

## Zealtech Workbench - AL

Optimised Lab Infrastructure for effective learning...



**Microprocessor  
Microcontroller  
DSP  
FPGA / VLSI**

Fully equipped lab infrastructure  
OS/RTOS - Assembly and C code  
Content for instructors and students  
Meets and exceeds curriculum requirements  
Support for mini projects in-house  
Better control over upgrades and management  
Cost Effective – Lower TCO  
Electronics focus – special interfaces  
Tech+ - Workshops for students

Zealtech Workbench AL is a total solution that is unmatched. Take a look at the benefits...

# Zealtech Workbench AL

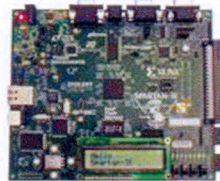
(Advance Learning)

A versatile, effective and flexible lab infrastructure to master Microprocessor, Microcontroller, DSP and VLSI



OS / RTOS  
Assembler / C Code

Assembly code is specific to processor whereas the C code is portable to different hardware kits which changes from time to time.



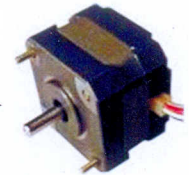
Trainer KIT

8085  
8086  
8051  
ARM  
POWER PC  
FPGA  
DSP



Interface Unit

Stepper Motor Interface  
DC Motor Interface  
Temperature Controller  
Relay unit  
Pressure Sensor Module  
Flow Sensor Module  
ADC/DAC Interface unit  
Traffic Light Interface Unit



Peripheral

Stepper Motor  
DC Motor  
Temperature Sensor  
Flow Sensor  
Input & Output

## Zealtech Workbench AL is an innovative lab infrastructure to practice and learn concepts

### Content

Content that is delivered, forms the core of the Zealtech Workbench AL lab solution. The content for the instructor and students is developed with great care and verified by learned professors to ensure authenticity.

### Mini Projects

Besides meeting the curriculum requirements, the Zealtech workbench lab can also be effectively used by the students to do their mini projects in-house.

### Better control over upgrades and management

Unlike the conventional labs, In the case of Zealtech workbench lab, the procurement gets largely streamlined, the administrator will have a better control of the lab inventory. This would help in upgrading and managing the infrastructure to suit the changes in the curriculum/syllabus from time to time.

### Cost Effective – Lower TCO

The lab changes, the kits change. The interfaces, sensor, power supply and content delivery system remains the same. Just swap the kits and realize a lab. This substantially reduces the Total Cost of Ownership(TCO) of these labs.

### Electronics focus – special interfaces

Typically in these labs, the students need to write code to sense, monitor, drive and control peripheral sub systems.

Whereas the code being the same, the design and construction of the electronics circuits involved in the interface unit varies with the target device specifications. The students have to understand this interface electronics circuit design than the simple assembly/C code.

### Fully Equipped

In line with the Zealtech Workbench methodology, all the batches of students in the lab do the same experiment in a lab session. This offers the teachers opportunity to explain and help students learn more comprehensively.

### Assembly and C code

For all the experiments for which the interfaces and sensors are ordered, we provide the sample code both in assembly and C.

### Deliverables

Workcenters with power supply and PC port terminations, Kits, Interfaces and devices. Complete content for both the instructor and student. Zealtech ELS Software for content delivery, Assessment system to administer prelab and post lab tests. Online query system to build knowledgebase.

### Tech+

Tech+ workshops to enhance the learning with experts from the industry and academia.