Arduino Stack Exchange is a question and answer site for developers of open-source hardware and software that is compatible with Arduino. Join them; it only takes a minute:

Here's how it works:

[Sign up]

Anybody can ask a question

Anybody can answer

The best answers are voted up and rise to the top

unresolved overloaded function type for Wire.onReceive

I am attempting to make an I2C slave out of my Arduino and I can't get past the Wire.onReceive function. Here is my code. The documentation says to just add a function that has the style of void myHandler(int bytes) but I can't figure out why my readPI function does not meet these requirements.

```
#include "piCom.h"
#include "WireAddresses.h"
#include <Wire.h>

pi::pi(){
    Wire.begin(NB_INFO); // is 0x04
    Wire.onReceive( readPI );
    //Wire.onRequest(sendPI);
}

void pi::readPI(int byteCount){
    while( Wire.available() ){

        ref_IMU = Wire.read();

    }//end while

}//end readPI

void pi::sendPI(){

    Wire.write(1);
    //use to send pressure info to pi

}//end sendPI


//double pi::getref_IMU(){return ref_IMU;}
```

then here is the error

```
piCom.cpp: In constructor 'pi::pi()':
piCom.cpp:7: error: no matching function for call to'TwoWire::onReceive(<unresolved
overloaded function type>)'
 Wire.onReceive( readPI );
                        ^

no matching function for call to 'TwoWire::onReceive(<unresolved overloaded
function type>)'
```

Any help is greatly appreciated.

`arduino-mega`   `i2c`

edited Aug 8 '15 at 9:03

Nick Gammon♦
24.7k   6   35   85

asked Aug 8 '15 at 8:08

Ximidar
116   6

1 Answer

```
void pi::sendPI(){
```

That is a class function (method) which has an implicit **this** pointer. You can't use it as a static ISR.

In general, classes cannot implement ISRs for this reason. There are a few workarounds, one being to make it a **static** class function. However then it will affect the entire class, not just one instance.

answered Aug 8 '15 at 9:00

Nick Gammon♦
24.7k   6   35   85

I ended up just putting the functions inside the .ino file. it's not as neat as I'd like but it works. Thanks for teaching me something new. – Ximidar Aug 10 '15 at 1:57

You can make a static class function (one that does not belong to a particular instance) and keep the function inside your class then. – Nick Gammon ♦ Aug 10 '15 at 2:47