

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.