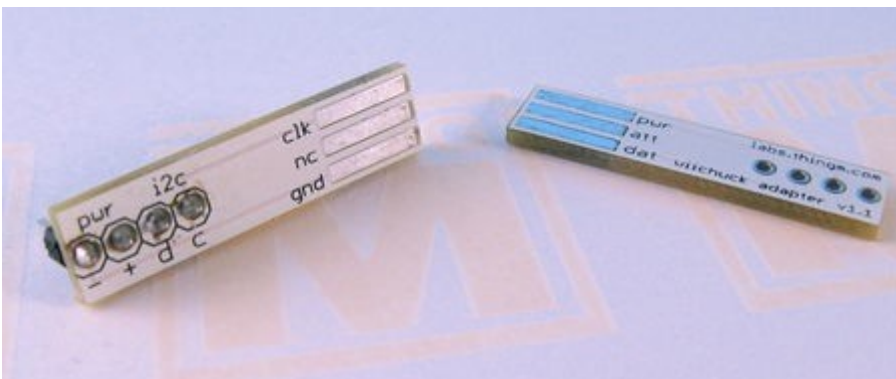
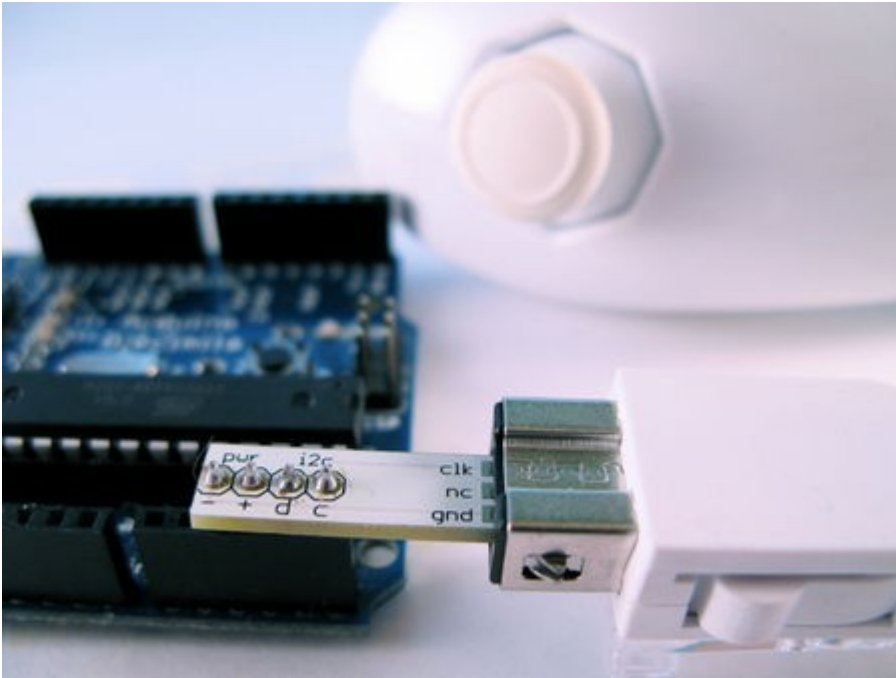


## “WiiChuck” Wii Nunchuck Adapter Available

Want to hook up a Wii Nunchuck to an Arduino but don't want to cut up the cord on your Nunchuck? Yeah me too. So I made some of these:



It's a small PCB that adapts the Wii Nunchuck connector to standard 4-pin header. I call it the “wiichuck adapter”. It plugs directly into the Arduino, no wiring necessary.

One of the coolest things about the Wii (to me) is that the expansion port on the bottom of the Wii remote is an I2C serial connection. This means that anything that plugs into that port can work with microcontrollers like the [Arduino](#) or Basic Stamp or others. Of the available peripherals, the Wii Nunchuck is one of the best. It contains a 3-axis accelerometer, a 2-axis joystick, and two buttons. [Hooking up a Wii Nunchuck to Arduino is easy](#) and I have [class notes](#) describing how to do it. But cutting off the connector of the Nunchuck to get at the wires is a little drastic.

This “wiichuck adapter” let's you play with the Wii Nunchuck and other Wii remote peripherals without needing you to cut cables. Just plug it into the Wii Nunchuck, then into the Arduino, in to Analog In pins 2,3,4,5. Pins 4&5 are the I2C communication pins and Pins 2&3 can act as the power supply for the Nunchuck.

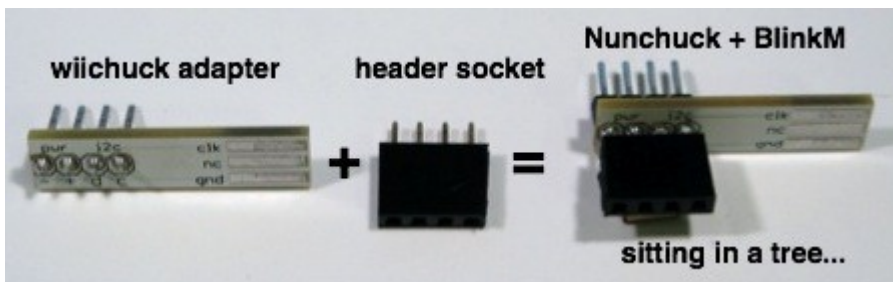


This is what it looks like plugged into the Nunchuck by itself.



## Nunchuck and Other I2C Devices (like BlinkM)

You can use other I2C devices at the same time as the Nunchuck. The I2C bus allows for multiple devices. For instance, if you have a [BlinkM](#) and also want to use a Nunchuck, no problem. The pinout of the BlinkM and the wiichuck adapter are the same. Just solder a little 4-pin socket header to the top of the wiichuck adapter.



And then you can plug in a BlinkM right on top.



## Software

To make it a little easier to play with the Nunchuck, I made a little Nunchuck library for Arduino and demo:

- [nunchuck\\_funcs.h](#)
  - [WiichuckDemo](#)
- ([Wiichuckdemo.zip](#) all zipped up)

It is based off the original research done by [Chad Philips of Windmeadow Labs](#). The library uses the [Wiring I2C library called "Wire"](#). This library is built-in to Arduino, as long as you have the latest Arduino development environment (0010 currently). To see another Arduino sketch using this library, you can check out the [BlinkMChuck example](#) that's part of the BlinkM examples.

The library functions are:

- `nunchuck_setpowerpins()` — power up a nunchuck plugged directly into an Arduino on analog pins 2,3,4,5.
- `nunchuck_init()` — init a nunchuck connected to an Arduino
- `nunchuck_get_data()` — get a data packet from the Nunchuck

Then you can get at the data packet using various helper functions like:

- `nunchuck_accelx()` — get X-axis acceleration
- `nunchuck_zbutton()` — get Z-button state
- ...and so on, see the header file for a complete list

## Nunchuck Information

- [Wiimote/Extension Controllers/Nunchuk](#) — info page about the Nunchuck on WiiLi (Linux for Wii) site
- ["Wiimote Accessory Bus"](#) — docs about the Nunchuck's connector.