[System Architecture](#h.h98c2qbs3qjk)

[Hardware Architecture](#h.x534mnp37c8o)

[Firmware Architecture](#h.i5bxigg37hib)

# System Architecture

230V, AC INPUT

PUSH BUTTON

**HUMIDITY % RH**

**TEMPARATURE 0C**

60.3

27.8

TEMPARATURE AND HUMIDITY SENSOR

# Hardware Architecture

[PCB\_DESIGN](https://github.com/jjyothilinga/PCB_PIC18F_BREAKOUT_BOARD/)

TEMPERATURE

INPUT

4-20mA TO

5V CONVERTER

PUSH BUTTON

RA0

4-20mA TO

5V CONVERTER

PIC18F4520

HUMIDITY

TEMPERATURE

PORTD

70.8

26.9

PORTA

HUMIDITY

INPUT

DATA

RA1

DIGIT

SELECTION

RA4

RB0-RB6

PORTB

PORTC

RB6

GREEN LAMP

RB7

RED LAMP

4-20mA TO

5V CONVERTER

G

G

o/p

I/P

12V

24V INPUT

SENSOR

TEMP & HUMIDITY OUTPUT (4-20mA)

# Firmware Architecture

1. **PIC18F4520**

[**FIRMWARE**](https://github.com/jjyothilinga/TempHumidityDisplay/)

DIGIT DISPLAY

ADC DRIVER

APPLICATION