## Mechanical Engineering Department IIT Delhi

03/11/2014

## Sub: NIQ for Sensor with Development Boards

On behalf of duly constituted purchase committee, sealed quotations are invited for below mentioned items. To be used for system Identification / modern mechatronics control experiments as per specifications given below. Partial quote can be accepted.

Development boards of dsPIC30, dsPIC33 and PIC24, supports MCUs from Microchip and dsPIC Compilers/Graphical interface.

- a) On-board jumpers for pull-up/pull-down port configuration, ICD connector for real time in-circuit debugger, on-board USB 2.0 programmer, on MCU board. The MCU board should be mounted in a sealable enclosure with adaptor to power from 220volts single phase mains. The enclosure should have holders for additional modules which may be plugged in on demand.
- b) Following onboard modules are should be supported with MCU development boards:

S.No.	Description of Items
1	USB UART module
2	Potentiometers for testing multiple AD conversions
3	PWM Drivers
4	LEDs and push buttons to indicate pins' logic state
5	DC & Servo Motor Control and drivers
6	Temperature Sensor
7	LCD
8	GLCD and 7seg
9	Piezo Buzzer
10	Serial SRAM module
11	Serial EEPROM
12	Touch Sense enables input
13	Real time module,
14	I2c
15	CAN
16	Blue tooth
17	Zig Bee
18	RFID
19	MMC Card R/W

20	GSM
21	Wireless Lan
22	GPS
23	Opto Isolator
24	Relay modules
25	DC Motor Driver modules
26	Servo Motor Driver Modules

c) The technical quote should indicate compatibility of the specific MCU board with items in c) above.

## **Terms and Conditions:-**

- Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, with clearly marked as Quotation for "Sensor with Development Boards".
- Please quote the price at FOB / CIF New- Delhi, inclusive of installation charges.
- Validity of the quotation must be at least 6 months.
- If the quote is being submitted by the representative of the principals/manufactures themselves, a valid Agency ship/ Dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- The institute reserves the rights to accept/reject any/all quotations without assigning any reasons thereof.
- Complete set of manuals for the operation of the equipment should be given.
- Installation and training for the operation of the equipment should be given.
- Warranty must be quoted as per the warranty offered by the manufacturer and will be effective from the date of installation of the system.
- If the item quoted are proprietary in nature, please enclose proprietary certificate from the principals stating "certificate that ------ is proprietary item of M/s ----- and no other manufacture make these items".
- The financial quotation should have a section in the following format.

Sealed quotation should reach the Room No. II/426, Department of Mechanical Engineering, IIT Delhi, New-Delhi – 110016 on before 18/12/2014 up to 5.00 PM.

(Prof. S. Mukherjee)

Mechanical Engineering Dept.