Indian Institute of Technology, Delhi Department of Mechanical Engineering

Sub: Notice Inviting Quotations for High speed Controller and Data Acquisition System

Sealed quotations are invited for High speed Controller and Data Acquisition System. The system should consists of "Chassis with Embedded Controller", I/O module with all accessories for the proper functioning of the system at 230 V operating temperature 0 to 50. The required specifications of each unitare given below.

NIQ for High speed Controller and Data Acquisition System

Description	Specifications
Chassis with Embedded Controller	At least three universal slots having compatibility with PXI, PXI Express, CompactPCI, and CompactPCI Express modules.
	System bandwidth at least 3 GB/s Dedicated bandwidth for each slot at least 0.75 GB/s
	Processor 2.2 GHz dual-core Intel or better processing speed RAM: 2 GB 1333 MHz DDR3L or better speed Hard drive: 250GB, 5400 RPM or better storage capacity Power supply to the controller:230 V with standard tolerances Operating Temperature: 0°C to 50°C
	<u>I/O</u> : 1 Gigabit Ethernet, 4 Hi-Speed USB, serial port and others Real Time Operating System
Analog Input Module	<u>Channel</u> : At least 16 channels with accuracy of 16-bit resolution. Each channel must have sampling rate equal or greater than 1 MS/s; Measuring voltage range: ±10 V
	16 channels with:
Analog input/output Module	 8 analog inputs, minimum independent sampling rates of 750 kHz, 16-bit resolution, ±10 V 8 analog outputs, minimum independent update rates equal to 1 MHz, 16-bit resolution, ±10 V
	FPGA programmable control over the synchronization and timing of all signals and operations
	Virtex-5 LX50 FPGA programmable or better
I/O Connector Block	Minimum of three shielded I/O connector block Screw terminals for easy I/O connections
Shielded Cable	3 cables at least 2 m long with appropriate adapters to connect Module and I/O Connector Block
Software	The controller must be compatible with either LABVIEW /MATLAB

Terms and Condition:

- The tenderer should submit an EMD (Ernest Money Deposit) amount of Rs. 25,000 by way of Demand Draft/Banker's Pay Order drawn in favor of "Registrar, Indian Institute of Technology, Delhi" and payable at New Delhi from any nationalized bank valid for six months. The EMD will be returned without any interest to unsuccessful tenderer only after the Tenders are finalized. In case of successful tenderer, it will be retained till the successful and complete installation of the equipment.
- The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to "Dr. Harish Hirani, Block II 354, Department of Mechanical Engineering, Indian Institute of Technology, Hauz Khas, New Delhi 110016" so as to reach latest by 5:00 P.M. of March 05, 2014. The

Technology, Hauz Khas, New Delhi - 110016" so as to reach latest by 5:00 P.M. of March 05, 2014. The quotation must incorporate two envelopes; one for "Technical bid" and other for "financial bid". Both the bid must be properly sealed. Technical bid should consist of all technical details along with EMD. The technical bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The tender number and details should be superscripted on the left side of the outer cover. The Quotations should be valid for 90 days from the due date.

- The offer/bid will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and it will be examined by a technical committee which will decide the suitability as per our specification and requirement. The financial offer/bid will be opened only for the offer/bid which technically meets all our requirements as per the specification.
- > The products will be used for research purposes. Hence any applicable institutional discounts should be offered and stated.
- > The Committee reserves the right to reject any or all offers without assigning any reason.
- Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- Delivery period should be specifically mentioned and should be as maximum 4 weeks.
- The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the IITD site of installation.
- Warranty period shall be minimum of 12 months from date of installation and demo of goods at the Mechanical Department of IIT Delhi.
- > Submitted quotations should clearly mention the validity period, preferably for a minimum of 3 months.
- In case the offered equipment is proprietary in nature, the same be mentioned on the envelope containing the bids. In addition, the necessary proprietary certificate stating clearly the proprietary details should be furnished together with Technical quotation.
- Please quote prices at FOB New Delhi, inclusive of installation charges.
- > Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
- Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.

Dr. Harish Hirani

Prof Anoop Chawla

Prof J.K. Dutt

Dr. S.V. Modak