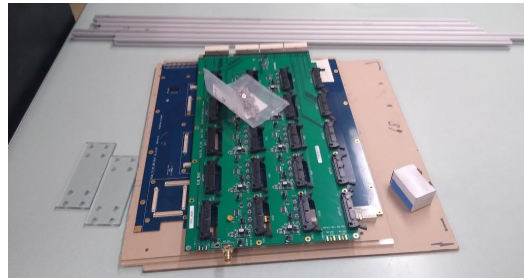


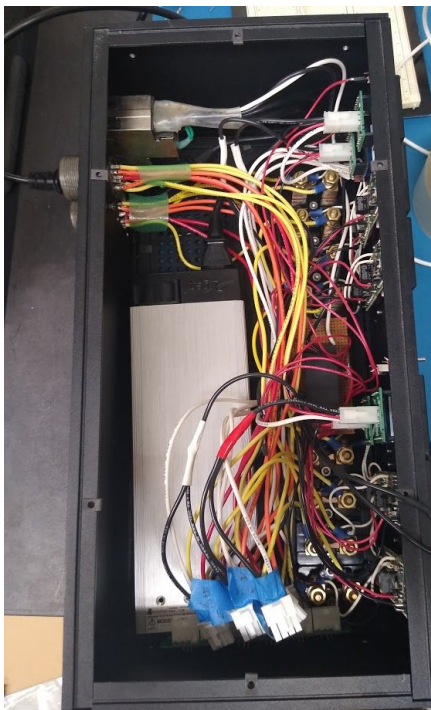
HMB

Boards support and Power supply
Salvador Ventura

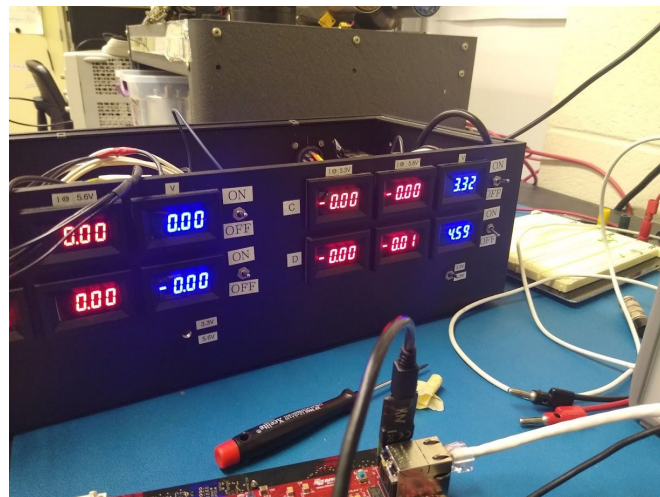
09/28/2020

- **Progress**
 - Working with Roy on the acrylic boards and cutting musumi bars. The acrylic boards are ready to be mounted.
 - Multimeter box for power supply.
 - Power supply assembled (Power Pac + Power Mod+ powerpac_panel_r7)
 - Rewiring for -5V
 - Circular connector replaced
 - Panel voltmeter tested
- **Plans**
 - Mounting the boards
 - Testing current measurements
 - Continue CAD models for fibers support

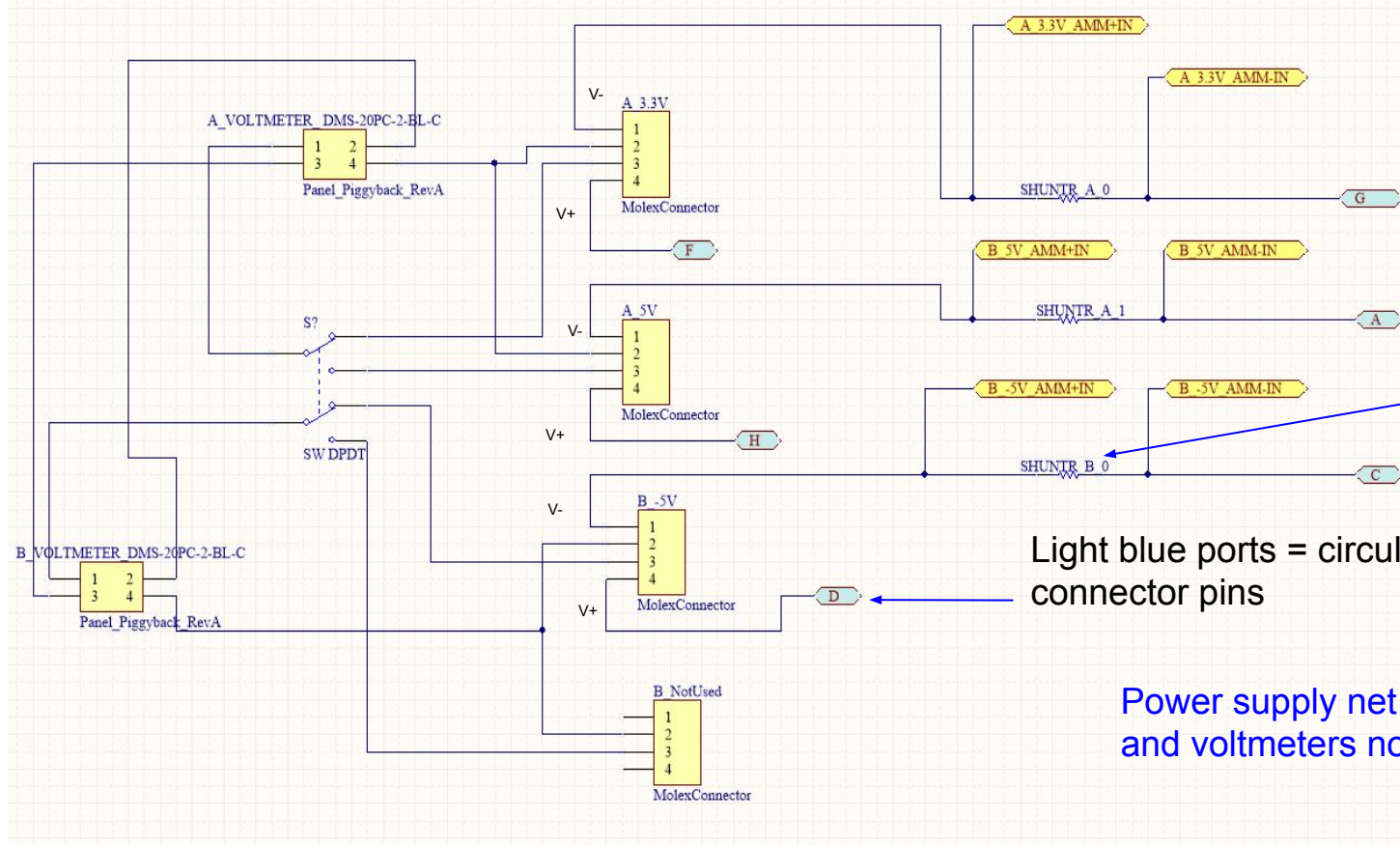




"New"
connector



Current setup, labels for voltage to be applied



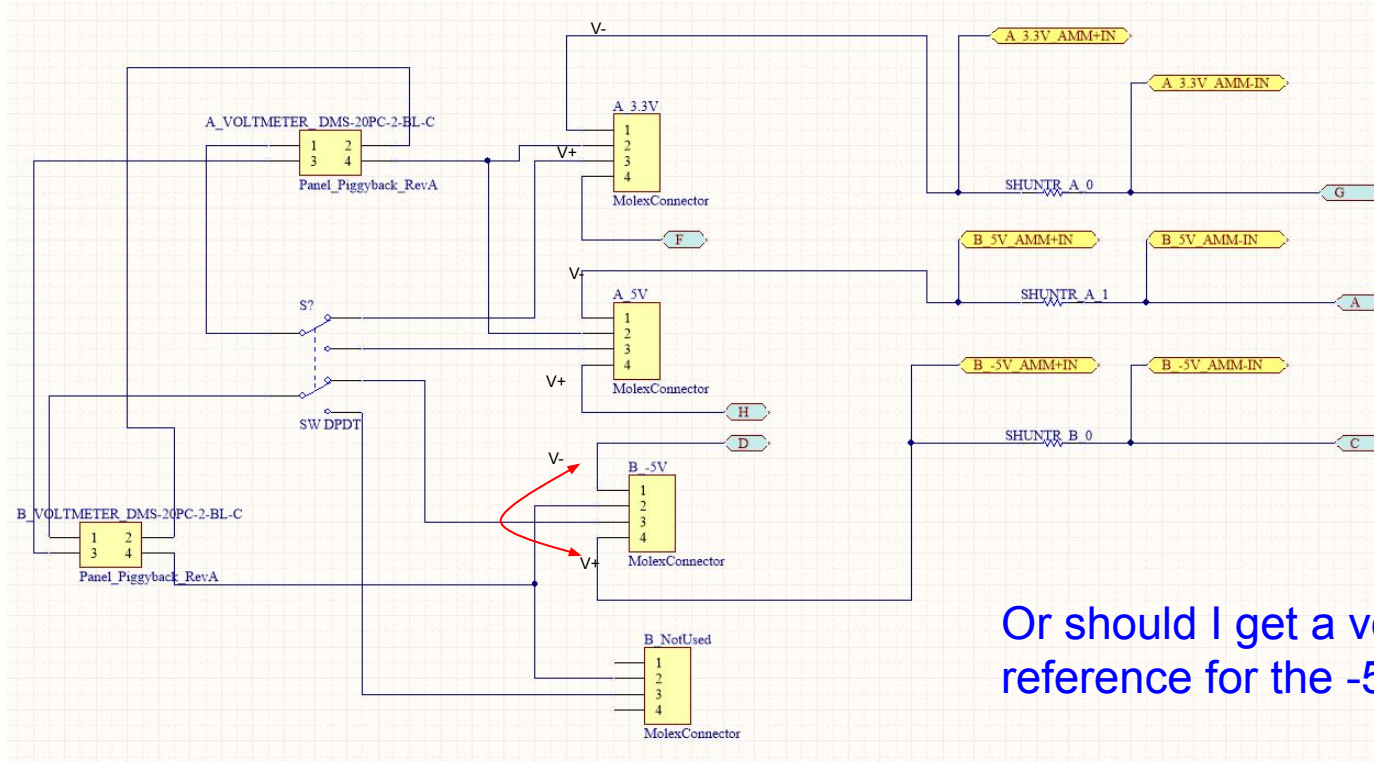
Yellow ports =
terminals in
ammeter

20mV, 40 A
Shunt
resistors

Light blue ports = circular
connector pins

Power supply net for ammeters
and voltmeters not included

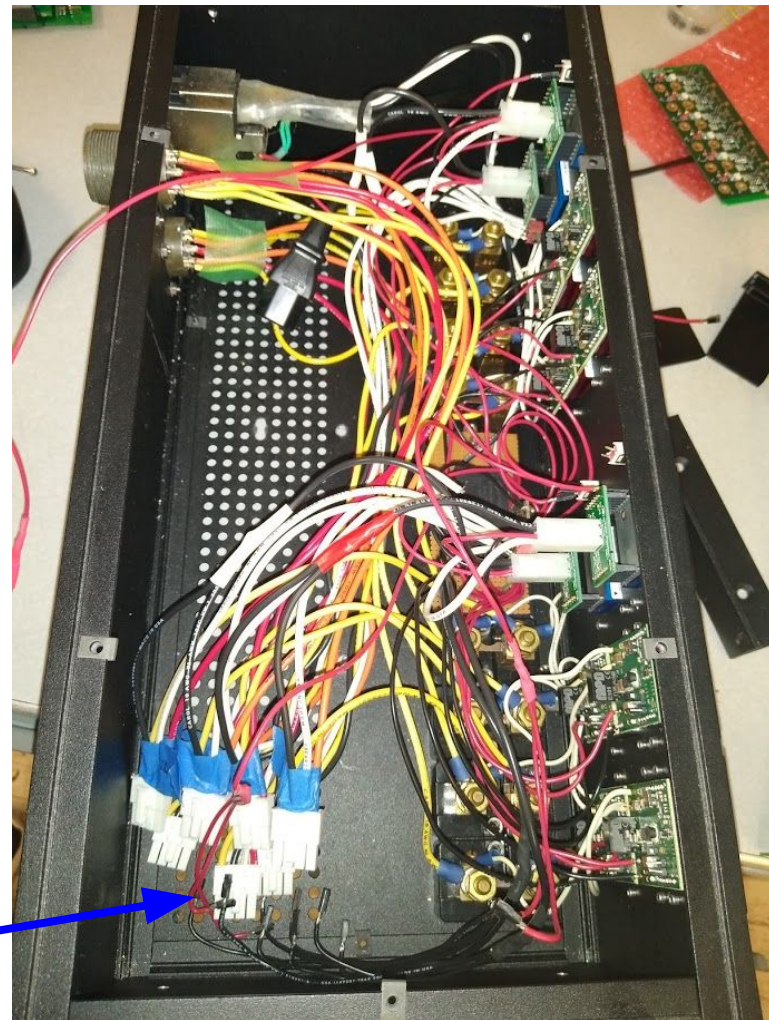
Plan to get -5V: swap cables for pin 4 and 1 of molex connector



Or should I get a voltage reference for the -5V ???



Molex connectors



AMMETER

DCA5-20PC-1-DC4-RL-C

Measuring positive and negative currents (bipolar operation): In applications where both positive and negative currents must be measured, Murata Power Solutions recommends using '-DC4' 8-36V isolated supply models. Negative current flow is denoted by the illumination of the display's negative (-) sign; the absence of a negative sign implies positive current flow. Contact MPS if you have any questions regarding bipolar operation of DCA5-20PC ammeters.

<https://www.murata.com/-/media/webrenewal/products/power/datasheet/dca520pc.pdf>

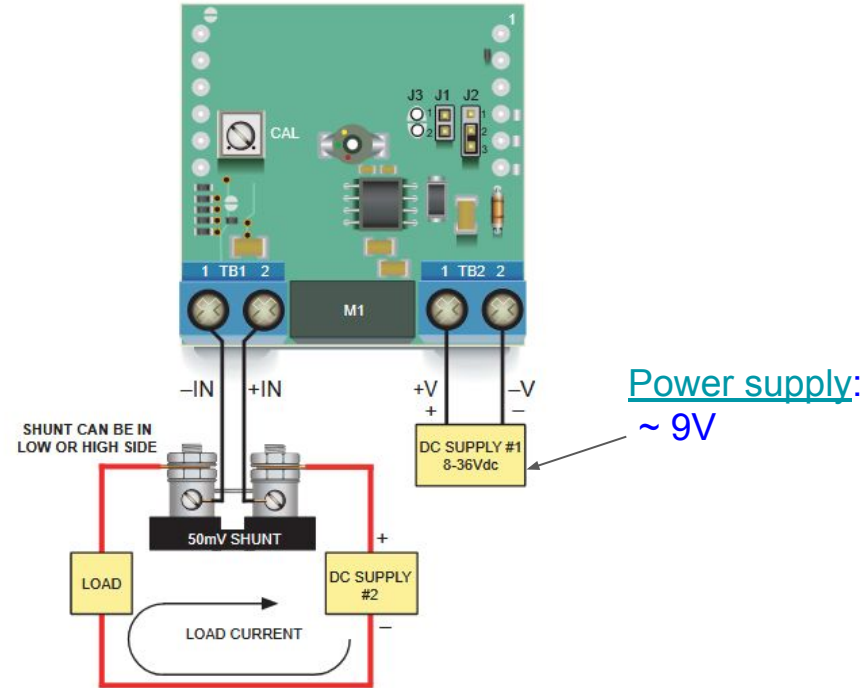


Figure 6. Using "-DC4" Isolated-Power Models to Maintain Isolation Between Two Power Supplies

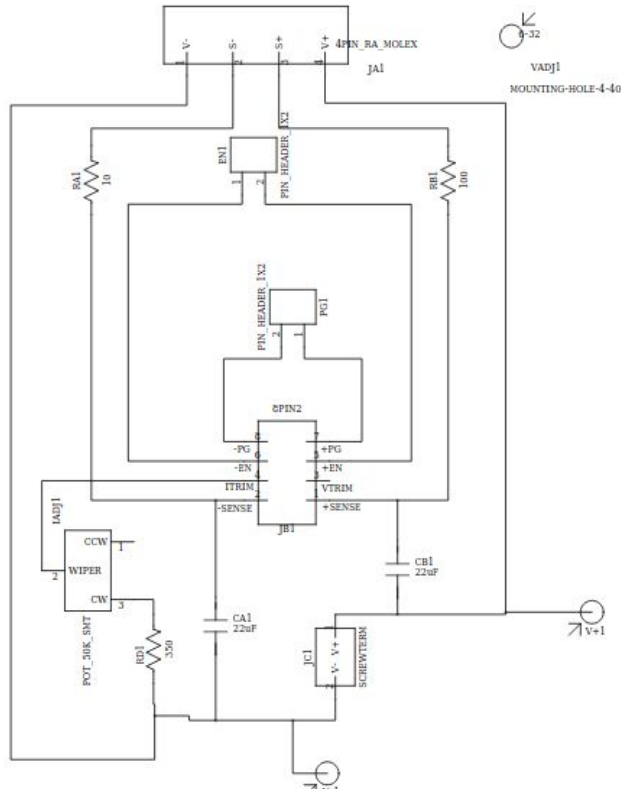
powerpac_panel_r7



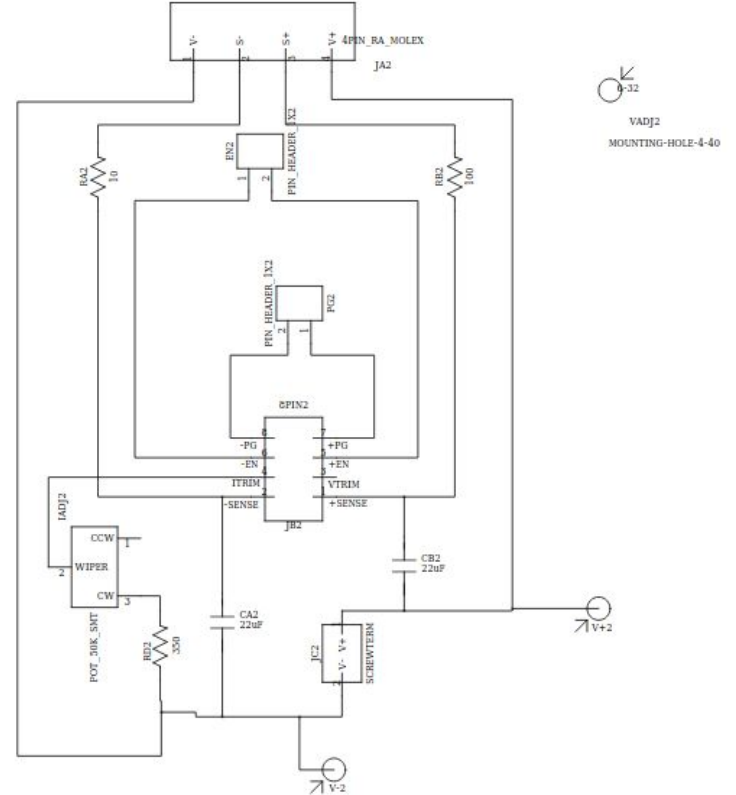
MOUNTINGHOLE1
MOUNTING-HOLE-6-32



MOUNTINGHOLE2
MOUNTING-HOLE-6-32



VADJ1
MOUNTING-HOLE-4-40



VADJ2
MOUNTING-HOLE-4-40