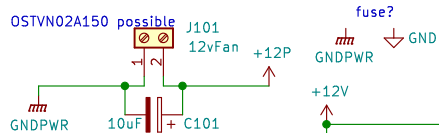


Powerpole for high current (pelt, fans, etc)  
db25 for low current (arduino, ICs, sensors)  
+12P - 12volt from powerpole  
+12v - 12volt from db25  
+5VP - 5volt from powerpole  
+5v - 5volt from db25  
GND - Ground from db25  
GNDPWR - Ground from powerpole

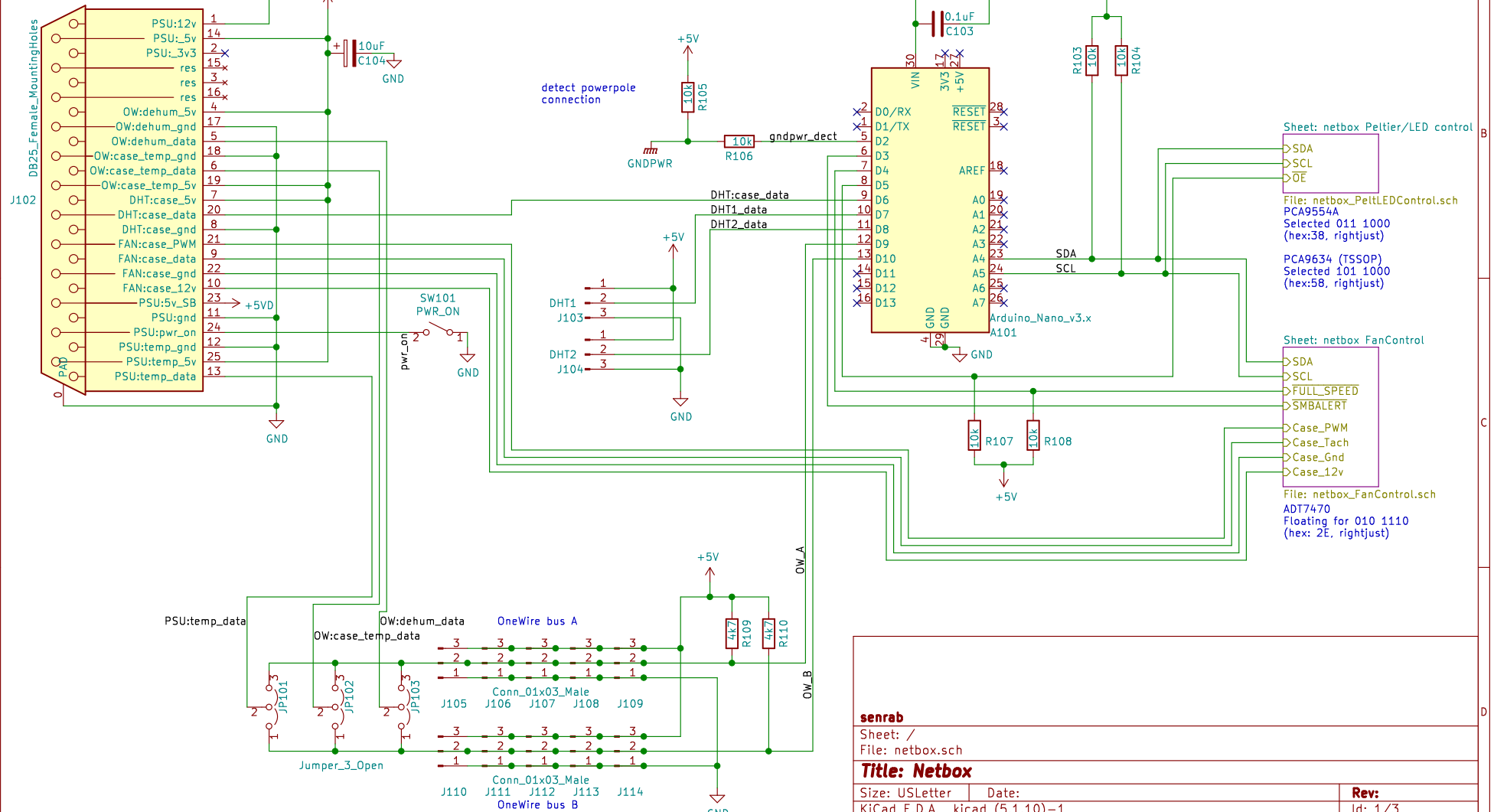
DB25 = 28gauge = 0.226 A



- controlled status LEDs
1. ard op
  2. pi communication
  3. Temp
  4. PCA9634 - Pelt array
  5. PCA9685 - Pelt dehum
  6. PCA9685 - Fans - intake
  7. PCA9685 - Fans - exhaust
  8. PCA9685 - Fans - Internal case

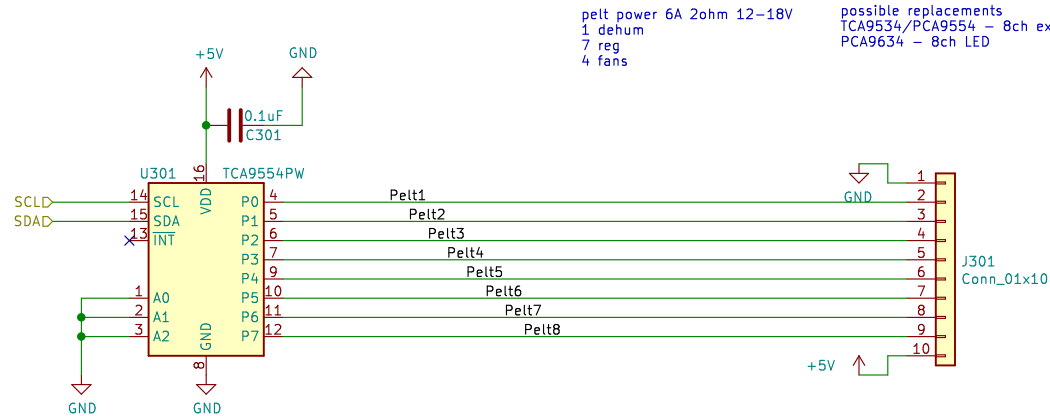
arduino 40mA max (w/o pin sourcing)  
ard sourcing 200mA  
pca9685 10mA max  
leds drain 400mA max 100mA realistic  
adt7470 0.8 mA max  
DHT22 2.5mA  
18b20 1.5mA max (x3)

POWER BUDGET OK!  
Everything from db25 except fans  
fan (12vp/gndpwr) on connector / screw term  
largest Noctua fan = 12V0.55A





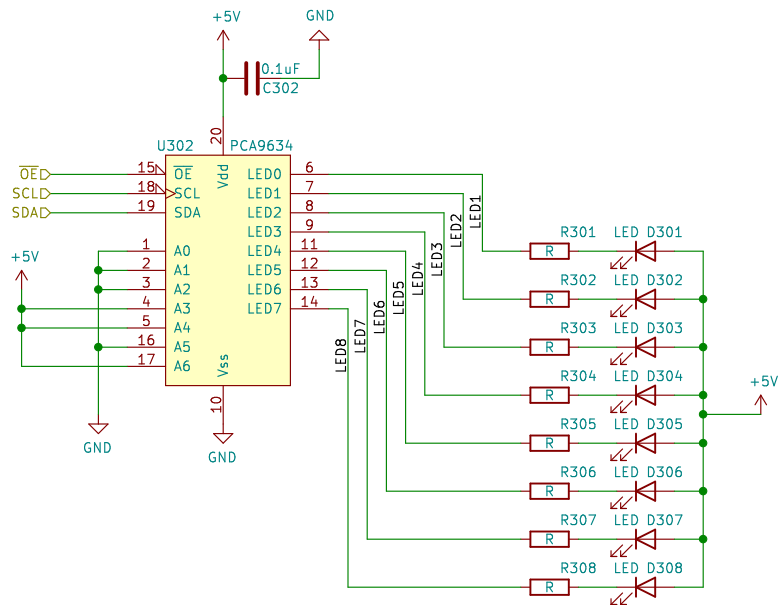
Selected 011 1000  
(hex:3B, rightjust)



pelt power 6A 2ohm 12-18V  
1 dehum  
7 reg  
4 fans

possible replacements  
TCA9534/PCA9554 - 8ch expander  
PCA9634 - 8ch LED

Selected 101 1000  
(hex:58, rightjust)



senrab

Sheet: /netbox Peltier/LED control/  
File: netbox\_PeltLEDControl.sch

**Title: Netbox - Peltier/LED Control**

Size: USLetter Date:  
KiCad E.D.A. kicad (5.1.10)-1

Rev:  
Id: 3/3