

Call for tenders

Reference No: EE/PK/DST QEC

Tenders are requested for the following items with description given below. Please quote your best offer, terms and conditions of payment, delivery of goods etc. If you are a distributor, please be prepared to include a proprietary certificate or authorized dealer certificate from the original equipment manufacturer. The specifications given below are not tight. Better alternatives are also accepted. Final decision in this matter rests with the purchase committee.

Quotation should be first sent via email to pradeepk@iitk.ac.in. A hard copy, in a sealed envelope, may be sent to the following address:

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Last date to receive quotations via email: April 21, 2012

Last date to receive hard copy: April 24, 2012

Component	Specification	Qty
3 dB coupler	Center Wavelength 1550nm Connector Type FC/PC Fiber pigtailed 2x2 port coupler	4
Spartan 3E Kit	Clocks: 50 MHz crystal clock oscillator Memory: 128 Mbit Parallel Flash 16 Mbit SPI Flash 64 MByte DDR SDRAM Connectors and Interfaces: Ethernet 10/100 Phy JTAG USB download Two 9-pin RS-232 serial port PS/2- style mouse/keyboard port, rotary encoder with push button Four slide switches Eight individual LED outputs Four momentary-contact push buttons 100-Pin expansion connection ports Three 6-pin expansion connectors Display: 16 character - 2 Line LCD	1
Optical Isolator	Wavelength Range: 970 - 990 nm Isolation: 33 - 38 dB Max Power: 2 W CW Fiber pigtail, FC/PC connector	2
WDM pump coupler	Operating Wavelength : 980/1550 nm Isolation (Min): 19 dB Wavelength Bandwidth : ± 10.0 nm Directivity : 50 dB CW Power (Max): 300 mW	2
OFS HNLF	HNLF PM module	1(1Km spool)

SSMF	<p>Operating Wavelength: 980 - 1600 nm Mode Field Diameter: $4.2 \pm 0.5 \mu\text{m}$ @ 980 nm, $6.8 \pm 0.5 \mu\text{m}$ @ 1550 nm Cladding Diameter: $125 \pm 1.5 \mu\text{m}$ Coating Diameter: $245 \pm 15 \mu\text{m}$ Cutoff Wavelength: $920 \pm 30 \text{ nm}$ Short-Term Bend Radius: =6 mm Long-Term Bend Radius: =13 mm Maximum Attenuation: =3.5 dB/km @ 980 nm Numerical Aperture: 0.20</p>	<p>(5km)1 (10km)1 (25km)1</p>
Attenuator	<p>2dB,5dB,10dB attenuator Fiber Connector FC/PC Operating Wavelength 1240 - 1620 nm Return Loss >55 dB Maximum Power Capability 1 W Polarization Dependent Loss (PDL) <0.1 Db</p>	5 each
Laser Mount	Butterfly laser mounts	4
Fiber Bragg grating	<p>Center wavelength: 1550nm 3dB bandwidth range: 5 GHz Center wavelength accuracy: +/-0.3nm Reflectivity: 0.05~0.95 Insertion loss: 0.1~0.2dB</p>	2
Circulator	<p>Wavelength(nm): 1470-1610 Insertion Loss (dB): 0.7 Channel Peak Isolation (dB, @1550nm): >50 PMD(ps): <0.1 Power handling(mW): 300</p>	2
Inline Polariser	<p>C-band operation Insertion Loss<0.05 dB Return Loss>65 dB Extinction Ratio >40 dB</p>	2
Piezoelectric Crystal Fiber and Driver	<p>Electrical Connection: 0.5 meter cable Fiber Connections: 1 meter bare fiber leads Standard Fiber: SMF-28* Fiber Diameter: 250 micrometer Minimum Fiber Bend: 50 mm (Diameter) Fiber Coil Length: ~ 20 m Max. Fiber Stretch: ~ 4.5 mm</p>	1
EDF 10m	<p>Operating Wavelength: C Band Saturation Power near 1530nm: 0.18mW Numerical Aperture: 0.23 Clad Diameter: 125um Core-Clad concentricity: <0.3um Coating Diameter: 245um Peak Absorption near 1530nm: 6.0 dB/m Peak Absorption near 980nm: >3.0 dB/m</p>	1
Power Meter	<p>Compatible Sensors: Photodiode, Thermal & Pyroelectric Optical Power Range: 100 pW to 200 W Optical Energy Range: 3 μJ to 15 J Sensor Wavelength Range: 185 nm - 25 μm Display Refresh Rate: 20 Hz Bandwidth DC : 100 kHz Photodiode Sensor Range: 50 nA - 5 mA Thermopile Sensor Range: 1 mV - 1 V Pyroelectric Sensor Range: 100 mV - 100 V</p>	2
Filter	<p>Tuning Range: 3000 to 4000 MHz Passband VSWR: 1.5:1</p>	2

	Passband: 3000 to 4000 MHz 3 db Bandwidth: $\approx 1\%$ of the Tuned Center Frequency Notch Depth: 40 dB minimum Passband Insertion Loss: 0.5 dB maximum	
SMA/SMB Male/Female	RF connectors	10
High Frequency Divider	7.5 GHz bandwidth Maximum PFD frequency of 120 MHz Divide ratios of 8, 16, 32, or 64 2.7 V to 3.3 V power supply	5
3dB RF Coupler	Frequency 2.6-5.2 GHz Average Power 4 W VSWR 1.25:1 Package Type Module with Connector Connector SMA	5
VCO	Frequency range* 5 - 8.4 GHz Output power, over all* 14-19dBm	5
IQ modulator (RF)	50-MHz TO 6-GHz	2
DC Power Supply	5V	5