



I2c Ezb Arduino1 Sensor

Hello all, I wail back I posted some information on using an Arduino as a I2C Sensor controller to use with the EZB3&4 I will post this in 3 stages .. [b]Stage one[/b].. right here right now. In this video you can see how im using the arduino to read the ultrasonic sensor . that in turn is being read by the EZB board via I2C.

[youtube]uvHPbPsZf98[/youtube] This is the only code needed to read the ping for the EzBuilder script [code] print(I2CRead(0, 2,6)) [/code] The code for the...

Last Updated: 10/9/2014

Step 1

Hello all,

I wail back I posted some information on using an Arduino as a I2C Sensor controller to use with the EZB3&4

I will post this in 3 stages ..

Stage one.. right here right now.

In this video you can see how im using the arduino to read the ultrasonic sensor . that in turn is being read by the EZB board via I2C.

This is the only code needed to read the ping for the EzBuilder script

Code :

```
print(I2CRead(0, 2, 6 ))
```

The code for the Arduino is

Code :

```
#include  
  
void setup()  
{  
  Wire.begin(2);
```

```

    Wire.onRequest(requestEvent);
}

void loop()
{
    delay(100);
}

void requestEvent()
{
    long duration, inches, cm;
    pinMode(9, OUTPUT); // attach pin 3 to Trig
    digitalWrite(9, LOW);
    delayMicroseconds(2);
    digitalWrite(9, HIGH);
    delayMicroseconds(5);
    digitalWrite(9, LOW);

    pinMode(8, INPUT); // attach pin 4 to Echo
    duration = pulseIn(8, HIGH);
    // convert the time into a distance
    inches = microsecondsToInches(duration);
    cm = microsecondsToCentimeters(duration);

    String outtoezb;

    outtoezb += "D1=";
    outtoezb += inches;
    outtoezb += ":";

    char tempout[outtoezb.length() + 1];
    outtoezb.toCharArray(tempout, outtoezb.length() + 1);
    Wire.write(tempout);
}

long microsecondsToInches(long microseconds)
{
    return microseconds / 74 / 2;
}

long microsecondsToCentimeters(long microseconds)
{
    return microseconds / 29 / 2;
}

```

Phase two will be adding the 3 other ping sensors and a temp sensor to the arduino . I hope to have it all encased together will plugs and off the project board.

I will follow up on this thread as the next phase is done I will provide the code for EzBuilder as well as the arduino code.

Hope yall can use it.