# Description:

A program to execute Analog Read on the Iomatic IoT Development kit using a potentiometer. A potentiometer is a simple knob that provide variable resistance, which we can read as an analog value using analog read.

# Source Code:

// include the library code:

#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(11,12,14,15,16,17);

// potentiometer wiper (middle terminal) connected to analog pin 4

int analogPin = A4;

// outside leads to ground and +5V

// variable to store the value read

float val = 0;

void setup()

{

//Initialize the LCD in 16x2 mode

lcd.begin(16, 2);

delay(1000);

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,0);

//Print the message as metioned cursor location

lcd.print("IomaTic : ADC ");

}

void loop()

{

// read the input pin

val = analogRead(analogPin);

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,1);

//Print the message as metioned cursor location

lcd.print("Moisture:");

//Print the message as metioned cursor location

lcd.print(val);

//Print the message as metioned cursor location

lcd.print(" ");

delay(1000);

}

# Libraries:

No additional libraries required.

# Functions:

analogRead(analogPin):

This function reads the reading received from the potentiometer and can be used to display its value. In our program the values range from 0 to 1023.