Department of Physics

Indian Institute of Engineering Science & Technology, Shibpur
Howrah – 711103

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Notice Inviting Quotation

Quotations are invited for the items within 7 working days from the date of publication in the IIEST website and institute notice board. The quotation should include delivery charges, all taxes, others etc. to IIEST, Shibpur.

Dr. Sukhendusekhar Sarkar
Physics
IIEST,Shibpur, Howrah – 03.

List of Items:

<u>Dual channel Independent 16k Digital MCA</u>

Should have following Features:

- Should be a desktop system Suited for high resolution digital nuclear Spectroscopy
- Should have selectable Input Dynamic Range and adjustable Digital Fine Gain
- Should be able to handle Counting Rate up to 1 Mcps
- Should have USB and Optical Link communication interfaces
- Should house 2x 100 MS/s 14-bit waveform digitizer on single-ended inputs with BNC connectors, featuring software configurable input range and adjustable DC offset via a 16-bit DAC on each input in the full range.
- Should be able to manage coincidences and anti coincidences between a pair of detectors, allowing the user, for example, to account background rejection or anti-Compton techniques.
- The module should be able to operate as a scalable multi-input, multi-board acquisition system, offering synchronization capabilities.

Specifications

Analog Input	Input Features -BNC connector -Single-ended, DC coupled -Impedance: 1 kΩ -Positive and negative signals accepted	-Programmable 4-step analog coarse gain corresponding to 0.3Vpp-1Vpp-3Vpp-10Vpp ranges -Bandwidth: DC to 5 MHz -Programmable DC offset adjustment on each input in the full scale range Number of Inputs 2
ADC	Resolution: 14 bits	Sampling rate: 100 MS/s simultaneously on each channel
Trigger Modes	-Uncorrelated: each channel operates independently (based on channel self-trigger) -Correlated: coincidence/anticoincidence among channels and/or an external trigger (TRG-IN) -External: channels are triggered by external trigger only (TRG-IN)	
Communication interface	**Optical Link** Up to 80 MB/s transfer rate Daisy chain capability: it is possible to connect up to 8 or 32 ADC modules to a single Optical Link Controller (A2818 or A3818 respectively)	**USB** USB 2.0 compliant Up to 30 MB/s transfer rate
Power Requirements	Suitable Power Adapter to be included in the offer	