

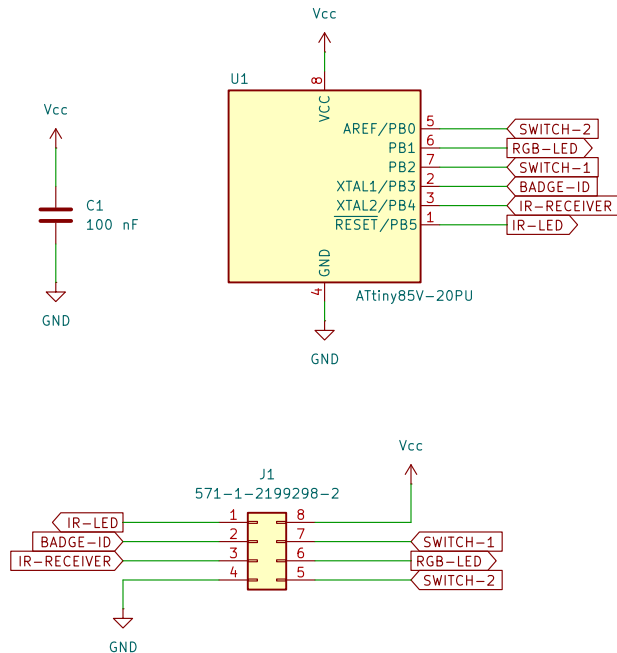
## ASSEMBLY INSTRUCTIONS

The ATtiny85 processor (U1) is installed in 2x8 Dip Socket (J2). Due to this, the PCB does not have a Reference Designator for U1 on the Silkscreen Layer.

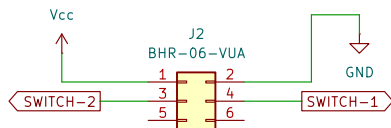
Included in the assembly kit are three 10 kohm resistors (R8, R9 and R10). Populate the BADGE-ID circuit using between one to three of these resistors to determine the "Color" of the Badge as follows:

- Red - Vcc - Populate R3; Do Not Equip R4, R5 and R6
- Purple - Vcc \* 2 / 3 - Populate R3, R4 and R5; Do Not Equip R6
- Blue - Vcc \* 1 / 2 - Populate R3 and R4; Do Not Equip R5 and R6
- Green - Vcc \* 1 / 3 - Populate R3, R5 and R6; Do Not Equip R4
- Yellow - GND - Populate R4; Do Not Equip R3, R5 and R6

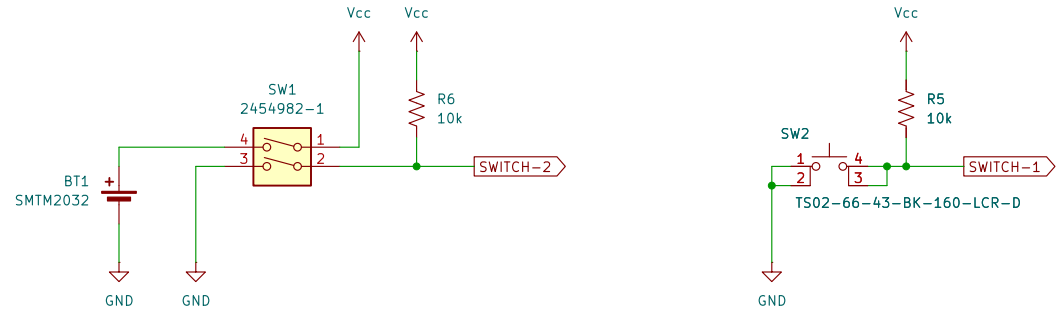
## MCU



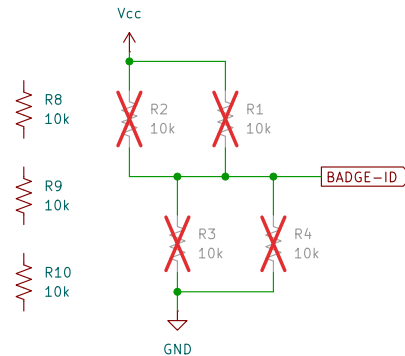
## STANDARDIZED ADD-ON CONNECTOR (EXPANSION)



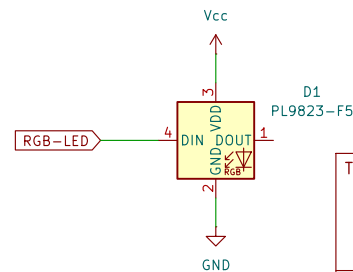
## SWITCHES



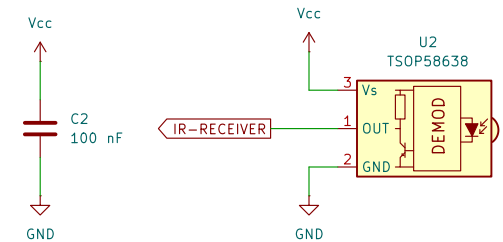
## BADGE CONFIGURATION



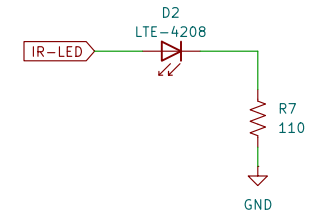
## MULTI-COLOR LED



## INFRARED RECEIVER



## INFRARED TRANSMITTER



This design allows for multiple assembly variants that will be detectable by the MCU. The Firmware will alter the assembly behavior based on which assembly variant is detected. The main power input is 3.0 volt coin cell. 3.0 volt power can also be supplied by the SA0 connector when the Battery is uninstalled or disconnected via SW1.

Designer: Ed Weaver  
File: maker-faire-badge.kicad\_sch

**Title: Maker Faire Orange County Badge**

Size: USLetter Date: 2026-05-25  
KiCad E.D.A. 10.0.3

Rev: A  
Id: 1/1