

# THAPAR UNIVERSITY

(Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956)
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Enquiry No. TU/CS/GK/15-16/150031 Date: December 1, 2015

Sub: Request for Quotation(s) for supply of <u>ARM microcontroller based embedded system</u>

<u>Hardware kit + Design suite</u>

Dear Sir

We shall be grateful if you kindly let us have your lowest quotations for the following materials. THE QUOTATIONS SHOULD REACH THE UNDERSIGNED LATEST BY 11.12.2015 through courier or e-mail accompanied by appropriate illustrative literature/catalogues/pamphlets/technical details and specifications as the case may be. On the quotation envelope the Enquiry Number & Date should be mentioned on the top of the Envelope/mail subject.

Sr. No.	Item Name	
		Qty.
1.	APM minus 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1.	ARM microcontroller based embedded system Hardware kit + Design suite (High end design suite)	25 Nos
	SPECIFICATION SHEET ATTACHED	
	Note: Kindly send the technical and commercial bid separately. The technical bid should contain approximate turnover of last three years and reference list of same equipment supplied by your company.	

## The offer sent by you must furnish the following details:

Name, Make & specifications of each item. Delivery FOR Thapar University, Patiala 6. 2. Cost of the item. 7. Insurance, Freight & other charges if any. 3. Educational discount if any. 8. Minimum Delivery Period. Validity of quotation should be at least 90 Days. 4. Payment terms. Net 30 days against delivery & satisfactory installation at Thapar University. 5. CST/VAT (%)do not provide Guarantee / Warranty Information. 10. Form C.

Regards,

-Sd-

Head Commercial

#### Annexure I

### **Technical Specifications:**

1. Name of the item: ARM microcontroller based embedded system Hardware kit +Design suite (High end design suite)

**Technical Specifications:** 

- 1. Must have daughter boards, for ARM LPC 2148, ARM Cortex 1768 and 2138.
- 2. The daughter boards must operate separate as well as with mother boards.
- 3. EPROM with 4K memory or more
- 4. RTC DS1307 with 32 KHz Crystal with battery back-up.
- 5. Two 12V relays with isolated O/Ps on 3 pin connectors.
- 6. One 12V stepper motors with drivers.
- 7. All interrupts available on header.
- 8. 16 x 2 LCD display.
- 9. 8 I/Ps from DIP switches.
- 10. 8 O/Ps available on LEDs.
- 11. 4 multiplexed 7-segment displays.
- 12. 4-Single bit keys ,8 Channel ADC with Potentiometers
- 13. The system must be supplied with USB programming cable etc, common for all daughter boards, and these daughter boards must be able to work individually as well.

#### Software:-

Customized software for e learning for ARM Programming system

With included IDE / Programming software, with step by step instruction

The system must be supplied with original version emprog / kiel design suite for compilers for c programming Debugging etc.

For pin Connections / user manual, example codes.

- 2. Name of the item: Daughter boards:
- 1) ARM7 2148with USB Interface
- 32 bit ,128K Bytes Program Flash, 64K Bytes RAM, RTC, 2x UARTs, , WDT, 5V tolerant I/O, up to 60MHz operation standard JTAG connector with ARM 2x10
- 2) ARM cortex 1768 Daughter board
- 3) ARM2138 development daughter boards