

ATMEL's ATMEGA32

This Workshop is a practical approach targeted to improve the student's knowledge in ATMEL's AVR Microcontroller family and provide in-depth knowledge to develop code in AVR STUDIO on the family of ATMEL's ATMEGA32 based Micro-Controllers. This workshop will be a firm stepping stone for implementing any kind embedded projects.

The objective is to provide adequate information about the ATMEL family Micro-controllers, so that the learner will be able to initiate designing and development of prototypes of projects quickly, on 40-Bit controller platform.

DESCRIPTION



A structured course with a smooth flow of information to gain expertise and therefore to gain appreciation on the following aspects:

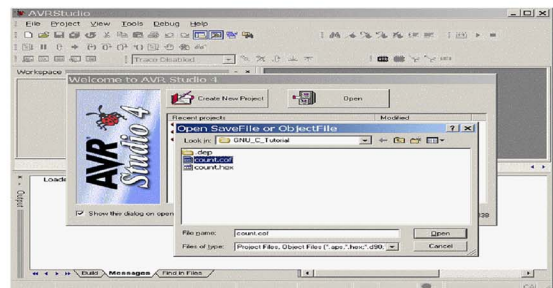
- Internal Architecture of ATMEL's ATMEGA32 micro controller, pin description, internal operations in detail
- Advanced programming methods, monitoring and control of the peripherals
 - o GPIOs,
 - o ADCs and DACs
 - o DC Motors, Stepper Motors,
 - o Temperature Sensors,
 - o LCDs,
 - o Keypad Decoding,
 - o UART, Timers, Counters, Interrupts Etc.

This module also deals with the connections that are to be made on the PCBs to develop the project prototype kit by the student him/herself



PLAT FORM

8-Bit ATMEL's ATMEGA32 Coding on AVR STUDIO 4.



DURATION

2-4 Days (8 Hrs per day)

DELIVERY METHOD

Instructor driven, Programming in Embedded-C, Hands-On assignments on the controller kit.

COURSE TOPICS

Introduction to ATMEL's processor Systems, Microprocessors Vs Micro controllers, Programming with internal peripherals, Interfacing and programming external peripherals – LEDs, switches, ADC/DAC, LCD, Keypad, Motors, Sensors etc.; interrupt handling and other efficient programming techniques.

MATERIAL FOR THE PARTICIPANTS

1. Micro-controller Starter Kit (to be bought separately at subsidized rates)
2. CD containing all the slides, Programming Software, UART Terminal Controlling Apsis Proprietary executable and plenty of code examples.
3. Participation Certificates

INNOVATING THROUGHOUT

