quad Core 1.2GHz Br	oadcom BCM2837 64bit CPU, 1GB RAM, BCM43438 wi	reless LAN	
and Bluetooth Low Energy (BLE) on board, 40-pin extended GPIO, 4 USB 2 ports, 4 Pole stereo				
outpu	it and composite video por	t, Full size HDMI, CSI camera port for connecting a R	aspberry Pi	
camer	ra, DSI display port for conr	necting a Raspberry Pi touchscreen display, Micro SD port	for loading	
opera	ting system.			
3	Raspberry Pi Accesso	ries		
3.00	Raspberry Pi case	High quality construction with removable side panels	4	
Detai	iled Description			
D 1	D' O 1 111	CII'I 1' ADO' D 11 '1 1	1 1' 1 C	

Raspberry Pi Case should be of High-quality ABS construction; Removable side panels and lid for easy access to GPIO, camera and display connectors; Light pipes for power and activity LEDs.

3 01	Power Supply	Power Supply should have over current	8	
5.01	Tower Suppry	and over voltage protection.	0	
Detail	ed Description			
Powe	er Supply for Raspberr	y Pi Development Board and its accessories, it	t must have	
1.5m	lead; Interchangeable heads	for different countries; Short circuit, over current and c	over voltage	
prote	ection; 50,000 hours MTBF			
3.02	Pi Camera Module	Pi Camera Module v2	4	
Detail	ed Description			
Pi Ca	amera Module v2 for Rasp	oberry Pi; it must be accessible through the MMAL, V4I	and other	
APIs.	1			
3.03	Infrared Camera Module	Infrared Camera Module v2		
Detail	ed Description			
Infrar	ed Camera Module v2 (P	i NoIR) for Raspberry Pi, it must be accessible through t	the MMAL,	
V4L a	and other APIs.			
3.04	Sense Hat	It should include sensors for Gryoscope, Accelerometer, Magnetometer, Temperature etc.	4	
Detail	ed Description			
Add-o	on board for Raspberry Pi	with 8×8 RGB LED matrix, a five-button joystick and i	ncludes the	
senso	rs for Gyroscope, Acce	lerometer, Magnetometer, Temperature, Barometric pr	essure and	
Humi	dity.			
3.05	Touchscreen	It should be of high quality and able to	4	
Detail	Monitor	connect via adapter board.		
Detail	ed Description	P : :		
adapt	nscreen Monitor for Ras	spherry P1, it must be of 800 x 480 display conn	iects via an	
4	Communication Modu	ules and Support Devices		
4 00	Zia Roa Madula	It must provide a high speed Interface and optimized	Б	
4.00	Zigbee Module	Integration with microcontrollers.	5	
Detailed Description				
ZigBee Module, it must be able to support devices compatible with Raspberry Pi3 and Arduino				
Versie	on 3 Boards.			
4.01	Wi-Fi Module	It should have a powerful enough on-board processing	5	
D . "		and storage capability.		
Detailed Description				
W1-F1	Module, it must be abl	e to support devices compatible with Raspberry Pi3 and	nd Ardumo	
Versie	on 3 Boards.	T 1 1 1 1 1 1		
4.02	Bluetooth Modules	battery life.	5	
Detail	ed Description			
Blueto	both Module, it must be	able to support devices compatible with Raspberry Pi3 as	nd Arduino	
Versie	on 3 Boards.	1	ſ	
4.03	RF Modules (SIVY	RF Transmitter-Receiver Module SIVY (Green)	5	
	(green))			
Detail	ed Description			
RF M Board	odules, 1t must be able to su ls.	upport devices compatible with Raspberry P13 and Arduin	o Version 3	
		Starter Kits to create and test working progra	ms based	
5	ARM Starter Kits	on the LPC1700 & LPC 1800 family of ARM C	Cortex-M3	
		processor-based devices.		
5.00	ARM Starter Kits	Keil MCB1760 starter kit including	10	

	(LPC 1768)	ULINK-ME. MCB1760UME			
Detail	ed Description		I		
Detail MCU: Display USB F button Interfa quoted 5.01 Detail MCU: 2004/E	ed Description 100MHz ARM Cortex-M3 y: Color QVGA TFT LCD; Iost, 2 CAN interfaces, 2 S , Analog Voltage Control ce Connectors: 20-pin JTA rates must include ULINK ARM Starter Kit (LPC 1857) ed Description 180MHz ARM Cortex-M3 c (LPC 1850); On Chin, File	based processor; On-Chip Memory: 512KB Flash and 6 ; Ports: 10/100 Ethernet, USB 2.0 Full Speed - USB, USE Gerial Ports, SD/MMC Card Interface, 5-position Joysticl for ACD Input, Amplifier and Speaker; GPIO: Up to G, 10-pin Cortex debug, 20-pin Cortex debug and ETM -ME for interfacing the board with the PC on a USB port Keil MCB1857 Starter Kit including ULINK-ME. MCB1857UME processor-based in LBGA256; On-Chip SRAM: 136KB	4KB RAM; 3-OTG, and x and push- 70; Debug Trace. The 5 (LPC1857),		
200KB (LPC1850); On-Chip Flash: 1MB dual bank (LPC1857); On-Board Memory: 16MB NOR Flash, 4MB Quad-SPI Flash, 16 MB SDRAM, & 16KB EEPROM (I2C); Color QVGA TFT LCD with touchscreen; 10/100 Ethernet Port; High-speed USB 2.0 Host/Device/OTG interface (USB host + Micro USB Device/OTG connectors); Full-speed USB 2.0 Host/Device interface (USB host + micro USB Device connectors); CAN interfaces; Serial/UART Port; MicroSD Card Interface; 4 user push- buttons + reset; Digital Temperature Sensor (I2C); Analog Voltage Control for ACD Input; Audio CODEC with Line-In/Out and Microphone/headphone connector + Speaker Debug Interface Connectors: 20-pin JTAG, 10-pin Cortex debug; 20-pin Cortex debug + ETM Trace. The quoted rates					
5.02	TM4C123G	TM4C123G USB+CAN Development Kit	3		
Dotail	od Description	DK-1M4C1230			
Tiva TM4C123GH6PGE MCU with 256KB internal Flash and 144-LQFP with 105 GPIOs; 96×64 color OLED display providing useful output and interface options; USB Micro-AB for prototyping; USB OTG applications; microSD card slot for data storage; 5-mm screw terminals for external analog inputs and CAN signals; Precision 3.0-V reference for accurate analog-to-digital conversion; Temperature sensor; 9-axis motion sensor that includes a 3-axis accelerometer, 3-axis gyroscope, and 3-axis magnetometer for motion and position tracking; One user LED; CAN transceiver; 10-pin JTAG header to provide standard dobug interface					
5.03	mbed Starter Kit	mbed Starter Kit (mSK) based on LPC1768	5		
Detail The K Breadd Breako Type A Card w - NPN Resistor	ed Description it should be based on mbe boards; Serial Miniature L but; Triple Axis Accelerom A Female Breakout; USB I with SD Adapter; microSD U (2N3904); Jumper Wires; O prs.	d - LPC1768 (Cortex-M3) (with USB Cable) and include CD Module - 1.44" (with Hook-Up Cable); TRRS 3 neter Breakout - MMA8452Q; microSD Transflash Break Mini-B Breakout; RJ45 Ethernet MagJack Breakout; 4G USB Reader; Speaker - PCB Mount; TMP36 Temp Sensor CAT 6 Cable - 3ft; Tri-color LED; Big 12mm Buttons; 3	e: Solderless 3.5mm Jack akout; USB B MicroSD r; Transistor 30 and 10K		
6	DSP Kits	Digital Signal Processing Kit			
6.00	TMS320C6416 based DSP Starter Kit	TMS320C6416 based DSP Starter Kit (DSK)	6		
Detail	ed Description				
The D C6416 Compo Adviso TMS32	SP Starter Kit (DSK) mus 1 GHz DSP Developmer oser Studio [™] IDE includi or; USB Cable; Universal I 20C6416 DSK board mus	t be based on TI's TMS320C6416 DSP generation. It n at Board with 512K Flash and 16MB SDRAM; C6416 ng the Fast Simulators and access to Analysis Toolkit Power Supply; AC Power Cord(s). Other hardware feat t include: Embedded [TAG support via USB; High-qu	nust include DSK Code on Update ures of the iality 24-bit		

TMS320C6416 DSK board must include: Embedded JTAG support via USB; High-quality 24-bit stereo codec; Four 3.5mm audio jacks for microphone, line in, speaker and line out; 512K words of Flash and 16 MB SDRAM; Expansion port connector for plug-in modules; On-board standard IEEE JTAG interface.

6.01	TMS320C6455 based	TMS320C6455	based	DSP	Starter	Kit	4
	DSP Starter Kit (DSK)	(DSK)					-
Detai	led Description						
The D	DSP Starter Kit (DSK) mus	t be based on TMS32	20C6455 E	DSP gene	eration hav	ing Seri	ial RapidIO
(sRIO) bus interface for multipro	ocessor C6455 DSP d	evelopmer	nt systen	n with sRI() com	nunications
conne	ctivity to third party tools,	FGPAs, sRIO switc	hes and s	RIO equ	uipped emb	bedded	processors.
Other	hardware features of the	TMS320C6416 DSK	board mu	ıst inclu	de: Embed	ded XI	OS510-class
JTAG	support via USB; 128MB M	Memory and 8MB Fla	sh; EMIF	(32bit d	ata) & McH	BSP0 to	Connector
1; HP	I/PCI to Connector 2; Hig	sh-quality 24-bit stere	o codec; I	Expansic	on port cor	nnector	for plug-in
modu	les; On-board standard 14	-pin IEEE JTAG ir	nterface; ()n-board	d 60-pin h	igh dei	nsity JTAG
interfa	ace; +5V universal power s	supply. The Kit mus	t include	DSK's f	full featured	d Code	Composer
Studio	[™] IDE and eXpressDSP [™]	Software which inclu	ides DSP/	BIOS as	nd Referen	ce Fran	neworks.
_	Quad FPAA			ъ 1		• ,	

7	Quad FPAA Development Kit	Anadigm QUAD 3.3volt Development Kit	
7.00	FPAA Development Kit	Anadigm QUAD 3.3volt Development Kit	1
D	1 D		

Detailed Description

The Anadigm QUAD 3.3volt Development Kit should have the following features/functionalities: Standard USB serial interface for downloading AnadigmDesigner®2 circuit files; 32bit PIC32 with 80MHz clock, 512KB program memory, 32KB data memory, 16 x 10bit ADCs; 5 pin header for reprogramming of PIC32; Option for 16MHz or 40MHz analog master clock; 16 x 2 LCD display capable; Breadboard areas; Access points to all relevant pins of each FPAA; Input Rauch LP filters, easily configured with passive components; Output LP filter buffers, easily configured with passive components; DIP switches for easy connectivity between FPAAs, input Rauch filters, and output buffers; Ability to electrically isolate digital & analog sections; Ability to configure 1, 2, 3 or 4 FPAA chain; Ability to store configurations in FLASH; Ability to self-configure with test circuit and Reset button.

8	FPGA Boards and Kit	FPGA Boards and Kits	
8.00	Basys 3 Artix-7 FPGA	Basys 3 Artix-7 FPGA Trainer Board with Vivado Design Suite) (Academic Use)	8

Detailed Description

The trainer board must be based on Xilinx Artix-7 FPGA: XC7A35T-1CPG236C. The board must have/support following features: 33,280 logic cells in 5200 slices (each slice contains four 6-input LUTs and 8 flip-flops), 1,800 Kbits of fast block RAM, five clock management tiles, each with a phase-locked loop (PLL), 90 DSP slices, Internal clock speeds exceeding 450 MHz, On-chip analog-to-digital converter (XADC), Digilent USB-JTAG port for FPGA programming and communication, Serial Flash, USB-UART Bridge, 12-bit VGA output, USB HID Host for mice, keyboards and memory sticks, 16 user switches, 16 user LEDs, 5 user pushbuttons, 4-digit 7-segment display, 4 Pmod ports: 3 Standard 12-pin Pmod ports, 1 dual purpose XADC signal / standard Pmod port.

8.01	Nexys Video Artix-7 FPGA: Trainer Board	Nexys Video Artix-7 FPGA: Trainer Board for Multimedia Applications with Required Software (Academic Use)	2
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Detailed Description

The board must the based-on Xilinx Artix-7 FPGA (XC7A200T-1SBG484C). The features should include: 33,650 logic slices, each with four 6-input LUTs and 8 flip-flops, 13 Mbits of fast block RAM (3x more than the Nexys 4 DDR), 10 clock management tiles, each with phase-locked loop (PLL), 740 DSP slices, Internal clock speeds exceeding 450MHz, On-chip analog-to-digital converter (XADC), Up to 3.75Gbps GTP transceivers, Programmable over JTAG, Quad-SPI Flash, microSD, and USB flash drive, 512MB 800MHz DDR3, 32MB Quad-SPI flash, microSD card slot for nonvolatile storage, Dedicated onboard USB port for JTAG programming and data transfers, Powered from any 12V source (36W wall supply included), HDMI sink and HDMI source, Mini DisplayPort source, 240bit Audio codec w/ four 3.5mm jacks, 10/100/1000 Ethernet PHY with included unique MAC address,

User EEPROM, USB-UART bridge, Digilent parallel transfer interface (DTPI) for high-speed data transfers over USB, Digilent serial peripheral interface (DSPI) for medium-speed data transfers over USB, Onboard user interfaces: 128x32 monochrome OLED display, 5 user push buttons, 8 user switches, 8 user LEDs, USB HID host for mice and keyboards, Fully-populated 160-pin FMC LPC connector, Four Pmod ports, Pmod for XADC signals

ANNEXURE "C"

AFFIDAVIT REGARDING BLACKLISTING/ NON-BLACKLISTING FROM TAKING PART INGOVT.TENDER BY GOI/GOVT. DEPT

(To be executed on Rs.10/- Stamp paper & attested by Public Notary/Executive Magistrate by the bidder)

I / We Proprietor/ Partner(s)/ Director(s) of M/S.----- hereby declare that the firm/company namely M/S.----- has not been blacklisted or debarred in the past by Department Of Electronics and Instrumentation Technology, UNIVERSITY OF KASHMIR, Srinagar or any other Government organization from taking part in Government tenders.

Or

Signature..... Name..... Capacity in which assigned: Name & address of the firm: Date: Signature of Bidder with seal.

"Q" BID FORMAT

This Document is available online in as Excel File. The "Q" Bid has to be submitted Electronically in the format given on the Website (BOQ). Technical Quotes should in no case include Rates or hard copies of BOQ. Any bids accompanying BOQ in hard copy format shall be rejected.

Annexure "E"

Technical BID FORMAT

Sl. No	Documents
1.	Cover letter by bidder (On the Letter Head of the Bidder).
2.	Check List on the letter head of the institute.
3.	Tender Fee.
4.	Earnest Money Deposit (EMD), if required.
5.	Registration Certificate of the Bidder.
6.	Documents in proof of Minimum Average Annual Turnover as per tender Document
	(Balance Sheet/CA Certificate, etc.)
7.	Documents in proof of Similar work experience (Copy of Purchase Order, etc.)
8.	Affidavit to the effect that the bidder is not Black Listed by any State/Central Universities NIT/IIT/IIIT
9.	Documents in proof of Availability of Technical and Financial strength to undertake the
	work
10.	Latest Income Tax Return (Last Three Years)
11.	List of Organization/Customer Dealt.
12.	Compliance Sheet
13.	Other Documents (As Mentioned in the tender)

Annexure "D"

List of Organization/Customer Dealt

Provide at least THREE references with compatible network size and complexity to whom				
you have provided similar imple	mentation and/or integration services. Please use this format			
for your response.				
ITEM	RESPONSE			
REFERENCE1				
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone				
REFERENCE2				
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone				
REFERENCE3				
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone				

Annexure "G"

Compliance Sheet

S. No	Item Name	Brief Description	Brand/ Make	Is the item to be supplied as per the specifications as mentioned in BOQ.	Remarks, if any.
	PIC Boards, Del	puggers and programmers: PIC Develor	ment boards	s. Debuggers, and	d Device
1	,	Programmers		-,:	
1.00	PIC Universal Device Programmer	MPLAB PM3 Universal Device Programmer DV007004 (USB Interface) along with accessories as given in the description			
1.01	PIC Debugger	PICkit 3 In-Circuit Debugger (PG164130) (USB Interface) along with accessories as given in the description			
1.02	ICD 3 In-Circuit Debugger	MPLAB ICD 3 In-Circuit Debugger DV164035 along with accessories as given in the description			
1.03	PIC Development Kit	Explorer 8 Development Kit (DM160228)			
1.04	PIC Development Platform	PICDEM Lab II Development Platform (DM163046)			
2	Arduino, Raspbe	rry Pi Development Boards and commu	nication mo	dules and suppor	t Devices
2.00	Arduino UNO Boards	Arduino UNO Rev3 Boards with ATmega 328 Controller, preprogrammed with bootloader			
2.01	Arduino TIAN Boards	Arduino Tian board containing Atmel's SAMD21 MCU			
2.02	Arduino IoT Bundle	Arduino IoT Bundle based around the MKR1000			
2.03	Raspberry Pi Development Board	Raspberry PI 3 Single-board computer with wireless LAN and Bluetooth connectivity			
3	Raspberry Pi Accessories				
3.00	Raspberry Pi case	High quality construction with removable side panels			
3.01	Power Supply	Power Supply should have over current and over voltage protection.			
3.02	Pi Camera Module	Pi Camera Module v2			
3.03	Infrared Camera Module	Infrared Camera Module v2			
3.04	Sense Hat	It should include sensors for Gryoscope, Accelerometer, Magnetometer, Temperature etc.			

3.05	Touchscreen	It should be of high quality	
		and able to connect via	
	Momeor	adapter board.	
4		Communication Modules and Suj	pport Devices
		It must provide a high-speed Interface	
4.00	ZigBee Module	and optimized Integration with	
		microcontrollers.	
4.01	Wi-Fi Module	It should have a powerful enough on-	
7.01		board processing and storage capability.	
4.02	Bluetooth	It must support wide range and should	
	Modules	have a good battery life.	
4.03	RF Modules	RF Transmitter-Receiver Module SIVY	
	(SIVY (green))	(Green)	
5	Starter Kits to creat	e and test working programs based on the	he LPC1700 & LPC 1800 family of ARM
		Cortex-M3 processor-based	devices.
	ARM Starter Kits	Keil MCB1760 starter kit	
5.00	(LPC 1768)	including ULINK-ME.	
	(/	MCB1760UME	
	ARM Starter Kit	Keil MCB1857 Starter Kit	
5.01	(LPC 1857)	including ULINK-ME.	
	(1101057)	MCB1857UME	
	TM4C123G	TM4C123G USB+CAN	
5.02	Development Kit	Development Kit	
	Development int	DK-TM4C123G	
5.03	mbod Startor Kit	mbed Starter Kit (mSK) based	
5.05	mbed statter Kit	on LPC1768	
6	Digital Signal Processing Kit		
	TMS320C6416	TMS320C6416 based DSP	
6.00	based DSP	Starter Kit (DSK)	
	Starter Kit	Starter Mt (DSK)	
	TMS320C6455	TMS320C6455 based DSP	
6.01	based DSP Starter	Starter Kit (DSK)	
	Kit (DSK)	Starter Mt (DSK)	
7		Anadigm QUAD 3.3volt Deve	lopment Kit
7 00	FPAA	Anadigm QUAD 3.3volt	
7.00	Development Kit	Development Kit	
8	FPGA Boards and Kits		
	Basue 3 Artiv-7	Basys 3 Artix-7 FPGA Trainer	
8.00	EPCA	Board with Vivado Design	
		Suite) (Academic Use)	
	Norra Widon	Nexys Video Artix-7 FPGA:	
0.01	INEXYS VIDEO	Trainer Board for Multimedia	
8.01	AIUX-/ FFGA:	Applications with required	
	I rainer Board	Software (Academic use)	

Signature of Bidder with Seal