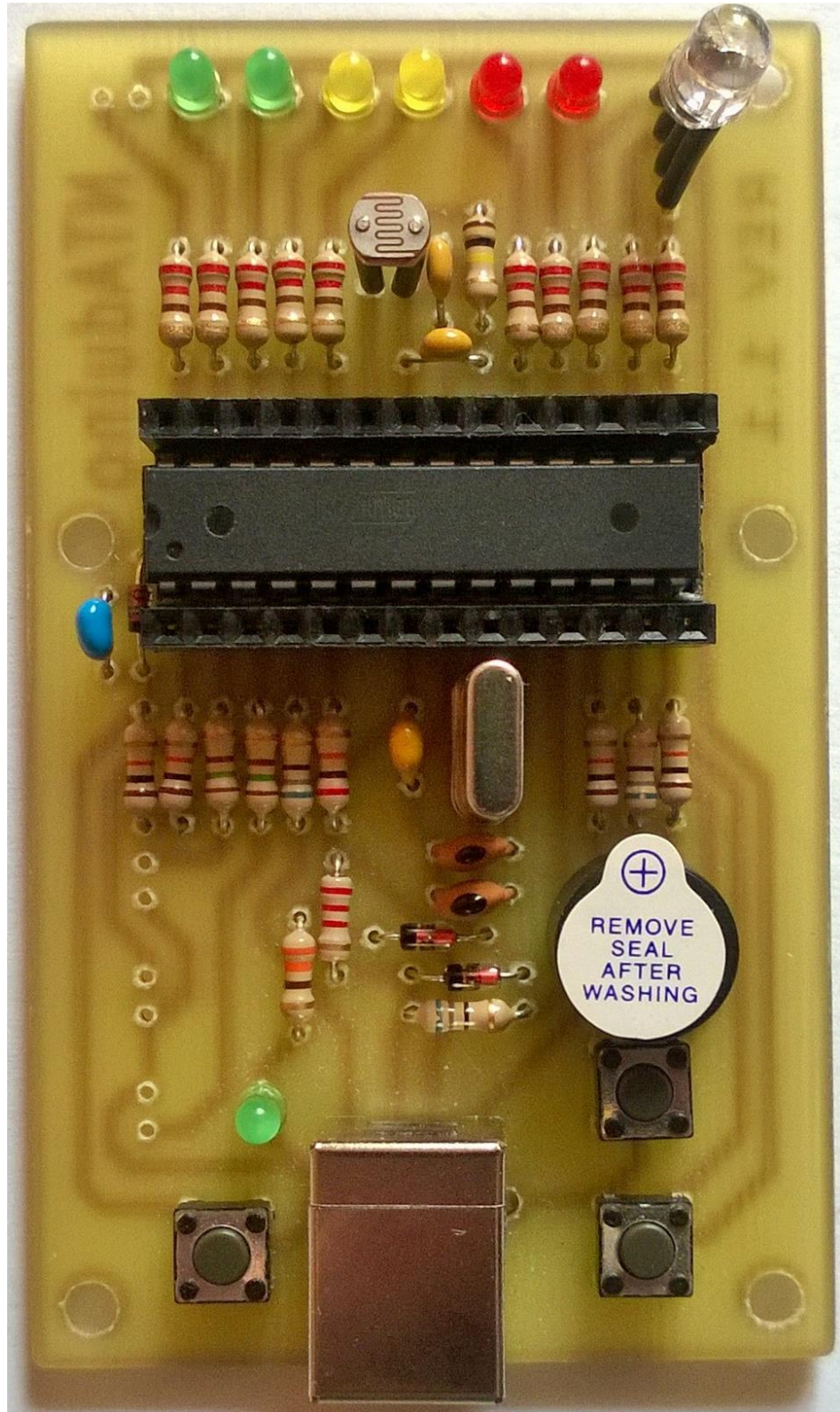


NTAduino baby steps



<https://github.com/makerspacelt/NTAduino>

What is NTAdduino?



Almost like Ardunio

Advantages

- Single chip design
- All thru hole components
- Built in leds/buttons
- Cheap

Disadvantages

- Has no usb -> uart support
- Single power option
- Needs a modified arduino IDE

Getting started

1. Download arduino IDE :)

<http://arduino.cc/Main/Software>

2. Download our patch

https://raw.githubusercontent.com/makerspacelt/NTAduino/master/arduino_patch/hardware/arduino/boards.txt

3. Place the boards.txt into your arduino folder

[arduino_location/hardware/arduino/boards.txt](#)

4. Launch Arduino ;)

5. From Tools->Board select NTAduino

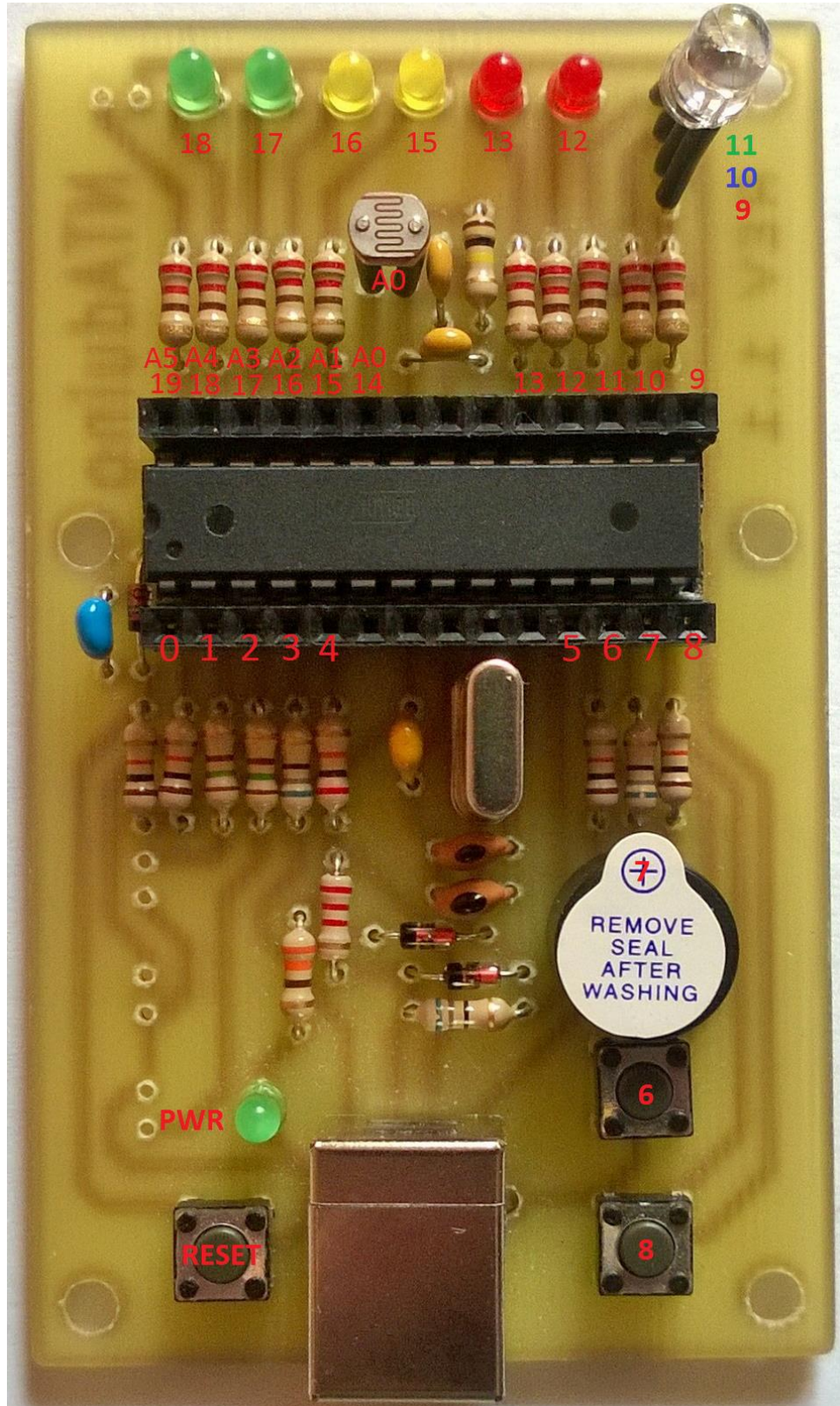
Coding NTAdduino



Language

- Based on C programming language
- Everything starts in *void setup()*
- Everything runs in *void loop()*
- Programs are called sketches
- Great place to start is arduino example sketches

Pins



Troubleshooting

1. Window could need a driver

<http://www.fischl.de/usbasp/>

2. Linux will probably need
root permissions for usb

```
SUBSYSTEM=="usb",  
ATTR{product}=="USBasp",  
ATTR{idProduct}=="05dc",  
ATTRS{idVendor}=="16c0",  
MODE="0666"
```


Workshop time