

Technical specifications

The system to be purchased is a **four-channel digitizer** which will be used to digitize four independent wavelength domain interleaved outputs of photonic time-stretch front end. The required specifications of the **four-channel digitizer** are as follows:

1. Number of channels : 4
2. Sampling rate per channel : ≥ 1 GSa./Sec.
3. Bandwidth per channel : ≥ 1.2 GHz
4. On board acquisition memory : ≥ 2 GBytes
5. Bit resolution per ADC : ≥ 14
6. Input range : ≥ 1.5 Volts peak-to-peak
7. DC offset capability : Required, should cover full-Scale
8. Effective Number of bits (ENOB)
@70 MHz with over-voltage protection : At least 9.5
9. Signal-to-noise ratio (SNR)
Specified at ~ 70 MHz at-1dBFS input signal : ≥ 62 dB
10. Signal-to-noise distortion ratio (SNDR)
Specified at ~ 70 MHz at-1dBFS input signal : ≥ 62 dB
11. Spurious-Free Dynamic Range (SFDR)
Specified at ~ 70 MHz at-1dBFS input signal : ≥ 68 dB
12. Internal on-board reference clock
Frequency : 10 MHz
13. FPGA Development kit with FDK : Required
14. Higher sample rate option : Required, quoted digitizer should be compatible for sample rate or number of channels upgradation on purchase of additional hardware

The vendor should have sold out more than 10 units of the product already.

Vendor must quote along with the compliance table for the specifications and charges should include CIF.

Technical bid and commercial bid should be submitted separately in separate sealed envelopes.

Online support within 24 hours should be assured.

Warranty of at least one year.



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