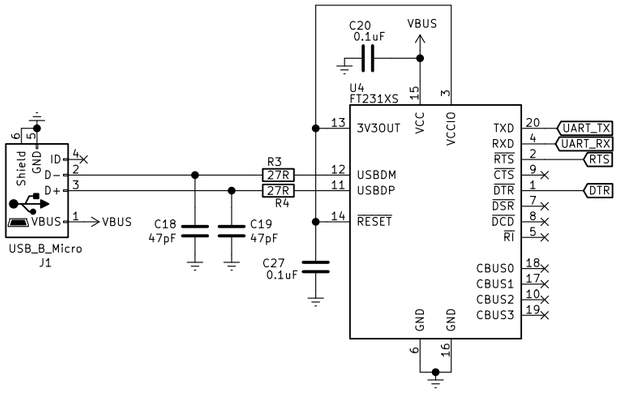
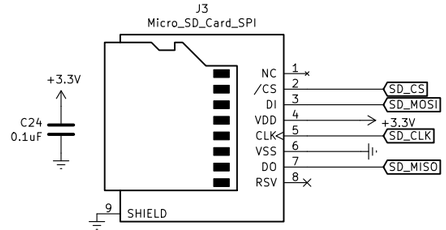
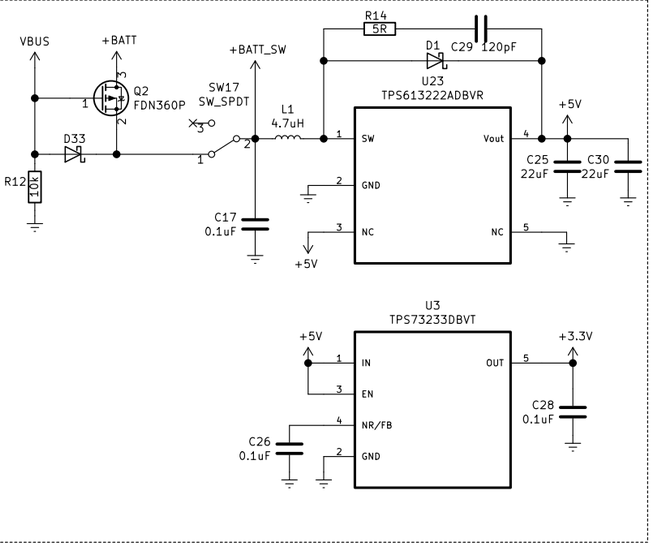
USB UART



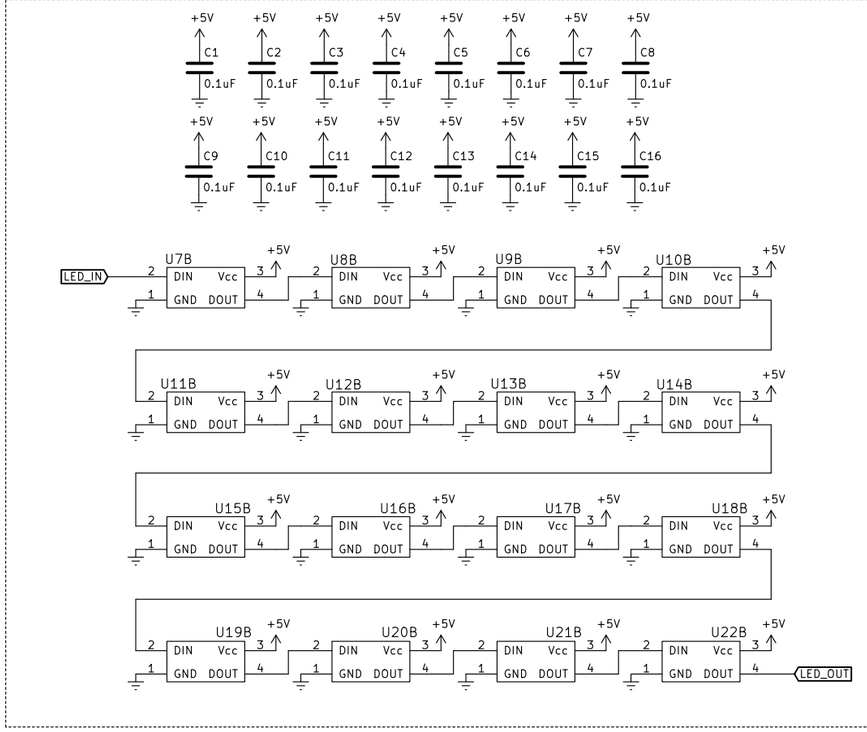
SD Card



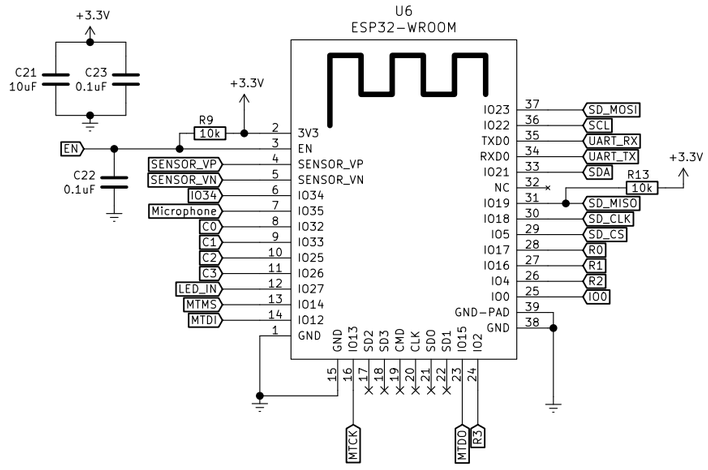
Power regulation



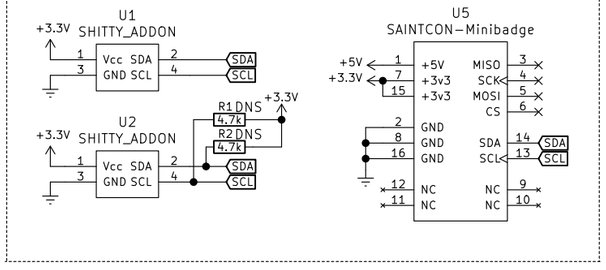
RGB LEDs



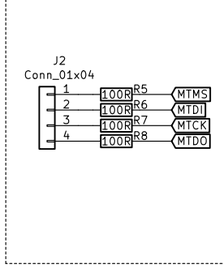
ESP32 Module



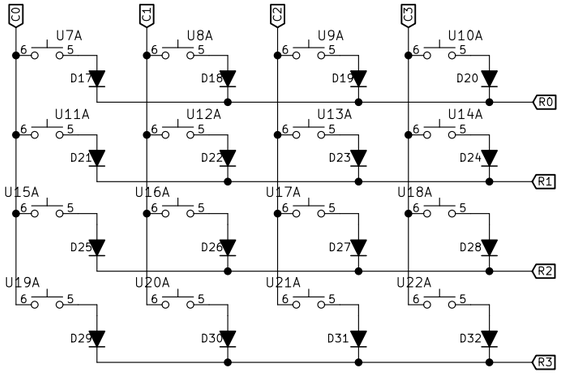
Addons



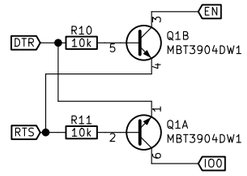
JTAG



Keygrid



Bootstrapping



The ESP32 will enter the serial bootloader when GPIO0 is held low on reset. Otherwise it will run the program in flash.

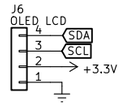
https://github.com/espressif/esptool/wiki/ESP32-Boot-Mode-Selection

DTR high, toggle RTS H->L to reset to run mode
RTS high, toggle DTR L->H to reset to bootloader

Bootstrap pins:

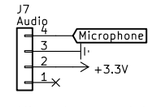
GPIO0 - H = SPI boot, L + GPIO2 L = Download boot
GPIO2 - See above
GPIO5 - See below
MTDI (GPIO12) - H = 1.8V VDD_SDIO, L = 3.3V (want L, default)
MTDO (GPIO15) - Couple with IO5 to determine timing of SDIO slave

OLED LCD



Connector is on the left
Pin 1 is at the bottom

Microphone



Microphone module

Batteries

Sheet: /		
File: KeyGridBadge.sch		
Title: DCZIA Defcon 26 Badge		
Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad (5.0.0-rc2-dev-321-g78161b592)		Id: 1/1