

**M.T.E. Society's
WALCHAND COLLEGE OF ENGINEERING, SANGLI.**

TENDER DOCUMENT



**LAST DATE OF RECEIVING
Fri, 28th August, 2009 upto 5.00 pm**

**DATE OF OPENING THE TENDER
Sat., 29st August, 2009 at 11 am**

In PG seminal hall, Electronics Department

(1) Electronics Department:

ITEM No.	Particulars	Basic Unit Price a	VAT+ OCTROI b	Approx. Qty q	Total Price (a*q)+b
1.	<p>ARM7 based trainer kit:</p> <p>Minimum Specifications:</p> <ul style="list-style-type: none"> • Processor LPC2148 • Processor daughter board should be removable • Test points for Reset, TX, RX and other important signals. • Min. 4x4 matrix keyboard • On board 16x2 character LCD, (additional facility of connecting 40x2 preferred) • On board SD/MMC card interface • Connector for interfacing min. 2 stepper motors • On board I2C based EEPROM with test points for signals • Two UARTS (serial ports) with separate 9 pin D connectors • Facility of measuring CPU current • Min. 8 LEDs for I/O monitoring. Facility of connecting them to any I/O lines. • Min. 2 push button switches for interrupt inputs with LED indication. • Min. one PWM output. • Min. 2 on-board relays with LED indication. The relay contacts NC, NO and Common should be available on screwed connectors. • Protected ADC inputs on screwed connectors. Facility of on board potentiometer for adjusting ADC input • On board buzzer. Facility of connecting buzzer to any I/O pin • On board logic probe • USB device interface with USB connect LED • 20 pin JTAG connector compatible with Keil U-Link 2 • Peripherals should be electrically detachable (preferably through DIP switches) • All processor I/O pins available on expansion headers. • User manual with complete circuit diagram • Lab manual with sample codes of various experiments 			10	

ITEM No.	Particulars	Basic Unit Price a	VAT+ OCTROI b	Approx. Qty q	Total Price (a*q)+b
2	<p>ARM9 based trainer kit Minimum Specifications:</p> <ul style="list-style-type: none"> • Atmel AT91SAM9260 ARM9 processor • 64MB Flash and upto 64MB SDRAM • External Memory bus interface on headers • USB host and device interface • 10/100 Ethernet interface • 3.5" TFT LCD display • On board Minimum 3x3 matrix keyboard • On board SD MMC card interface • Audio DAC with headphone connector (jack) and connector for audio input (jack) • I/O signals available on expansion headers • Connector for I2C and SPI bus • JTAG connector (Keil ULINK-2 Compatible) • Min. 6 LEDs for observing I/O pin status • On board potentiometer for ADC input • Push button for external interrupt • RTC with battery backup • Two UARTS • Support for Embedded Linux. Linux device drivers for on board devices. • Associated software with which the students should be able to develop their own linux based embedded applications as well as write device drivers for their own external hardware. Training for these needs to be provided. • Accessories such as serial cables, USB cables, power adapter • User manual with complete circuit diagram • Laboratory manual with sample codes for various experiments. 			2	

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3	<p>Microcontroller Hardware debugger</p> <p>Minimum Specifications:</p> <ul style="list-style-type: none"> • Keil Ulink 2 hardware debugger adapter for Philips ARM7, ARM 9 and Cortex processors • Target Adapter Cables, A USB Cable, Drivers and other necessary software 			6	
4	<p>8051 trainer kit</p> <p>Minimum Specifications:</p> <ul style="list-style-type: none"> • Processor 89C51RD2/89V51RD2 • ZIF socket for processor • Min 8 LEDs connected to a port • On board 4x6 matrix keyboard with configurable number of rows and columns through DIP switches • On-board 16x2 LCD module. Facility of connecting 40x2 LCD • Two on-board relays with LED indication and with contacts on screw connectors • Support of In system programming (ISP) • on-board logic probe and buzzer • on board I2C based EEPROM • on board I2C based RTC with battery backup • on board I2C based ADC with pot and screwed connector for input • on board I2C DAC • All processor I/O pins on expansion headers • Connector for interfacing min. 2 stepper motors • Serial port with test points for TXD and RXD • Min. 2 Push buttons with LED indication for providing interrupts • User manual with complete circuit diagram • Laboratory manual with sample codes for various experiments. 			10	

ITEM No.	Particulars	Basic Unit Price a	VAT+ OCTROI b	Approx. Qty q	Total Price (a*q)+b
5	<p>Peripherals boards: (Compatible with 8051 trainer kit item no 4) Minimum Specifications:</p> <ul style="list-style-type: none"> a) External memory interfacing <ul style="list-style-type: none"> a. RAM and ROM interfacing b. LEDs for observing Address, Data and control signals b) 8255 interfacing <ul style="list-style-type: none"> a. Selectable base address b. LEDs for Address, Data and control signals c) Multiprocessor communication <ul style="list-style-type: none"> a. Min two 89V51RD2 processors on peripheral board b. ZIF socket for processors c. Communication with RS485. d) Dot matrix printer interfacing <ul style="list-style-type: none"> a. Compatible with EPSON 300+ printer e) Thumbwheel interfacing <ul style="list-style-type: none"> a. Min 4 thumbwheels in multiplexed mode with active high output b. LED indication for all signals <p>Note: All peripherals should be supported with appropriate software examples for 89V51RD2. Also complete circuit diagram needs to be provided.</p>			4 each	

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6	<p>General Purpose Peripherals Minimum Specifications:</p> <p>a. Xbee Multipoint RF module with antenna (Sparkfun WRL08665 or compatible) with demo software</p> <p>b. DOSonCHIP FAT16 FAT32 uSD Module with compatible MMC card and demo programs. (Sparkfun BOB-08215 or compatible.)</p> <p>c. Fingerprint sensor module (biometric) with standard serial port on 9 pin D connector. Fingerprint scanner, interface card, serial cable, sample application code</p> <p>d. Thermal Printer with driver card, associated software, RS232 serial interface</p> <p>e. V-Drive2: Vinculum, FTDI's VNC1L embedded USB host controller IC device, One USB "A" socket to connect to USB Flash disk, Traffic indicator LED, 8-way header interconnect cable, 4 signals to connect excluding PWR/GND, Jumper selectable UART or SPI interface, Single 5V supply input, VDAP firmware and command set, Enclosure with snap in place clips for easy front panel mounting, Program or update firmware via USB Flash disk or UART interface, VNC1L firmware programming control pins PROG# and RESET# brought out onto internal jumper interface (www.vinculum.com)</p>			<p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>2</p>	

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7	<p>Beagle board Minimum Specifications:</p> <p>OMAP3530 processor based, HD video capable TMS320C64x+ DSP for versatile signal processing at up to 430MHz, USB powered , DVI-D for connecting digital computer monitors, Compatibility with USB peripherals including hubs, keyboards, mice, WiFi, Bluetooth, web cameras etc. MMC+/SD/SDIO interface for memory or wireless connectivity, S-Video out for connecting your NTSC or PAL television, Stereo audio in and out for a microphone and headphones or speakers. (Ref: http://beagleboard.org/hardware)</p>			1	
8	<p>JM Badgeboard Minimum Specifications:</p> <p>Freescale MCF51JM128 Microcontroller, USB Interface, LED Matrix display, Proximity capacitive touch sensor, Ambient light sensor, Three axis accelerometer, Debug connector, Associated software CD/DVD (Ref: http://http://www.freescale.com/webapp/sps/site/prod_summary.jsp?code=JMBADGE&nodeId=0127262E703BC3)</p>			2	

Please note following terms and conditions before filling the tender form, and **submit this sheet duly signed along with company's seal, along with the tender document.**

Terms & Conditions:

1. Essential additional services to be included such as installation and training on college site. Supplying of documentation, Software Media/Software with media. (Licensed Version), Warranty for **three** years. Equipment for it's malfunctioning, if any, must be replaced/repared within 15 days during warranty period.
2. Mentions educational prices / offers if any. Any deviations in the specifications, of the quoted item, from the required specifications should be clearly mentioned on separate sheet.
3. For any proprietary items, attach certificate from the manufacturer that the product is proprietary and also attach the valid certificate of authorized dealer/distributor/channel partner.
4. Local support for three years must be provided by the party/manufacturer.
5. The name of your principal party (if any) is to be indicated for the items, so as to enable to place the order with the principal.
6. **Usual payment terms:** 80% against successful installation, testing, training and 20% after submission of Bank guarantee for three years of 10% of the total purchase order.
7. **The tender form is not transferable.**
8. The offer value is to be calculated on the basis of Rate x Quantity
9. Tender documents should be submitted, in sealed envelope, along with duly signed terms and conditions sheet, in the college office, on or before 28/8/2008 (5:00 pm). **Clearly mention "Tender bid document for Electronics Department" on the envelope. Late documents will not be accepted.**
10. The cost of the TENDER document is in the form of DD of Rs.600/-- in favour of Director, Walchand College of Engineering, Sangli. This amount is non refundable. The tender document after having downloaded from the college website, www.walchandsangli.ac.in; is to be filled up by the bidder and the filled tender document is to be submitted alongwith the D.D
11. If the space provided in any one of the columns of the tender form is not enough, additional pages may be attached.
12. Earnest Money Deposit (EMD) is to be calculated as 3% of the offered total price of the items for a department. Separate Demand Drafts for each of the departments must be submitted along with the tender documents. **Tender Submissions, without Demand Drafts will not be considered.** Demand drafts must be drawn on any Nationalized Bank in favour of 'The Director, Walchand College of Engineering, Sangli. If the tender offer is not acceptable, the EMD will be refundable.
13. **The right to reject or accept any or all offers with or without modifications from any or all parties without assigning any reason is reserved with the Director, Walchand College of Engineering, Sangli.**
14. The bidder has to submit an undertaking for terms and conditions, if selected for placing the order.
15. Rates quoted should be valid at least for **Two Months**.
16. The supply of materials should be done within two weeks after the date of purchase order.
17. Legal matter will be restricted to Sangli jurisdiction.
18. Quantity mentioned in tender for item may vary depending on availability of fund.
19. Enough supporting documents, for example, specifications of the items, customer list, Authorization letter, Sales tax number letter, etc. must be submitted along with the tender documents.

I/We have read the above instructions carefully, and I/we abide by the instructions.

Seal of Company
Date:

Authorized Signature
Name:

Details of EMD

Sr. No	Department	Total Amount Rs. Ps.	EMD Rs. Ps.	DD Details		
				D.D. No.	D.D. Date DD/MM/YYYY	Nationalized Bank's Name
1	Electronics					

Seal of Company

**Authorized Signature
Name:**

Date: