

राष्ट्रीय प्रौद्योगिकी संस्थान पुदुच्चेरी
कारैक्काल – 609 609.
NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY
Karaikal – 609 609.
Union Territory of Puducherry



Tender Document

For

**Supply of Keil ARM Microcontroller Development Kit (Software),
Universal JTAG debugger and CORTEX M3 Board with Interfaces
(Hardware)**

at

**National Institute of Technology Puducherry
Thiruvettakudy, Karaikal – 609 609
Union Territory of Puducherry
India.**

National Institute of Technology Puducherry @ Karaikal an autonomous Institute established under Ministry of Human Resource Development, Government of India would like to procure the following items.

Item	:	Keil ARM Microcontroller Development Kit (Software), Universal JTAG debugger and CORTEX M3 Board with Interfaces (Hardware) (Specification Enclosed)
Tender Enquiry No	:	NITPY/2016-17/ECE/Project Lab/004 dated : 21/03/2017
Due Date (For submission of bids)	:	03.00 P.M. 24.04.2017
Technical Bid Opening time	:	04.00 P.M. 24.04.2017
EMD	:	The tenderer will have to deposit the earnest money of Rs. 5,000/- (Rupees Five thousand only) through online State Bank Collect mode under the payment category of Administrative Miscellaneous https://www.onlinesbi.com/prelogin/icollecthome.htm . The EMD or Performance security will bear no interest whatsoever. The copy of the payment receipt should be enclosed along with the Technical bid of tender document.
Eligibility Criteria	:	The Contractors / Tenderers should have experience in supply of similar item with ONE similar work of Rs.15,00,000/- or above (or) TWO similar works each of Rs.10,00,000/- (or) above executed during the last 3 years with reputed educational institutions, organizations, etc., along with the copy of orders.
Submission of Offer	:	<u>Two Bid System:</u> Two bid system will be followed for this tender. In this system the bidder must submit his offer in two separate sealed envelopes . Both the technical bid and commercial bid envelopes should be securely sealed and stamped separately and clearly marked as "Envelope No : 1 – Technical Bid" and "Envelope No : 2 – Commercial Bid" respectively. EMD should be placed in the Envelope No : 1, Technical Bid.
Place of Submission	:	Please send the tenders in a sealed envelope superscribed as "Keil ARM Microcontroller Development Kit (Software), Universal JTAG debugger and CORTEX M3 Board with Interfaces (Hardware), Ten. Notification NO: NITPY/2016-17/ECE/Project Lab/004" so as to reach The Registrar (i/c) National Institute of Technology Puducherry Thiruvettakudy, Karaikal – 609 609 Union Territory of Puducherry India.

INSTRUCTIONS TO BIDDERS

1. This document set contains the following:
 - a) Terms and conditions of the Tender
 - b) Details of the Firm offering this Quote
 - c) Technical Compliance Form
 - d) Quotation form (Price Bid)
 - e) Currency Form (quoted on behalf of the foreign suppliers)
 - f) NIT Puducherry's check list copy
2. The bidder's copy is for your future records. **Please fill in and return only NIT Puducherry's copy.**
3. The bidder should give details of their technical soundness and provide list of customers of previous supply of similar items to Universities, Institutes or Government Departments / Undertakings/public sectors with contact details. The details of the agency / profile should be furnished along with the copy of all related documents.
4. Read through the terms and conditions given and affix your signature and seal if you find them acceptable. Any deviations may be recorded. Read carefully list of specifications that we have enclosed.
5. Fill in the questionnaire regarding the Firm.
6. The downloaded documents 'Technical Compliance Form' and 'Quotation Form (Price Bid)' should be TYPE WRITTEN USING CAPITAL LETTERS ONLY. At the time of filling the "Quotation Form (Price Bid)" make sure that you have not missed anything. Specify the model number & specification for each item. The form should be filled item-wise. Do not leave blank fields. If you are not quoting for a specific item, you should specify "NOT QUOTING".
7. Do not use ambiguous terms like "yes", "complied" or "available". Specifically mention the matching specification of the product offered by you. Make sure that all the documents should be duly signed by you with date and seal.

CHECKLIST TO BE FILLED IN BY BIDDER	
List of documents to be enclosed	Completed & Signed
1. Terms and Conditions form	YES / NO
2. Details of the Firm offering this Quote	YES / NO
3. NIT Puducherry's Quotation form (Technical & Price Bid)	YES / NO
4. Currency Form(quoted on behalf of the foreign suppliers)	YES / NO
5. Other technical specifications & pamphlets	YES / NO

- Note:** 1. "Cover" should contain the following:
- a. Form of "**Acceptance of Terms and Conditions**".
 - b. Form of "**Firm details**"
 - c. Pamphlets, if any (in a separate sealed cover)
 - d. Quotation Form (Technical, Price Bid and Currency Form)

Please retain this page with you for your future reference

Cover 1: EMD and Tender cost

(should be superscribed as 'EMD and tender cost cover' duly indicating the Tender reference No. and the due date of opening)

Earnest Money Deposit (EMD) and tender cost are to be submitted through online State Bank Collect mode under the payment category of Administrative Miscellaneous <https://www.onlinesbi.com/prelogin/icollecthome.htm>. The bids submitted without EMD or tender cost will be treated as non-responsive and will be rejected. **EMD shall bear no interest.**

Cover 2: Technical Bid

(should be superscribed as 'Technical Bid' duly indicating the Tender reference No. and the due date of opening)

Should contain:

- a. Technical pamphlets
- b. Detailed technical specification
- c. Copy of license certificate for manufacture/supply of the item*
- d. Income Tax PAN number & TIN number.*
- e. Last three years balance sheet approved by the CA and the IT clearance certificate.*
- f. Warranty period offered for the tendered item to be specified. If the warranty period is not conforming with the schedule of requirements given in section 3 of the Tender document, the bid is liable to be treated as non-responsive and will be rejected.
- g. Duly filled up technical questionnaire, if any
- h. Duly filled up deviation schedules to technical specifications, if any
- i. Copy of supply orders completed during the last three years

* Appropriately pertaining to the country of origin.

Cover 3: Price Bid

(should be superscribed as 'Price Bid' duly indicating the Tender reference No. and the due date of opening)

Should contain:

- a. Price bid as per the format in Section-4 of the tender document
- b. Break-up price as per the format in Annexure-A

Note:

- a. If the prices are revealed in cover 1 or in cover 2, the offer will be summarily rejected.
- b. Each Cover shall be sent in a double sealed cover. The inner covers (Cover 1, Cover 2 and Cover 3) should be sealed individually with the Sellers's distinctive seal and superscribed with the tender reference No. and due date of opening. All inner covers shall be placed in a common outer cover which shall also be sealed with seller's distinctive seal and superscribed with the tender reference No. and due date of opening.

SECTION : 2 – TERMS AND CONDITIONS FORM

1. The Bidders are requested to give detailed tender in their **own forms** in two bids.
Part-1 : **Technical Bid**
Part-2 : **Commercial Bid**
2. Tenders, which are submitted without following the two bid offer system will summarily be rejected.
3. The tender document can be downloaded from the National Institute of Technology Puducherry website www.nitpy.ac.in
4. **Envelope No-1 : Technical Bid**
The technical offer **should not contain any price information**. The technical offer should comprise of the following:
 - i) Earnest Money Deposit (EMD).
 - ii) The technical bid should be comprehensive and shall indicate all specification of the all products and services. Each page of the bid and cutting / corrections shall be duly signed and stamped by the bidder. Failure to comply with this requirement may result in the bid being rejected.
 - iii) If the bid is for branded makes, an authorization letter from principals clearly indicating that the vendor is competent and authorized to sell and provide services towards the items shall be enclosed.
 - iv) List of deliverables / bill of materials and services.
 - v) Bids should have a validity of **90 days**.
5. **Envelope No-2 : Commercial Bid**
This should contain only the price information along with commercial terms and conditions. The commercial bids of **only the shortlisted bidders** shall be considered for further processing.
6. **Technical Evaluation Committee**
 - i) A committee duly constituted by The Registrar (i/c), NIT Puducherry will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee shall be final and binding on all the parties.
 - ii) The technical committee will examine all the technical aspects of the bids received. Further, the technical committee may seek additional information from the existing users at NIT Puducherry or from other Institutes and also call for technical presentations from the bidders if required.
 - iii) The bidders are required to submit the sample for evaluation before the stipulated time.
 - iv) No cost will be paid by NIT Puducherry for sample.

7. **Opening of Commercial Bids**

- i) NIT Puducherry will open commercial bids of only the shortlisted bidders in the presence of the bidders or their authorized representatives who choose to attend the commercial bid opening. The date and time of opening the commercial bid will be intimated only to pre-qualified and technically acceptable bidders for the item at a later date. The representatives of shortlisted firms only will be allowed for commercial bid opening.
- ii) No sub-contracting is allowed with regard to installation, commissioning, training, warranty, maintenance and after sales service. This is the sole responsibility of the principals / their authorized agents.
- iii) The NIT Puducherry reserves the right to accept the offer in full or in parts or reject summarily or partly.

8. **Delivery Period / Timelines**

The deliveries and installation must be completed within 04 - 06 weeks from the date of purchase order. The time is the essence of the contract. It is mandatory for the bidders who respond to this bid to meet this expectation, as this is linked to student's admission and shifting the college to permanent campus.

9. **Locations for the supply / services**

The items covered by this document is required to be supplied and installed at

National Institute of Technology Puducherry
Thiruvettakudy, Karaikal – 609 609
Union Territory of Puducherry
India

10. NIT Puducherry will not provide any accommodation / transportation for the engineers / representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the principal supplier / agent to make their own arrangements.

11. **Purchasers right to vary quantities at the time of award**

NIT Puducherry reserves the right at the time of award of contract to increase or decrease the quantity of items specified in the schedule of requirements without any change in price or other terms and conditions.

12. **Price**

The price quoted shall be considered firm and no price escalation will be permitted. The quote should be for **Destination** at National Institute of Technology Puducherry, Thiruvettakudy, Karaikal – 609 609, Union Territory of Puducherry.

- i) The packing, forwarding, freight, insurance and commissioning charges, if any extra may be quoted separately in commercial bid.
- ii) The actual sales tax percentage (without form "C") if any, should be specified.

13. Performance Bank Guarantee

The vendor will have to furnish performance bank guarantee for 10% of the total purchase order value, to be valid for one year plus two months from the date of installation and acceptance.

14. Installation

- i) Bidder shall be responsible for installation / demonstration as applicable and for after sales service during the warranty and thereafter.
- ii) Installation and demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the equipment at site.

15. Warranty / Support

- i) The items supplied shall carry a minimum of **ONE year of comprehensive warranty** from the date of acceptance of the equipment.
- ii) The defects, if any, during the guarantee / warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes if any and should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.

16. Indemnity

The vendor shall indemnify, protect and save NIT Puducherry against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc., or such other statutory infringements in respect of all the items supplied by him.

17. Freight and Insurance

The items to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at NIT Puducherry permanent campus.

18. Payment

90% payment shall be made at site against delivery, installation, commissioning and acceptance as per purchase order and balance 10% shall be made after receipt of performance bank guarantee. If no bank guarantee is given, the balance 10% will be paid after the warranty period plus two months.

19. Penalty for delayed services / LD

- i) As time is the essence of the contract, delivery period mentioned in the purchase order should be strictly adhered to. Otherwise the NIT Puducherry will forfeit EMD and also LD clause will be applied / enforced.
- ii) If the supplier fails to supply, and fix the item as per specifications mentioned in the order within the due date, the supplier is liable to pay liquidated damages of 1% of order value for delay of every week or part here of subject to a maximum

of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

- iii) NIT Puducherry reserves the right to cancel the order in case the delay is more than 10 weeks. Penalty as at (ii) above will be deducted from the security deposit.

20. Jurisdiction

The disputes, legal matters, court matters, if any, shall be subject to Karaikal Court Jurisdiction only.

21. Force Majeure

NIT Puducherry may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the contract, is the result of a force majeure.

22. Arbitration

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (NIT Puducherry or the bidder) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute and will be referred to the arbitrator to be nominated by The Registrar (i/c), NIT Puducherry, Karaikal. The Venue for arbitration shall be Karaikal, Union Territory of Puducherry, India.

23. Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity / dispute in the interpretation of any of the clause in this tender document, interpretation of The Registrar (i/c), NIT Puducherry, Karaikal shall be final and binding on all parties.

24. Purchase Order may be issued to the supplier based on the lowest price of the each item.

**-Sd-
Registrar (i/c)
NIT Puducherry**

“DETAILS OF THE FIRM OFFERING THIS QUOTE”
(Write or print or type in block letters)

1. Name of the firm: _____
2. Date of incorporation: _____
2. Nature of the company (tick one): Government / Public / Private Company / Partnership / Proprietorship
3. Specify the number of years in this line of activity by the Company: _____
4. Quantity of sales in the last three years for the “.....” (same model that you have quoted):

2013-2014	2014-2015	2015-2016

5. Turnover in the last three years (Lakh Indian Rupees):

2013-2014	2014-2015	2015-2016

6. Provide the postal address, telephone & fax numbers, and email address of the nearest service center.
7. Number of service engineers in the above location trained on the product quoted along with their educational qualification, certification and designation (applicable only for instruments):
8. Assured response time for service calls in hours: _____
9. Delivery period from the date an official purchase order placed (in weeks): _____
10. Enclose the list of customers to whom you have supplied “.....” during the last 3 years ending 31/12/2015 with full postal address and name of the contact person with phone, FAX numbers, and E-Mail id. Certificate regarding satisfactory performance of the “.....” from the minimum three end users should be furnished.
11. Enclose the certificate regarding the authorized dealer or distributor for the products quoted.
12. On Manufacturer’s Side to whom NIT Puducherry have to contact in case of delayed in supply and other issues committed by the authorized dealer / distributor / reseller :

Contact Person Name :

Address :

E-mail ID :

Telephone / Cell Phone :

DECLARATION

I/we have not tampered/modified the tender forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our tender will be summarily rejected and full Earnest Money Deposit (EMD) will be forfeited and I/we am/are liable to be banned from doing business with NIT Puducherry and /or prosecuted.

Signature of the Bidder:

Name and Designation:

Business Address:

.....

.....

Place :

Date : Seal of the Bidder's Firm

SECTION 3 – SPECIFICATION

ITEMS REQUIRED

Item. No	Name of the Equipment	Specifications	Required
1	Keil ARM Microcontroller Development Kit (Software)	(A) Microcontroller based on ARM Cortex –M (B) ARM Cortex-R4 based processors (C) Legacy ARM7 and ARM9 Devices (D) ARM SecurCore based devices (E) Compiler Support for Cortex-M, ARM7, ARM8, ARM9 (F) Including middleware, <ul style="list-style-type: none"> • IPv4 Networking • USB Device • File System • Graphics (G) Documentation CD, Manual and Learning material CD if any	10-user Classroom License
2	Universal JTAG debugger	(A) J-Link: USB driven JTAG interface for support ARM7, 9 & Cortex M family (B) Direct download into flash memory option (C) All major IDEs support (D) Cross platform support (E) Download speed: up to 1M Byte/sec (F) Software developer kit (SDK) (G) JTAG, SWD target interfaces (H) SWV/SWO support (I) Support to concurrent access to CPU by multiple applications (J) Target voltage range: 1.2V to 3.3V (5V tolerance) (K) Production flash programming software (J-Flash) (L) Embedded trace buffer (ETB) support (M) Monitoring JTAG signals and measuring target voltage facility (N) Target power supply: up to 300mA to target with overload protection (O) USB cable and 20-pin ribbon cable (P) Integrated licenses for unlimited	01 No.

		breakpoints in flash memory, RDI/RDDI and J-Flash (Q)01 year free software updates and support	
3	CORTEX M3 Board with Interfaces (Hardware)	<p>(A) Single Board Computer/Evaluation Board for NXP LPC1760 series</p> <ol style="list-style-type: none"> (1) 100MHz ARM Cortex-M3 processor- LPC 1768 based MCU in 100-pin LQFP (2) On-Chip Memory: 512KB Flash and 64KB RAM (3) Color QVGA TFT LCD (4) 10/100 Ethernet Port (5) USB 2.0 Full Speed - USB, USB- (6) Control for ADC Input OTG, and USB Host (7) 2 CAN interfaces, 2 Serial Ports, SD/MMC Card Interface, 5-position Joystick and push-button (8) Analog Voltage (9) Amplifier and Speaker (10) Debug Interface Connectors: 20-pin JTAG (0.1 inch connector), 10-pin Cortex debug (0.05 inch connector) (11) Provision to work with Interfaces for academic / development <p>(B) Interfaces;</p> <ol style="list-style-type: none"> 1. Elevator Interface: Elevator representation by a column of ten LEDs. Key (request) and LED indicator (status) for each floor assumed. 2. Dual DAC Interface: Two 8-bit D/A converters which can provide current/ voltage output 3. 4X4 Matrix Hex Keypad Interface: 16 keys from (0 to F) 4. DC Motor Interface: +12V, 250mA DC motor, Speed control using pulse width modulation technique with 100 Hz pulse frequency 5. 16 Channel 8-bit ADC Interface: 16 channel 8 bit data acquisition device based on ADC 0816. Provision for on-board reference voltage generation using precision voltage 	Each 01 No. of quantity

		<p>regulator LM 723. Input signal voltage range; 0-5V</p> <ol style="list-style-type: none"> 6. Calculator type keyboard Interface: keys 0 to 9, +, -, x, /, =, %, AC, CE, etc. arrangement in 2 groups of 3x4 matrix 7. Keyboard/Display Interface: Calculator style keyboard with seven segment display. 20 Keys arrangement in a 4x5 matrix (0 to 9, ., =, +, -, x, /, %, AC, CE, CHK) and six 7-segment displays 8. LCD (16X2) Interface: 16x2 (sixteen character per line and two lines) alphanumeric LCD module which can be directly coupled to the programmable peripheral interface 8255 on any of the trainers 9. Real Time Clock Interface: Based on MSM5832 real-time clock/calendar (RTC) chip which can be interfaced to the programmable peripheral interface 8255A. Battery backup for RTC. 10. Stepper Motor Interface with Stepper Motor & Power Adapter: Interface should permit ON/OFF control of the individual coils of the stepper motor at varying speeds in either direction. +12V to +5V DC, 3 Kg.cm torque stepper motor. Power Supply and required driver circuitry along with the necessary software to control the operation of the stepper motor. 11. Traffic Lights Interface: Interface with four directions (North, South, East, and West) LED indicators (Left, Right, Straight, Amber, Red and Pedestrian Red/Green). Provision to control 24 LEDs through 24 port lines of 8255 12. Zigbee Interface: Interface with Tarang ZigBee Transceiver module (User can select and program in any network topology) 	
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		<p>13. Power Supply, +5V @3A; +/- 12V @ 250mA, +30V @ 100mA</p> <p>(C) Sample programs for all interfaces, software CD and documentation, Manual and Learning material CD if any</p>	
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SECTION : 4 - PRICE SCHEDULE

To be used by the bidder for submission of the price bid

1. Component Name:
2. Specifications (confirming to Section 3 of Tender document-enclose additional sheets if necessary):
3. Currency and Unit cost (excluding Taxes):
4. Quantity:
5. Item cost (Sl.No.3 * Sl.No.4) (in Indian Rupee):
6. Taxes and other charges:
 - (i) Specify the type of taxes and duties in percentages and also in figures
 - (ii) Specify other charges in figures
7. Total cost (Inclusive of all taxes) :
8. Warranty period (confirming to the Section 3 of Tender document. This should be mentioned in Technical bid also in order to get qualified for price bid):
9. Delivery Schedule (confirming to the Section 3 of Tender document):
10. Name and address of the firm for placing purchase order:

11. Name and address of Indian authorized agent (in case of imports only):

Signature of the Bidder :

Name and Designation :

Business Address :

Place :

Date :

Seal of the Bidder's Firm

(Note: All column should be filled. No column should be left blank. If any column is not filled-in properly or left empty then the bid will be rejected.)

SECTION : 5 - CONTRACT FORM

To be provided by the bidder in their business letter head

[Name of the Supplier's Firm] hereby abide to deliver theby the delivery schedule mentioned in the Section 3 of the Tender document for supply of the items if the purchase order is awarded.

The item will be supplied conforming to the specifications stated in the tender document without any defect and deviations.

Warranty will be given for the period mentioned in the tender document and service will be rendered to the satisfaction of NIT Puducherry during this period.

Signature of the Bidder :

Name and Designation :

Business Address :

Place :

Date :

Seal of the Bidder's Firm

NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY

Annexure-A

MODEL PRICE BID FORMAT FOR INDIAN BIDDERS

Tender No. & Date:

Bidder's Offer No. & Date:

S. No. (1)	Description of item (2)	Unit (SET /No) (3)	QTY (4)	Rate /Qty in Rs. (excluding of all taxes) (5)	ED in % (6)	VAT/CST In % (7)	Service Tax in % (8)	Total Value in Rs. (inclusive of all taxes) (9)
1	Supply portion (The price indicated shall be exclusive of all accessories, spares etc. as given in the scope of supply)							
2	Other accessories /spares etc as given in scope of supply (Individual item-wise break-up price shall be attached as an annexure to this price bid format.)							
3	Installation & Commissioning (extra, if any)							
4	Packing & Forwarding charges (extra, if any)							
5	FOR Dispatching station value in Rs.							
6	Freight & Transit insurance charges, extra, if any							
7	Total all inclusive price delivered, installed and commissioned at NIT Puducherry							
9	Net cost to be paid by NIT Puducherry							

Signature & Seal of Vendor

Note: The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "Not Applicable". If this format is not used or any column is left blank, then the bid will be rejected.