

PURCHASE ORDER

Reference No: **TEQIP-III/2018/duie/Shopping/12**

Date of Issue: **23-May-2018**

Subject: **DUIET/TEQIP11/ECE/MICROPROCESSOR**

Purchaser: **Dibrugarh University Institute of Engineering & Technology, Dibrugarh**

Dibrugarh University, Dibrugarh, Assam- 786004.

Supplier Name: **MAVERICK TECHNOLOGIES**

1 st FLOOR, SILVER SQUARE MALL, ABOVE WESTSIDE, CHRISTIAN BASTI, G.S. ROAD, GUWAHATI- 781005, ASSAM., Guwahati, Assam, 781005

With reference to our correspondence, **Dibrugarh University Institute of Engineering & Technology, Dibrugarh** is pleased to award this detailed Purchase Order to **MAVERICK TECHNOLOGIES** for supply of items as per the details given below at a total cost of **563063.00** (<In words>):

Sr. No	Item Name	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)	Delivery Period
1	7-segment display interface	5	1050	5250	30
2	8051 microcontroller kit	10	9800	98000	30
3	8085 trainer kit	15	9450	141750	30

4	8086 tranner klt	15	16200	243000	30
5	ADC interface module	5	2100	10500	30
6	keyboard display	5	1850	9250	30
7	stepper motor interface	5	4700	23500	30
8	Traffic light controller	5	1000	5000	30

Total price (without taxes)	:	Rs. 536250.00
Total applicable taxes	:	5 %
Total price (with taxes)	:	Rs. 563063.00
Total Octroi	:	Rs.

Delivery	:	Dibrugarh University Institute of Engineering & Technology, Dibrugarh
Testing/Installation Clause (if any)	:	Yes
Training Clause (if any)	:	Yes
Technical Specifications	:	As per Annexure - 1
Delivery Period	:	As specified for each item from date of issue of confirmed purchase order or as early as possible.
Warranty	:	36
Payment Terms	:	Delivery and Installation - 100% of total cost

Satisfactory Acceptance - 0% of total cost

For
Dibrugarh University Institute of Engineering & Technology, Dibrugarh



(Authorized Signatory)

Dibrugarh University Institute
Name & Designation
of
Engineering & Technology, DU

Accepted by

Signature

Date

Address

Annexure I

Sr. No	Item Name	Specifications
1	7-segment display interface	• 8051 Evaluation Board, 8085 & 8086/88 Trainer Kits should be supported, FRC cables connectors should be supplied, should be covered with protective boxes as they are for training purpose, Complete documentation including schematic diagrams and interface details should be provided.
2	8051 microcontroller kit	Target board 8051 with MCU ? 24 MHZ Clock frequency ? 64KB RAM ? 64 KB ROM ? One USB and one RS232 port ? LED with demonstration/example programs ? Boards should be supplied with schematic diagrams, necessary cables, power supplies etc. ? It should be possible to expand these boards with additional hardware like 8 Channel 12 Bit ADC Interface with MUX, Elevator Interface, Stepper Motor Interface with Stepper Motor (3Kgcm) & Power Adapter, 6-digit, 7-Segment Display with Calculator KBD Interface,

		Traffic Lights Interface, 4-Digit, 7-Segment LED Display Interface etc. Target board should be compatible with industry leading IDE/Software.
3	8085 trainer kit	<p>It should operate on SINGLE +5V power supply in on board keypad mode or from host PC through RS-232- C interface. ? In both stand alone and serial modes, user can enter programs, run them at full speed and debug them through breakpoint and single step facilities. ? It should allow program editing through , and BLOCK MOVE commands. ? It should allow direct read/write from/to a specified I/O port through IN BYTE and OUT BYTE commands. ? It should have four on board ribbon cable connectors for easy expansion and two user defined function keys. ? On board battery backup for RAM. ? It should be compatible with many interface modules like 8 Channel 12 Bit ADC Interface with MUX, Elevator Interface, Stepper Motor Interface with Stepper Motor (3Kgcm) & Power Adapter, 6-digit, 7-Segment Display with Calculator KBD Interface, Traffic Lights Interface, 4-Digit, 7-Segment LED Display Interface etc. ? It should have built in Text editor, Assembler and Disassembler facilities in serial mode. ? It should operate at 3.072 MHz. ? MEMORY : Three 28 pin JEDEC sockets offer 64K Bytes of memory as in the following configuration. ? ROM : 16K Bytes of monitor program in 27128 EPROM. ? ROM / RAM : 16K Bytes user expansion using any EPROM/SRAM. ? RAM : 32K Bytes supplied using 62256 CMOS static RAM with battery backup. ? 8255 : (Two Nos) One 8255 is supplied to give 24 programmable I/O lines. User can have 48 I/O lines by populating an additional 8255 in expansion socket. ? 8253 : 3 programmable interval timers - Timer 0 is used for implementing single step facility, Timer 1 is used for generating baud clock and Timer 2 is available to the user. ? 8251 : For serial communication. Supports all standard bauds from 110 to 19200. ? 8279 : To Control 32 keys keyboard and 6-digit, half-inch size, seven segment LED display. Bus Expansion : Fully de-multiplexed and buffered TTL compatible bus signals brought out through two 26 pin ribbon cable connectors for expansion. ? Parallel I/O: 48 TTL compatible lines (2x8255) brought out through two 26 pin ribbon cable connectors. Serial I/O : RS-232- C serial interface signals through on board 9 pin D type female connector</p>
4	8086 trainer kit	<p>It should have on-board provision to interface optional LCD & PC keyboard. ? It should have a powerful, general purpose microprocessor trainer which can be operated either with 8086 CPU or 8088 CPU with a clock frequency of 8MHz in maximum mode. ? It should be versatile and can be configured in a variety of ways via jumper options, to suit specific user requirements. ? The basic system can be easily expanded through the system bus connectors. ? User can have full 1MBytes of addressable memory. ? 128K Bytes of powerful system firmware provides keyboard monitor, serial monitor, single- line assembler, disassembler and driver programs for parallel printer interface. ? The software for the optional PROM programmer interface is also included in the firmware. ? It should be compatible with many interface modules like 8 Channel 12 Bit ADC Interface with MUX, Elevator Interface, Stepper Motor Interface with Stepper Motor (3Kgcm) & Power Adapter, 6-digit, 7-Segment Display with Calculator KBD Interface, Traffic Lights Interface, 4-Digit, 7-Segment LED Display Interface etc. ? Driver software for file upload / download to / from host PC. ? Provision for system bus expansion through FRC. ? Provision for on-board 8087 NDP ? 6 JEDEC 32 pin sockets provide the following memory configuration : ROM : 256K bytes (128K X 2) system firmware using 27C010 RAM : 256K bytes using 628128 (128K</p>

X 2) upgradable to 512K bytes using 628512 (256K X 2) Peripherals like 8255, 8253, 2681, 8042, 8259A, 8288, 8254, AD 1674, DAC 0800 should be there.

5	ADC interface module	<ul style="list-style-type: none">• 8051 Evaluation Board, 8085 & 8086/88 Trainer Kits should be supported, FRC cables connectors should be supplied, should be covered with protective boxes as they are for training purpose, Complete documentation including schematic diagrams and interface details should be provided.
6	keyboard display	<ul style="list-style-type: none">• 8051 Evaluation Board, 8085 & 8086/88 Trainer Kits should be supported, FRC cables connectors should be supplied, should be covered with protective boxes as they are for training purpose, Complete documentation including schematic diagrams and interface details should be provided.
7	stepper motor interface	<ul style="list-style-type: none">• 8051 Evaluation Board, 8085 & 8086/88 Trainer Kits should be supported, FRC cables connectors should be supplied, should be covered with protective boxes as they are for training purpose, Complete documentation including schematic diagrams and interface details should be provided.
8	Traffic light controller	<ul style="list-style-type: none">• 8051 Evaluation Board, 8085 & 8086/88 Trainer Kits should be supported, FRC cables connectors should be supplied, should be covered with protective boxes as they are for training purpose, Complete documentation including schematic diagrams and interface details should be provided.