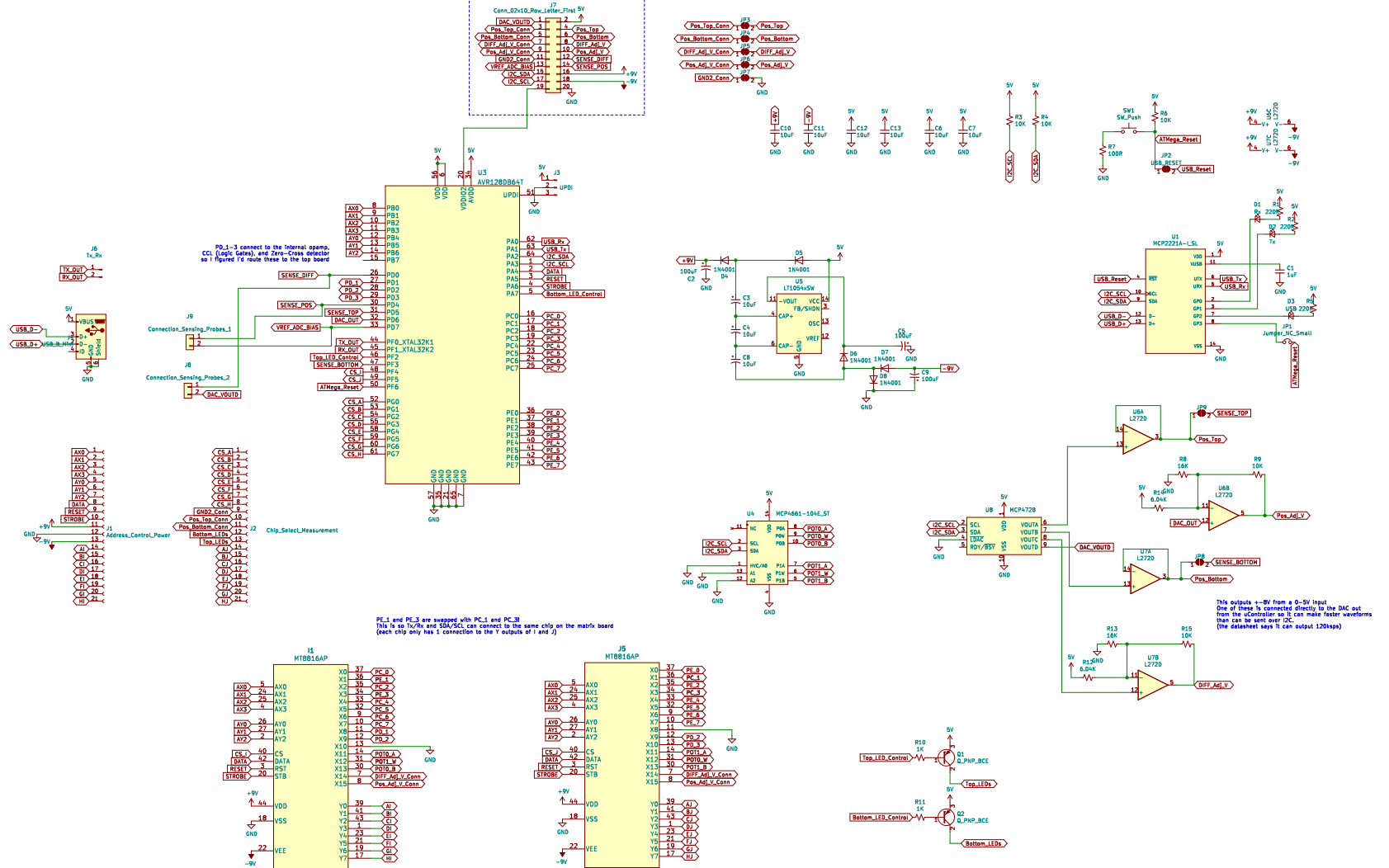This is a card edge connector that I won't populate for now

I was going crazy trying to figure out a simple enough way
to measure current from the bipolar power supplies without
being more expensive than every other component on the board
combined, So if we really want to measure current, we can make
a tiny PCB and just stick it in here and cut the solder jumpers.

https://www.digikey.com/en/products/detail/amphenol-cs-fci/10056847-101LF/5201796
https://www.amphenol-cs.com/media/wysiwyg/files/drawing/10056847.pdf

**J7**
Conn_02x10_Row_Letter_First

**U3**
AVR128DB64T

**U1**
MCP2221A-I_SL

**U5**
LT1054xSW

**U4**
MCP4661-104E_ST

**U8**
MCP472B

PD_1-3 connect to the internal opamp,
CCL (Logic Gates), and Zero-Cross detector
so I figured I'd route these to the top board

**I1**
MT8816AP

**J5**
MT8816AP

PE_1 and PE_3 are swapped with PC_1 and PC_3!
This is so Tx/Rx and SDA/SCL can connect to the same chip on the matrix board
(each chip only has 1 connection to the Y outputs of I and J)

the Wipers on POT0 and POT1 are swapped!
So they can connect to the same chip on the matrix board as one of the A or B inputs
(each chip only has 1 connection to the Y outputs of I and J)

This outputs +-8V from a 0-5V input
One of these is connected directly to the DAC out
from the uController so it can make faster waveforms
than can be sent over I2C.
(the datasheet says it can output 120ksps)

**U6A** L2720
**U6B** L2720
**U7A** L2720
**U7B** L2720