INVITATION FOR QUOTATION

TEQIP-III/2018/iiit/Direct Contract/67/*5040* **27th -Nov-2018**

To,

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Sub: Invitation for Quotations for supply of Equipment & Accessories.

Dear Sir,

1. You are invited to submit your most competitive quotation for the following equipment & Accessories [Proprietary item(s) of M/s Digilent Inc] with item wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period (In days)	Place of Delivery	Installation Requirement (if any)
1	Basys 3 Artix FPGA Trainer Board : Device/IC: Xilinx Artix FPGA (XC7A35T-1CPG236C)	15 Nos	45 Days	Indian Institute of Information Technology Guwahati, Bongora, Pin: 781015	Yes
2	USB A to Micro B Cable	15 Nos			
3	Basys 3 Pmod Pack:- i. Pmod ALS: Ambient light sensor-15 nos ii. Pmod AMP2: Audio amplifier-15 nos iii. Pmod KYPP, 16 button keypad-15 Nos iv. Pmod OLED:128x32 pixel monochromic OLED display-15 os v. Pmod R2R : Registor ladder D/A converter-15 Nos	1 Set			
4	2x6-pin to Dual 6-pin Pmod Splitter Cable	15 Nos			
5	Pmod ACL2:3-Axis MEMS Accelerometer	03 Nos			
6	Pmod BT2: Bluetooth Interface	03 Nos			
7	Pmod MAXSONAR: Maxbotix Ultrasonic Range	03 Nos			
8	Pmod GPS: GPS Receiver	03 Nos			
9	Pmod WiFi: WiFi Interface 802.11g	03 Nos			

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III**

Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. Quotation,
   3.1 The contract shall be for the full quantity as described above.
   3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
   3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
   3.4 Applicable taxes shall be quoted separately for all equipment.
   3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
   3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. Evaluation of Quotations,
   The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
   6.1 are properly signed ; and
   6.2 confirm to the terms and conditions, and specifications.
   6.3 You are also requested to submit the following documents:-
      a. <u>In case of OEM (Original Equipment Manufacturer) as the bidder</u>: -
         - Proof of Registration under relevant law, such as Companies Act, and / or Shops & Establishment Act or Trade License from appropriate authority etc.
         - **Proprietary Certificate in the company's letter head**.
         - Copy of PAN, GSTIN.
         - Details of the after sales service facilities available at India (nearest to IIITG).

      b. <u>In case of dealers/distributors of the OEM as bidder(s):-</u>
         In addition to above documents (at 6.3.a) :-
         - Dealership/authorization certificate from the OEM (Original Equipment Manufacturer).
         - Details of the similar equipment ordered by Government/ Autonomous Institute(s) during last three years as per **Annexure-II**.
         - Copies of the Purchase order(s) of similar equipment from Government/ Autonomous Institute(s) during last three years.
7. The Quotations would be evaluated for all items (Equipment & Accessories) together.
8. Award of contract:
   The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
   8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
   8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:
   On Completion - 100% of total cost
10. All supplied items are under warranty of **12** months from the date of successful acceptance of items (Equipment & Accessories).
11. You are requested to provide your offer latest by **16:00** hours on **10-Dec-2018 .**
12. Detailed specifications of the Equipment & Accessories are at Annexure I.
13. Training Clause (if any) **Yes**
14. Testing/Installation Clause (if any) **Yes**
15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
16. Sealed quotation to be submitted/ delivered at the address mentioned below,

    The Director
    Indian Institute of Information Technology Guwahati
    Bongora, Guwahati, Pin-781015
17. We look forward to receiving your quotation and thank you for your interest in this project.

Sd/-
(Authorized Signatory)
Name & Designation
Gautam Barua
Director,
Indian Institute of Information Technology Guwahati

Annexure-I

Sr. No	Item Name	Specifications
1.	**Basys 3 Artix-7 FPGA Trainer Board: Device/IC: Xilinx Artix-7 FPGA (XC7A35T-1CPG236C)** *Make: Digilent Inc*	**Stats:** Device/IC: Xilinx Artix-7 FPGA (XC7A35T-1CPG236C) Connector(s): • USB A • USB micro-B • Four 12-pin Pmod ports • VGA Programming: Designed exclusively for the Vivado Design Suite **Features:** • Features the Xilinx Artix-7 FPGA: XC7A35T-1CPG236C • 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 • Micro-B USB cable not included. • 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.
2.	**USB A to Micro-B Cable** *Make: Digilent Inc*	Standard USB A to micro-B cable compatible with Digilent FPGA boards.

3.	**Basys 3 pmod pack :-** **(***Make: Digilent Inc)* **The pack includes:-** **i. Pmod ALS: Ambient light sensor**	The Digilent Pmod ALS demonstrates light-to-digital sensing through a single ambient light sensor. Digilent Engineers designed this Pmod around Texas Instrument's ADC081S021 analog-to-digital converter and Vishay Semiconductor's TEMT6000X01. **Note:** The Pmod ALS is also featured in a fantastic product bundle, the Zybo Pmod Pack! This bundle was designed to expand project possibilities by utilizing a variety of peripheral modules perfectly suited for the Zybo Zynq-7000 FPGA. **Features:** • Simple ambient light sensor • Convert light to digital data with 8-bit resolution • Small PCB size for flexible designs 0.8 in × 0.8 in (2.0 cm × 2.0 cm) • 6-pin Pmod connector with SPI interface • Follows Digilent Pmod Interface Specification Type 2
	ii. Pmod AMP2: Audio Amplifier	The Pmod AMP2 is a low power audio amplifier through the use of the Analog Devices SSM2377. With digital gain options and a pop-and-click feature, users are able to drive a variety of monophonic outputs by providing a digital or analog signal. **Features:** • Filterless, high efficiency audio amplifier • Monophonic audio output • Standard 1/8“ (0.32 cm) mono speaker jack • Micropower shutdown mode • Pop–and-click suppression • Digital gain select • Small PCB size for flexible designa 1.25” × 0.8“ (3.2 cm × 2.0 cm) • 6-pin Pmod connector with GPIO interface • Follows Digilent Pmod Interface Specification Type 1

	iii. **Pmod KYPD: 16-button Keypad**	The Pmod KYPD is a 16-button keypad arranged in a hexidecimal format (0-F). By digitally driving a column line to a logic low level and digitally reading each of the rows, users can determine which button is currently pressed. **Features:** • 16 momentary push-buttons • Can detect simultaneous button presses • Isolated rows and columns • Small PCB size for flexible designs 3.4“ × 2.7” (8.6 cm × 6.9 cm) • 12-pin Pmod connector with GPIO interface • Follows Digilent Pmod Interface Specification Type 1 • Library and example code available in resource center
	iv. **Pmod OLED: 128 x 32 Pixel Monochromatic OLED Display**	The Pmod OLED is 128x32 pixel monochrome organic LED (OLED) panel powered by the Solomon Systech SSD1306. Users can display any sort of graphical design by programming the device through SPI as well as sending bitmap images. This module uses the UG-2832HSWEG04 display from Univision Technology Inc. The Pmod OLED is also featured in a fantastic product bundle, the Zybo Pmod Pack! This bundle was designed to expand project possibilities by utilizing a variety of peripheral modules perfectly suited for the Zybo Zynq-7000 FPGA. **Features:** • 128×32 pixel graphic OLED display • Clock speeds of up to 10 MHz • Internal display buffer • 16 different brightness settings • Small PCB size for flexible designs • 12-pin Pmod connector with SPI interface
	V. **Pmod R2R: Resistor Ladder D/A Converter**	The Pmod R2R is resistor ladder with a R-2R resistor configuration. Users can provide 8-bits of parallel data to the module through GPIO signals. This setup teaches users the basic principles behind a Digital-to-Analog Converter.

		Features: • 8-bit digital-to-analog conversion • Convert data at up to 25MHz • Easy attachment of oscilloscopes to illustrate the data conversion process • Small PCB size for flexible designs 1.0“ × 0.8” (2.54 cm × 2.0 cm) • 2×6-pin Pmod connector with GPIO interface • Follows Digilent Interface Specification Type 1
4.	**2x6-pin to Dual 6-pin Pmod Splitter Cable** *Make: Digilent Inc*	• Designed for use with Digilent Peripheral Modules that have 2x6 pin connectors • Designed to connect two 6-pin system board connectors to a 12-pin Pmod connector, or to connect a 12-pin system board connector to two 6-pin Pmod connectors • Uses standard 100mil-spaced 25mil square connectors • 6" (15cm) in length
5.	**Pmod ACL2: 3-axis MEMS Accelerometer** ***Make: Digilent Inc***	The Pmod ACL2 is a 3-axis MEMS accelerometer powered by the Analog Devices ADXL362. By communicating with the chip via the SPI protocol, users may receive up to 12 bits of resolution for each axis of acceleration. Additionally, this module offers freefall detection as well as power saving features through its motion activated sleep and wake modes. **Features:** • 3-axis MEMS accelerometer • Up to 12 bits of resolution per axis • User-selectable resolution • Activity/inactivity monitoring • Low current consumption at <2 µA at 100Hz • Free-fall detection • Small PCB size for flexible designs 1.0 in × 0.8 in (2.5 cm × 2.0 cm) • Follows Digilent Pmod Interface Specification Type 2A

		• Library and example code available in resource center
6.	**Pmod BT2: Bluetooth Interface** ***Make: Digilent Inc***	The Pmod BT2 is a powerful peripheral module employing the Roving Networks® RN-42 to create a fully integrated Bluetooth interface. Users can communicate with the chip via UART and can also use the secondary SPI header on the board for updating the RN-42 firmware if needed. **Note:** The Pmod BT2 is also featured in a fantastic product bundle, the Zybo Pmod Pack! This bundle was designed to expand project possibilities by utilizing a variety of peripheral modules perfectly suited for the Zybo Zynq-7000 FPGA. **Features:** • Bluetooth 2.1/2.0/1.2/1.0 compatible • Add wireless capability with this low power, Class 2 Bluetooth radio • Supports HID profile for making accessories such as pointing devices, etc. • Secure communications, 128-bit encryption • Six different modes • Small PCB size for flexible designs 1.5“ × 0.8” (3.8 cm × 2.0 cm) • 12-pin Pmod connector with UART interface
7.	**Pmod MAXSONAR: Maxbotix Ultrasonic Range Finder** ***Make: Digilent Inc***	The Pmod MAXSONAR is a single-transducer ultrasonic range finder that uses the MaxBotix® LV-MaxSonar®-EZ1™. Users can measure how far away an object is with an accuracy within 1 inch to over 20 feet away. Information is sent in a variety of ways including UART, PWM, and analog signals. **Features:** • Ultrasonic range finder with effective detection range of 6 in - 255 in (15 cm - 648 cm) • Detect object distance with 1.0 in (2.54 cm) resolution up to 20 ft away • Continuous measurement (free run) operation • Three options for sending range data: UART, analog and PWM • Small PCB size for flexible designs 0.9 in × 0.8 in (2.3 cm × 2.0 cm) • 6-pin Pmod connector with UART interface

		• Library and example code available in resource center
8.	**Pmod GPS: GPS Receiver** ***Make: Digilent Inc***	The Pmod GPS can provide satellite positioning accuracy to any embedded system. By communicating through UART with the GlobalTop FGPMMOPA6H GPS module, users may benefit from the 3 meter accuracy for any long term traveling. **Note:Due to an end of life notice on the Gms-u1LP antenna module, the PmodGPS will be using the FGPMMOPA6H module. Please see the previous PmodGPS page for resources.** **Features:** • Ultra-sensitive GPS module (-165 dBm) • Add 3m 2D satellite positioning accuracy to any embedded system • Low power consumption • Up to 10Hz update rate • NMEA (default) and RTCM protocols available • Small PCB size for flexible designs 2.0 in × 0.8 in (5.0 cm × 2.0 cm) • 6-pin Pmod connector with UART interface • Library and example code available in resource center
9.	**Pmod WiFi: WiFi Interface 802.11g** ***Make: Digilent Inc***	The Pmod WiFi provides Wi-Fi access through the Microchip® MRF24WG0MA Wi-Fi™ radio transceiver module. Users can communicate with the IEEE 802.11g compliant chip through SPI and achieve data rates up to 54 Mbps. **Features:** • IEEE 802.11-compliant RF transceiver • Send data at 1 and 2 Mbps up to 400 m • Serialized unique MAC address • Integrated PCB antenna • Radio regulation certification for the US, Canada, Europe and Japan • Wi-Fi certified • Small PCB size for flexible designs 1.7“ × 1.0” (4.3 cm × 2.0 cm) • 12-pin Pmod connector with SPI interface • Follows Digilent Pmod Interface Specification Type 2A • Libraries available in resource center

Annexure-II

Details of the similar equipment ordered by Government/ Autonomous Institute(s) during last three years

Sl No	**Date of Order**	**Institute's Name**	**Name of Equipment ordered**	**Quantity**	**Order value in ₹**	**Whether successfully completed the Order (Yes/No)**

Signature of Supplier
Name: _____
Address: _____
Contact No: _____

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

_____

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Sl. No.	Description of Equipment (with full Specifications)	Qty.	Unit	Quoted Unit rate in ₹ (Including Ex Factory price, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	GST and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): ₹ _____

We agree to supply the above equipment in accordance with the technical specifications for a total contract price of ₹ ———————— (Amount in figures) (Rupees ————————amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ——————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier
Name: _____
Address: _____
Contact No: _____