

## DSG-Ansys R&D Meeting Minutes

**Date:** June 16, 2022

**Time:** 14:00 to 15:00

*Attendees: Aaron Brown, Pablo Campero, Brian Eng, and Marc McMullen*

### 1. NPS thermal analysis

*Aaron Brown, Pablo Campero, Brian Eng, and Marc McMullen*

1. From pictures of the assembled detector enclosure, noticed that the electronic volume is isolated with foam
2. Discussed simulation results for a model with four fans with an inlet velocity of 3.3 m/s, at 20°C and the heat exchanger plate at 10°C
  - Preliminary results show a maximum temperature of 20.44°C

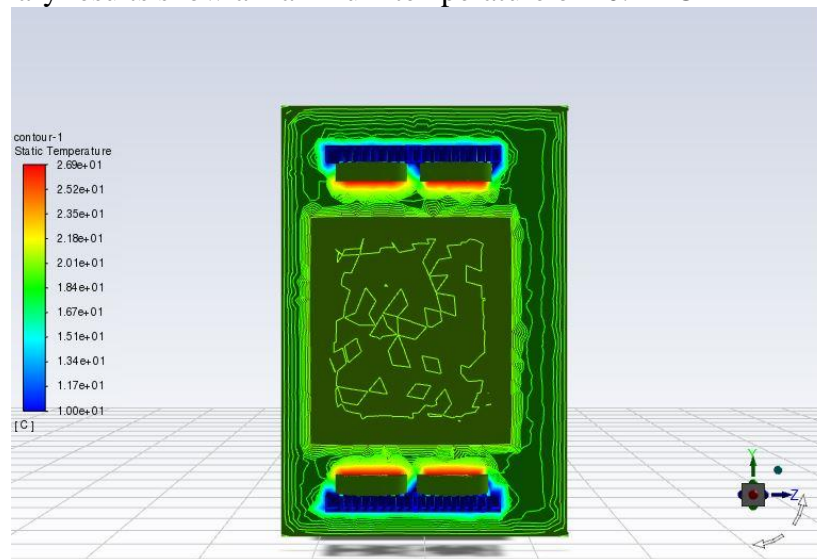


Fig.1 Preliminary results of temperature profile for the electronic volume, YZ plane view

3. Discussed velocity contour plot from the simulation
  - Agreed to run a simulation with a high value of 3000 m/s for the inlet flow velocity set on each fan and then compare with the plot when velocity is set at 3.3 m/s