



# Bundelkhand Institute of Engineering & Technology, Jhansi

Kanpur Road Jhansi, Uttar Pradesh – 284128

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## INVITATION FOR QUOTATION

TEQIP-III/2018/biej/Shopping/36

14-Jun-2018

To,

### Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods 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	DSP Trainer Kit	1	30	BIET, Jhansi	Yes
2	High Speed PCB Drilling Machine	1	30	BIET, Jhansi	Yes
3	Mentor DSP Software-10 Users	1	30	BIET, Jhansi	Yes
4	PCB Holder	1	30	BIET, Jhansi	Yes
5	PCB Illuminated Magnifier cum solder stand	1	30	BIET, Jhansi	Yes

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 items.
  - 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 **30** 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.
7. The Quotations would be evaluated for all items 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:  
**Delivery and Installation - 90% of total cost**  
**Satisfactory Acceptance - 10% of total cost**
10. All supplied items are under warranty of **12** months from the date of successful acceptance of items.
11. You are requested to provide your offer latest by **12:00** hours on **03-Jul-2018** .
12. Detailed specifications of the items 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,  
Bundelkhand of Engineering & Technology Kanpur Road, Jhansi, Uttar Pradesh, 284128
17. We look forward to receiving your quotation and thank you for your interest in this project.

**(Dr. Mukesh Shukla)**  
Nodal Officer Procurement  
TEQIP-III

## Annexure I

Sr. No.	Name of Equipment	Detailed Specification
1	DSP Trainer Kit	<p>Digital Signal Processing Kit - with CCS Compatibility</p> <p>Hardware Features</p> <p>Texas Instrument's TMS320C6713 DSP operating at 225 Mhz.</p> <p>Embedded USB JTAG controller with plug and play drivers, USB cable included</p> <p>TLV320AIC codec</p> <p>2M x 32 on board SDRAM</p> <p>512K bytes of on board Flash ROM</p> <p>3 expansion connectors (Memory Interface, Peripheral Interface, and Host Port Interface)</p> <p>On board IEEE 1149.1 JTAG connection for optional emulator debug</p> <p>Four 3.5 mm. audio jacks (microphone, line-in, speaker, and line out)</p> <p>4 user definable LEDs</p> <p>4 position dip switch, user definable</p> <p>+5 Volt operation only, power supply included</p> <p>Size: 8.25" x 4.5" (210 x 115 mm), 0.062" thick, 6 layers</p> <p>Compatible with Spectrum Digital's DSK Wire Wrap Prototype Card</p> <p>RoHS Compliant</p> <p>Software Features</p> <p>TMS320C6713 DSK specific Code Composer Studio from Texas Instruments</p> <p>Test/sample code provided to reduce coding time</p> <p>Compatible with National Instruments LabView Embedded 2.0</p> <p>Compatible with JTAG emulators from Spectrum Digital.</p>
2	Mentor DSP Software-10 Users	<p>Mentor DSP SOFTWARE(10USER)</p> <p>DSPBase (for Basic Theory)</p> <p>Realization of sampling theorem and Aliasing effects.</p> <p>ADC resolution effect (up to 32-bit supported)</p> <p>Calculation of Energy, Power, Average, Period and Frequency of signals.</p> <p>Can adjust Energy Scale.</p> <p>Plotting of Probability density function.</p> <p>NumPro (for numbering formats)</p> <p>Concept of coding schemes, number format.</p> <p>Different type of coding schemes(Real, Hexadecimal, Fixed point, Floating point and conversion among these)</p> <p>Precision may be set from 4 to 32-bits</p> <p>Data in signed format supports between -1.0 and +1.0</p> <p>Output result can be seen with and with out saturation</p> <p>SigGen (for Signal Generation)</p> <p>Basic signal generators including sine, cosine, square, sawtooth and triangle waves, but also less commonly available functions such as unit step, unit impulse, and noise functions.</p> <p>Signal generation facility for Amplitude modulation (AM), Frequency Modulation</p>

(FM), Frequency Shift keying (FSK), QPSK, GMSK, OFDM, DTMF, etc signals. Noise, with specified distributions (white, Gaussian) can be added to signals. Facility for Equation window to create own signals by writing equations (for e.g. sin, EXP, white (1), Gauss (0.5) etc.

Support for audio signal input through windows wave file format.

DSPPro (for DSP functions)

Fast Fourier Transform (FFT) calculation with size of up to 4096 points.

Real time FFT for Microphone audio input.

Inverse Fourier Transform with facility to change sine and cosine harmonics.

Support for design of FIR, IIR and can write our own recurrence equations.

Support designs for Low pass, High pass, Band pass and Notch filters.

Can import coefficient files for filters.

Generate Coefficients for FIR, IIR and recurrence equations.

Filtering supports rectangular, hamming and Blackman Windows.

Can do Convolution and Correlation operations on two signals.

Performs Correlation on noisy signal to extract original signal.

Support DTMF Tone identification.

Real time 2-D Spectrogram.

ComPro (for Communication training)

Support for Amplitude Modulation (AM) and Demodulation

Support for Frequency Modulation (FM)

Support for Quadrature Phase Shift Keying (QPSK) Modulation and Demodulation

Support for Code Division Multiple Access (CDMA) Modulation and Demodulation

Support for Orthogonal Frequency Division Multiplexing (OFDM) Modulation and Demodulation

MathSTAT (for Statistical DSP)

Calculate Mean and Standard deviations of signals.

Display Probability Density Function (PDF) of signals.

Can adjust Density scale.

Can show Probability Distribution, Density Function, Period, frequency, Average, Standard Deviation of signals.

ImageSEE (for image processing)

Display of image properties like Hue, Saturation, Value, RGB values.

Image statistics with help of colour histogram, visualize sampled spectra of colours in image.

Perform binary (NOT, AND, OR and XOR) and arithmetic (ADD, SUB, MULTIPLY and DIVIDE) operations on images.

Facility of Discrete Cosine Transform (DCT) on images with various resolutions.

Understand the link between image pixels and frequency.

Visualization of the quantization resolution and image compression factor on the resulting image quality.

Should provide image transformation with user defined equation. Commonly transforms like stretch, skew, rotate & translate should also be supported on images. Also facility to add anchors on image.

Should be able to find object position in a picture by image correlation technique.

		Facility to add RGB plane noises to image. Filtering facility for noisy images with user defined parameters.
3	PCB Holder	Dimensions: 12 x 6 x 5 inches,  Weight: 2 LB, Package Contents: Fully adjustable in prototype work and production, Max Work Dia: 230mmX170mm
4	High Speed PCB Drilling Machine	Motor Speed: Up to 20,000 RPM, Range:06 to 3.0mm Base: Metal Working Area: 280mmX170mm, Electrical Power: 230V/50Hz, 5A 3 Step Speed control
5	PCB Illuminated Magnifier cum solder stand	Main Lens is 3.5x in magnification and is 65mm diameter. For special repair welding workbench, Adjustable 2-1/2in glass lens magnifier, Usually been used in computer industry, jewelers. All clips, magnifier & other joints rotate 360 degree angle. All parts chrome plated, heavy duty stand. Material: stainless steel + iron + glass

**FORMAT FOR QUOTATION SUBMISSION**

(In letterhead of the supplier with seal)

Date: \_\_\_\_\_

To:

\_\_\_\_\_

\_\_\_\_\_

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
<b>Total Cost</b>							

Gross Total Cost (A+B): Rs. \_\_\_\_\_

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. \_\_\_\_\_ (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: \_\_\_\_\_