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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 ..
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

```

print(I2CRead(0, 2,6 ))

```

The code for the...

Last Updated: 10/9/2014

Step 1

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```

print(I2CRead(0, 2,6 ))

```

The code for the Arduino is

```

#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.