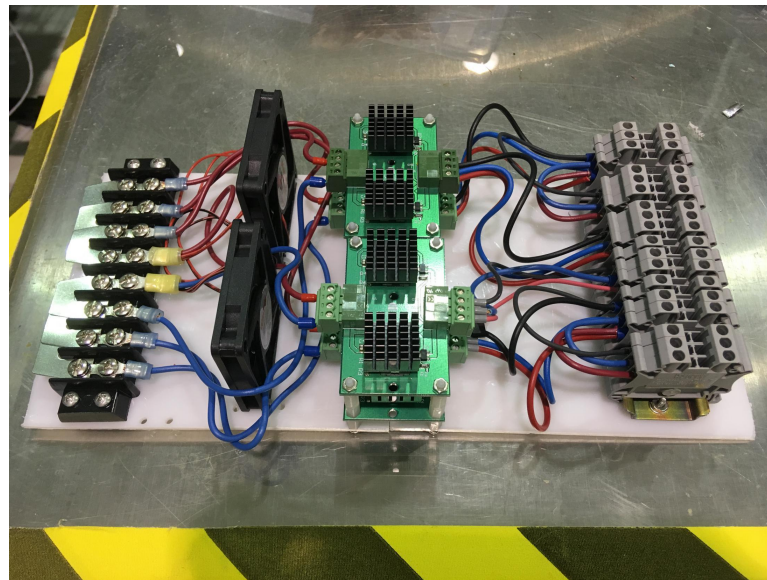


# GEM Commissioning Meeting 08/22/2019

Update of the UVa GEMs

- The in-layer low voltage power supplies are being built and we installed fans in to one of them and we will test it today to see whether they (“The regulator chips) stay below 50 C when operational.
- We did the “hand -touch” test and seemed like fans were working well to keep down the temperature compared to the one just with heat sink. Today we will use the IR camera Chuck will let us burrow.
- We are planning to measure the temperature **without the heat sink and fan, with heat sink and without fan and with both the heat sink and fan.**



- Yesterday we observed that there is an unusual voltage drop in layer #2 at the end of the back planes (especially ones furthest away from the in-layer power supply). The voltage drop of the “1.25 V” is the most prominent one. We observed that for the 12 slot back plane which is furthest away from the power supply it goes down as low as “1.16 - 1.20 V”.
- This particular power supply does not have the fans but the voltage coming out of the regulators were pretty decent (~2.6 V and ~1.26 V). Also, we changed wires to see whether it's because something faulty with the wires and it still gave the same result.
- Thus, we are still not sure what's causing this voltage drop...
- The layer #4 is in progress and we have four GEM modules placed on the layer and most of the HDMI cables and gas tubes has been routed. The GEM modules were shown to hold high voltage fine and we will go ahead with the assembly of the rest of the layer.