

# Abstract

LED (Light Emitting Diode) is a semiconductor light emitting diode. We know that diode allows the current in one direction and does not allow the reverse current which will affect the components in the circuit. LED also do the same function but will emit a small light when it allowed the current, which will give the sign or visual indication to the normal human that circuit is working. There are lots of applications using LEDs. They are mainly used for visual indication in any electronic devices, measuring and interacting with the process, displaying the pictures in TV or in any advertisement hoarding, etc.

First develop the code for “led blinking” by using Atmel studio 6. Here we will write code by using C language. For the programming of AVR Atmel32 two registers are used namely, DDR and PORT. DDR is a data direction register which tells the direction whether the pin of Atmega328 is input or output while the port register is an output register which tells whether the pin of

corresponding port is active low(0V) or active high(5V).

For writing code open Atmel studio 6, selects “new project” choose “GCC C Executable Project”. After selecting “device”, main C Window will open, here you can write your code.