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
$\overline{1}$	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 befor you solder it for strength.

So start with the resistors (the small cilinders 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 continu with the progressively larger components. after you are done sodering, "flash" your bord with the Arduino IDE. Bob or luca can help you with that, but you can do it yourself! (witch is arguably more fun) Just follow the instructions on the GitHub projectpage. https://github.com/lucanatorvs/project-liberation



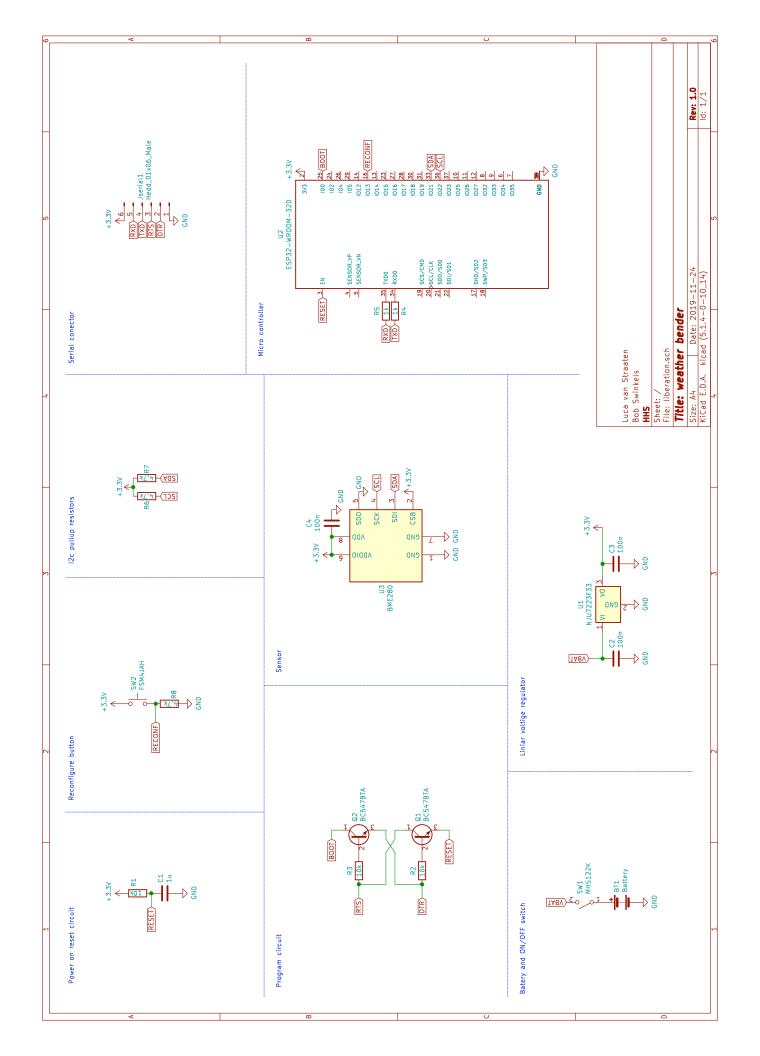




Figure 1: https://github.com/lucanatorvs/project-liberation

www.resistorguide.com Signficant figures Tolerance Temp. Coeff. Fail Rate Color Multiply (ppm/K) (%) black Bad 0 0 0 x 1 250 (U) Beer brown 1 1 1 x 10 1 (F) 100 (S) 1 2 x 100 50 (R) 0.1 Rots 2 2 2 (G) 3 Our orange 3 3 x 1K 15 (P) 0.01 4 0.001 Young yellow 4 4 x 10K 25 (Q) 5 5 x 100K 0.5 (D) 20 (Z) **G**uts green 5 blue 6 6 x 1M 0.25 (C) 10 (Z) But 6 x 10M 0.1 (B) 5 (M) **V**odka violet x 100M 8 8 0.05 (A) 8 1(K) Goes grey 9 9 x 1G 9 Well white 3th digit only for 5 and 6 x 0.1 5 (J) Get gold × 0.01 10 (K) Some silver Now! none bands 20 (M) 6 band 3.21kΩ 1% 50ppm/K 5 band ∍521Ω 1% 4 band ∙82kΩ 5% 3 band ⇒330Ω 20% gap between band 3 and 4 indicates reading direction

Figure 2: van: https://www.resistorguide.com/standards-and-codes/resistor-color-code/resistor_color_codes_chart/

