

# WOW Monitor

A project by Bob Swinkels and Luca van Straaten

---

## start:

do you have all the components?

check your components against the bill of materials.

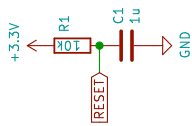
Id	Designator	Package	Quantity	Designation
1	R3,R1,R2	Weerstand	3	10k
2	C1	Condensator	1	1u
3	C2,C3,C4	Condensator	3	100n
4	Jserial1	PinHeader_1x06_P2.54mm_Vertical	1	Hedd_01x06_Male
5	Q2,Q1	Transistor_npn	2	BC547BTA
6	R5,R4	Weerstand	2	1k
7	R6,R7,R8	Weerstand	3	4.7k
8	SW1	Schakelaar	1	MHS122K
9	SW2	Knop	1	FSM4JAH

Now it is time to start SOLDERING!!! Start with the small components and finish with the battery holder, remember to put some double sided tape on the battery holder before you solder it for strength.

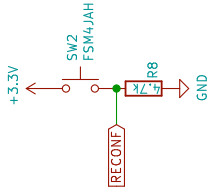
So start with the resistors (the small cylinders with 2 wires), the value is written on the piece of paper. you can also decode the colorcode, look at the decoder that is attached or just google “resistor color code”.

Now continue with the progressively larger components. after you are done soldering, “flash” your board with the arduino IDE. Bob or Luca can help you with that, but you can do it yourself. just follow the instructions on the github project page. <https://github.com/lucanatorvs/project-liberation>

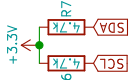
Power on reset circuit



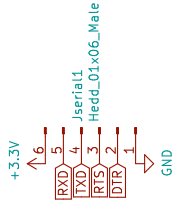
Reconfigure button



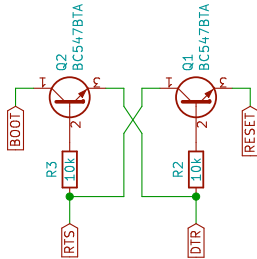
I2c pullup resistors



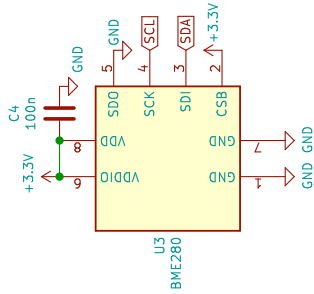
Serial connector



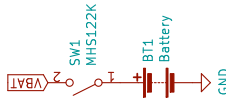
Program circuit



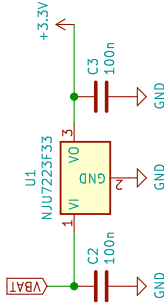
Sensor



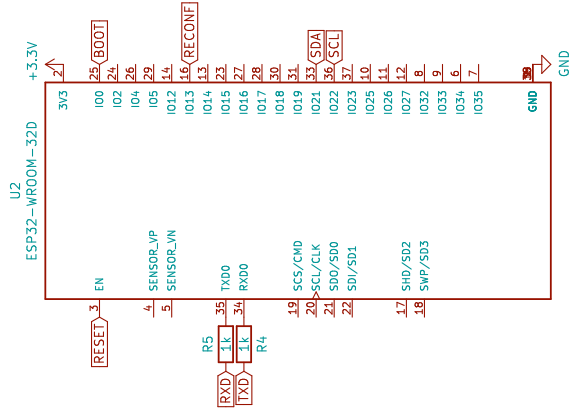
Battery and ON/OFF switch



Linear voltage regulator



Micro controller



Luca van Straaten  
Bob Swinkels  
HHS

Sheet: /  
File: liberation.sch

**Title: weather bender**

Size: A4

Date: 2019-11-24

KiCad E.D.A. kicad (5.1.4-0-10.14)

Rev: 1.0

Id: 1/1



Figure 1: <https://github.com/lucanatorvs/project-liberation>

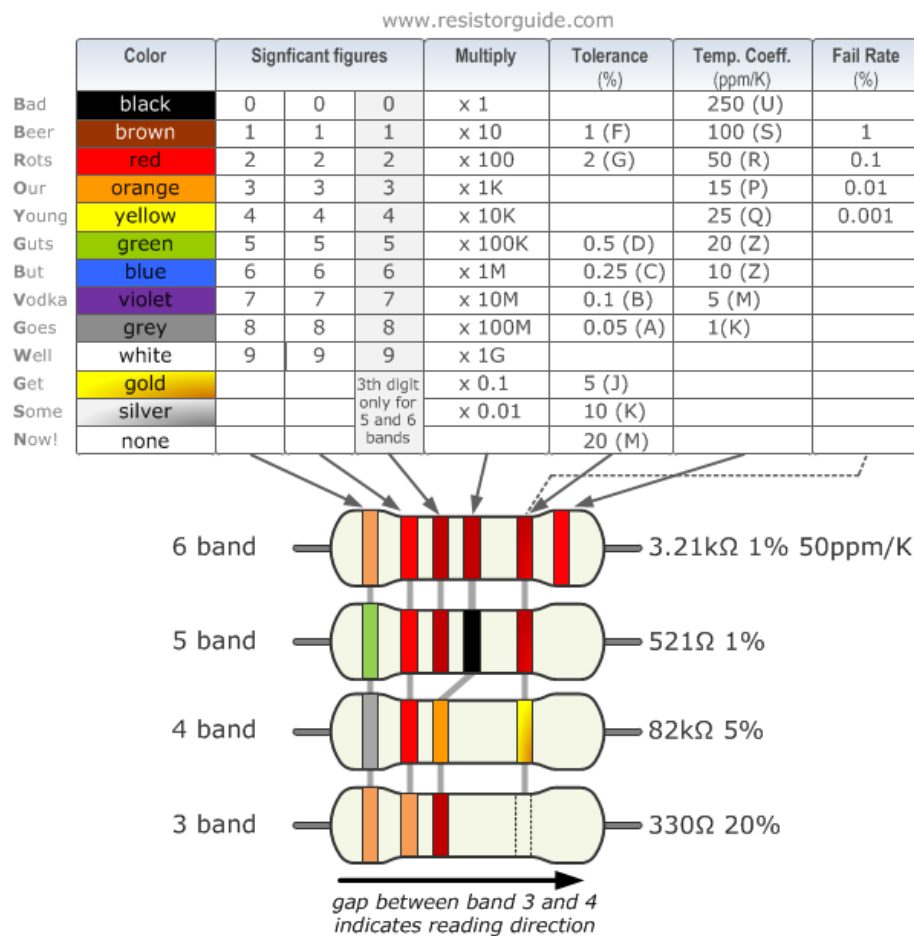


Figure 2: van: [https://www.resistorguide.com/standards-and-codes/resistor-color-code/resistor\\_color\\_codes\\_chart/](https://www.resistorguide.com/standards-and-codes/resistor-color-code/resistor_color_codes_chart/)

