

# **Introduction to Microcontrollers**

## Module 2 in Basics for Engineers

## 1 Introduction

Microcontroller is the simplest of all digital computers. Microcontrollers are used in almost all of the electronics appliances we encounter everyday eg: Wireless headset, Washing machines, Wifi routers. Most microcontroller chips have CPU and all 'accessories' needed for its proper functioning included in it. There is no need provide external RAM or Hardisk. This makes microcontrollers very easy to use. STM32 series of microcontrollers from ST Microelectronics is one of the popular microcontrollers used in industry. In this module we will introduce STM32 microcontroller. The aim is to introduce students with enough resources to help them do more microcontroller based projects in future.

## 2 Items required

Table 1: items required

sno	item	qty	remarks
1	laptop	1	with stm32 ide installed
2	stm32 nucleo	1	model no
3	item	1	with stm32 ide installed
4	laptop	1	model no

Following thing is a mosfet



Figure 1: MOSFET.