

LBS COLLEGE OF ENGINEERING ,KASARAGOD

QUOTATION NOTICE

No.D-1306/2025-1

Date: 24.08.2026

Sealed competitive Quotations are invited by the Principal, LBS College of Engineering, Kasaragod from authorised dealers for the supply of Software Defined Radio – SDR and Raspberry PI4 Model B ECE Department of this Institution.

Quotations should be super scribed "Quotations for the supply of items in ECE Department against Quotation No **D-1306/2025-1** due on 08.09.2026. The rates quoted should be for the Supply of the items at LBS College of Engineering, Povval, Muliya PO, Kasaragod. Quotations received after the time fixed on the due date is liable to be rejected. Maximum period required for the delivery of the items should also be mentioned.

The prices quoted should be inclusive of all taxes. The quotationer shall also quote the percentage of rebate/discount if any offered by them against the items. Special conditions if any or printed on quotation will not be applicable to the contract unless they are explicitly accepted in writing by the undersigned.

Due date and time for receipt of quotation : 08.09.2026 2 PM ✓
Date and time of opening the quotation : 08.09.2026 3 PM ✓
Date up to which the rates are to remain firm for acceptance : 6 Months ✓

To whom the quotation is to be addressed : The Principal,
LBS College of Engineering
Muliya (P O),
Kasaragod-671542.

PRINCIPAL

Encl: Specification of item

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SPECIFICATION OF ITEMS

SOFTWARE DEFINED RADIO – SDR

TECHNICAL SPECIFICATIONS

RF Specifications

- **Frequency Range:** 325 MHz to 3.8 GHz (hackable/tunable further outside spec, approx. 70 MHz to 6 GHz)
- **Instantaneous Bandwidth:** Up to 20 MHz (complex I/Q)
- **Channels:** 1 transmit (Tx), 1 receive (Rx), supporting half-duplex or full-duplex
- **RF Output Power:** Up to 7 dBm
- **ADC / DAC Resolution:** 12-bit
- **Sample Rate:** 65.2 kSPS to 61.44 MSPS
- **Frequency Accuracy:** ± 25 ppm (no TCXO)

Processing and Hardware

- **SoC:** Xilinx Zynq-7000 (XC7Z010-1CLG225C)
- **Processor:** Single ARM Cortex-A9 core @ 667 MHz
- **FPGA Logic Cells:** 28k
- **RAM:** 4 Gb (512 MB) DDR3L
- **Storage:** 256 Mb (32 MB) QSPI Flash

Physical and Interface

- **Host Interface:** USB 2.0 On-the-Go (supports Mass Storage, Serial, RNDIS Networking, and Libiio)
- **RF Connectors:** 2x SMA female (50 Ω , one for Tx, one for Rx)
- **Power Supply:** USB powered (4.5V to 5.5V)

RASPBERRY PI 4 MODEL-B

TECHNICAL SPECIFICATIONS

Processor: Broadcom BCM2711, quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz

Memory: 4GB LPDDR4 SDRAM.

Connectivity:

2.4 GHz and 5.0 GHz IEEE 802.11ac wireless LAN, Bluetooth 5.0, BLE Gigabit Ethernet
2 x USB 3.0 ports
2 x USB 2.0 ports.

GPIO: Standard 40-pin GPIO header

Video & sound:

2 x micro HDMI ports (up to 4Kp60 supported)
2-lane MIPI DSI display port
2-lane MIPI CSI camera port
4-pole stereo audio and composite video port



Multimedia:

H.265 (4Kp60 decode)

H.264 (1080p60 decode, 1080p30 encode)

OpenGL ES, 3.0 graphics

SD card support: Micro SD card slot for loading operating system and data storage

Input power:

5V DC via USB-C connector (minimum 3A1)

5V DC via GPIO header (minimum 3A1)

Power over Ethernet (PoE)

Environment: Operating temperature 0–50°C




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