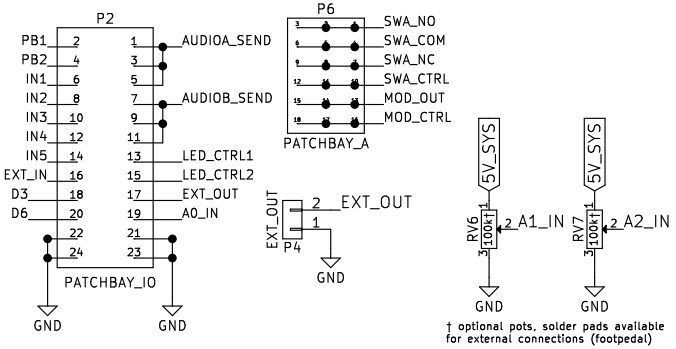
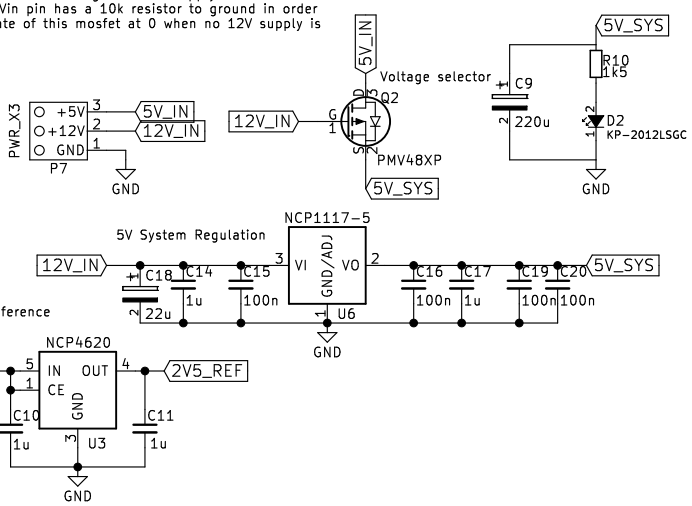
# PATCHBAYS

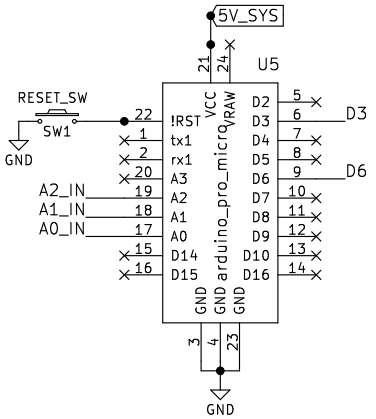



† optional pots, solder pads available for external connections (footpedal)

# POWER

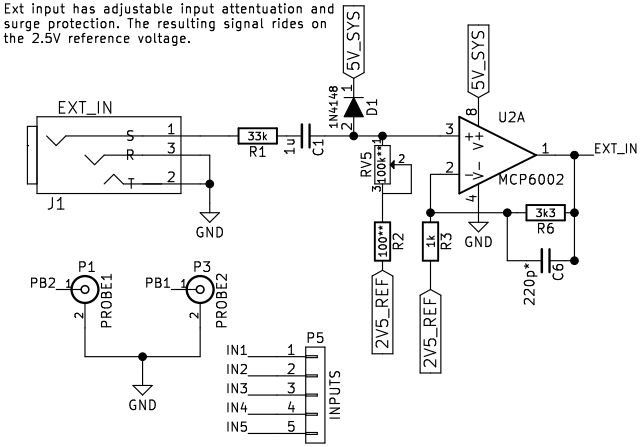
This circuit uses the NCP1117-5 LDO regulator on the Arduino Micro for power regulation.
The circuit can be supplied with a 12V supply from the iMac's power supply.
Or directly by the iMac's regulated 5V supply.
The Arduino's Vin pin has a 10k resistor to ground in order to keep the gate of this mosfet at 0 when no 12V supply is connected.

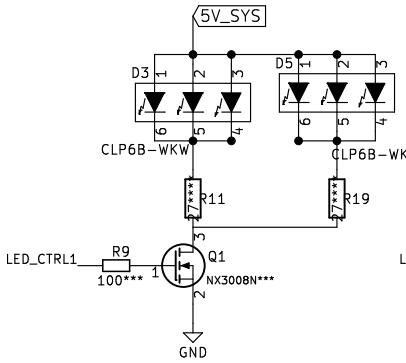


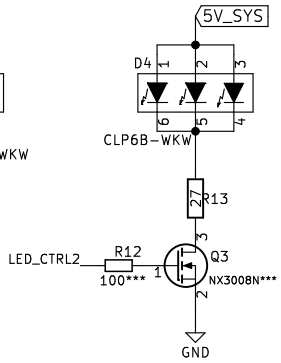




# EXTERNAL INPUT

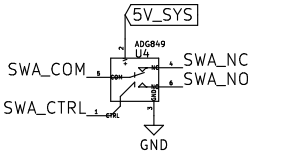
Ext input has adjustable input attentuation and surge protection. The resulting signal rides on the 2.5V reference voltage.

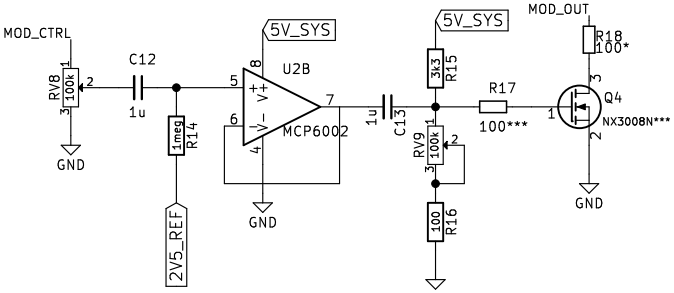


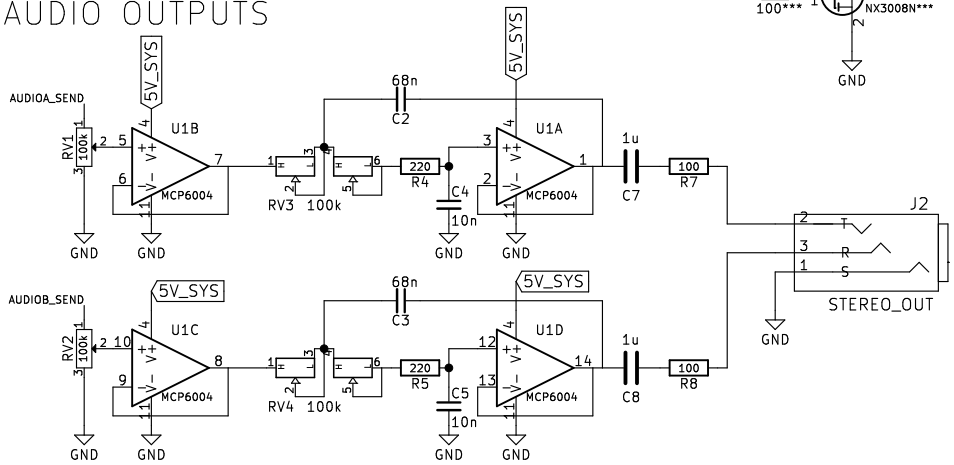




# SIGNAL MODULATION




# AUDIO OUTPUTS




* Resistors are optional. Can be connected with a solder bridge.
** Trimmer can be swapped for 1meg for higher input impedance
*** Replace/Experiment with BC817, and larger base/gate resistors
**** Choose one LED front or back

| | | |
|---|---|---|
| Sheet: / | | |
| File: imac-pcb.sch | | |
| **Title: imac patchbay** | | |
| Size: A4 | Date: 2017-01-06 | **Rev: 1** |
| KiCad E.D.A. kicad 4.0.5 | | Id: 1/1 |