INVITATION FOR QUOTATION

25 CCT 2024

Our Ref No. : DBATU/Store /Elect. Engg (Diploma wing)/ Microcontroller kit /2024 / **Date:** 25/10/2024

3214

Quotation For : 8051 Universal Development Microcontroller Kits **Due On:** 05/11/2024

Date of Opening: 06/11/2024 **Time:** 11.30 am

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To,

Sub: QUOTATION FOR THE SUPPLY OF STORE

Dear Sir,

Your quotation for the items listed overleaf, may please be submitted to the under signed, so as to reach this Office not later than **05/11/2024**

While submitting your quotation, the following procedure may please be observed and other points borne in mind.

1. The maker's name must be specified.
2. The "Terms and Conditions" for supply and delivery of stores, should be clearly indicated in the quotation, stating whether rates are, inclusive of all taxes, Packing and forwarding charge,s Freight charges, etc. or not, however rates offered as including all taxes will be more welcome.
3. If packing and forwarding charges are to be charged separately, it should be so clearly stated in your quotation.
4. Please mention clearly whether consignment would be Ex-Godown, Ex-Shop, of F.O.R. dispatching stations. Preferably terms offered as "Delivery of consignment of stores, on F.O.R.
5. Envelope should be super-scribed **"Quotation for reference No...... of dated....."** It should also be superscripted as per the format given above.
6. The quotation would be opened as per date and timing given above, if desired by you, you may depute an authorized representative with a letter of authority to be present at the time of opening of the quotation at this Office on the aforesaid day, date & time.
7. Your quotation must be valid for a minimum 30 (Thirty) working days from the date of it's opening.
8. Quotation received after the date of opening may not be taken into consideration.
9. Items tendered should confirm to the specification shown in the attached list when and where, full or no specifications are indicated against items in the list. Kindly furnish your full specification in accordance with accepted standards against each item tendered. Where reference to catalogue is made, the relevant catalogues/ Pamphlets/ Literature should accompany the quotation.
10. Your quotation should be for all new items and not for second1 hand.
11. Please state whether items will be available Ex-Stock. If not the minimum period for delivery, or for supplying the items or stores.
12. It should be clearly stated whether **GST,** Insurance, Freight or packing and forwarding charges, or any other taxes and duties, etc. leviable.
13. It would be appreciated if illustrated catalogues/Literature etc is furnished with the quotation.

14. Expression to as "<u>Complete with standard Equipment</u>" complete with standard accessorie "Equipment to" As good as should be avoided. If at all their use is unavoidable then it should b very specifically indicated as to what exactly they mean and what exactly would be supplie under them. Any ambiguity or vagueness should be avoided.

15. For convenience, kindly adopt while quoting the same serial Nos. as given in the list detaile below.

Thanking You.

Yours faithfully,

Registrar
Dr. Babasaheb Ambedkar Technological University, Lonere

List of Items

Sr. No.	Description	Make	Approx. Qty Req.	Rate per / Each / Unit	Rem
1.	8051 Universal Development Microcontroller Kits (Detailed specifications per Annexure –I)		04		
2.	Stepper motor & 12V DC Motor Interface card with motors mounted to illustrate speed, direction control. 1) RPM measurement. 2) LM35 temperature Sensor (0-12V)		01		
3.	Traffic light of 2 intersections cum logic study card with 24 tags & 24 LED's. Opto-coupler, Relay, Buzzer.		01		

➢ Quantity may vary

Technical Specifications for 8051 Micro-controller Training Kit

MEMORY CAPA:	Monitor: EPROM: 36KB, Battery Back Up: 16KB (64 KB)
	Scratch Pad: 2KB(8KB)
ADVANCED S/W:	Assembler:/ Disassemble
	1 Pass Disassembler Hex Dump
Additional serial o. & parallel I/O:	• Using built in TxD/RxD • Unused pins of P1 port offered through 10 pin reliamate
INTERRUPTS:	8 Nos. Using 8259
Speed	20 MHz crystal operated multi-output clock source to operate various resources on Mother Board like CPU, Baud rate, T/C etc.
Parallel I/O	48 I/O lines using two 8255 through 2 Nos. of 26 pin FRC header, printer I/F.
Serial I/O	RS-232c serial interface using 8251 & RS232 driver IC through 9 Pin male D connector.
Timer Counter	3 Nos. T/C using 8253 pins brought out on 6 pin reliamate.
Display:	16 X 2 LCD (Backlit)
Key Board:	Single chip micro-controller 89C2051 to support 101 Keys PC AT/PS2 Keyboard & LCD
System Bus:	50 Pin FRC buffered Bus to connect periware cards as well as to facilitate ROM Emulation of 8 bit/16 bit system memory using external ROM emulation card-cum converter card.
Battery Backup	Rechargeable NiCd battery (3.6/60maH) provided to supply power to battery backup memory.
Onboard Features	• External Loud Speaker (8ohm/0.5W) interface for experiments on frequency synthesis. • Reset & Single Step/Interrupt push button. • EP socket for experiments with Cassette recorder interface. • Programmable Wait state generator | Real Time Clock IC 58167 • 11 Nos. fault links to teach troubleshooting skills by introducing faults in the circuit. • PALs-All glue logic like Memory I/O decoders are implemented using 4(5) nos. of EEPROM PALS 16V8
Power Supply (SMPS)	5V/2.5 Amp SMPS with RCA plug +12 V/850 mA-12V/250 mA with 4 pin reliamate SMPS.
Cables & CD:	9 Pin Female to 9 Pin Female RS-232e Cable, 26 Pin FRC 10 Cable, USB to RS232 Cable, Sample program & Software on CD.
Fault Links:	• Shorts 2 Pins of Address Bus and Shorts 2 Pins of Data Bus. • Shorts Address pin to Data Bus. • Increasing Battery Discharge. • Disables RD/ & WR/ into BBK RAM • Permanent Wait State, Permanent Reset State. • Disables 7 Segment Scanning., Disables 7 Segment Data. • Steps 2011 Clock., Disables laud Rate Clock

Stepper motor & 12V DC Motor Interface card with motors mounted to illustrate speed, direction control. 1) RPM measurement. 2) LM35 temperature Sensor (0-12V)

Traffic light of 2 intersections cum logic study card with 24 tags & 24 LED's. Opto-coupler, Relay, Buzzer.