# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## Ref: NIQ/CSE/RP02355/8

Due Date: 13<sup>th</sup> March, 2012

We are interested in procuring upto 4 **Nos.** of GNU SDR Systems. The specifications for these are listed below.

## Specifications for a single GNU SDR system

Qty 4

**Motherboard:** Xilinx Spartan-3A-DSP3400 FPGA or equivalent/two 100 MS/s 14-bit analog to digital converters/ two 400 MS/s 16-bit digital to analog converters/ digital downconverters with programmable decimation rates/ digital upconverters with programmable interpolation rates/ Gigabit Ethernet interface/ 2 Gbps high-speed serial interface / 1 megabyte of SRAM /Capable of processing signals up to 100 MHz wide/ Capable of streaming signals up to 50 MHz wide/ Auxiliary analog and digital I/O support complex radio controls such as RSSI and AGC/ Fully coherent multi-channel systems (MIMO capable)/ TCXO Frequency Reference/ Optional internal GPS locked reference oscillator/ 2 SMA-Bulkhead Cables/ 1 USB-ADP Adapter Cable/ Power Supply

**Radio Board:** Transceiver with range of 50 MHz to 2.2 GHz max/ transmit power of 30 to 100 mW/ Dual synthesizers for independent TX and RX frequencies/ 30 MHz TX/RX bandwidth/ less than 200us PLL lock time/ 16 digital I/O lines/ adjustable transmit power

Antenna: 400 MHz to 1 GHz Log Periodic PCB directional antenna, 5-6dBi Gain.

### **Terms and Conditions**

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- (i) Bids should be properly sealed. Technical and Commercial bids must be sealed in separate sealed envelops packed in one big sealed envelop.
- (ii) For Foreign Currency bids, Bids must be made on FOB basis.
- (iii) Complete bill of material to be attached with Technical Bid.
- (iv) Technical Compliance chart should be strictly attached with Bid.
- (v) Validity of quotation should be minimum 90 days from the date of bidding.
- (vi) Authorisation from the OEM in case of bids by Authorised resellers must be attached.
- (vii) If the item quoted is properitory, then proprietory certificate should be furnished with technical bid directly from the Manufacturer.

- (viii) Sealed quotations with technical and financial bids in separate envelops must reach the office of HOD, Deptt. of CSE, IIT Delhi positively by 13<sup>th</sup> March, 2012 by 5.00 PM
- (ix) Warranty should be mentioned clearly.
- (x) Payment terms should be clearly mentioned in the bid.
- (xi) Quotations not sent in separate covers for technical and commercial bids are bound to be rejected.
- (xii) IIT Delhi Reserves the right to accept or reject any quotations without assigning any reasons thereof.