

Nakuja Internship

Edwin Mwiti

Week 1 progress report

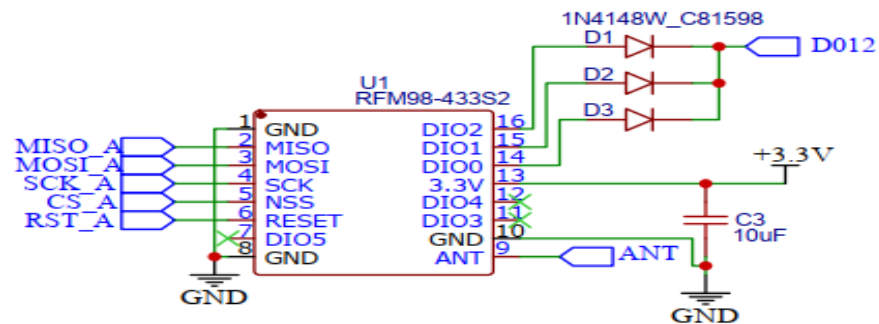
Tasks this week

- ▶ Get acquainted with Avionics and telemetry resources [Issue #4]
- ▶ Review computer 1 PCB
- ▶ Review computer 2 PCB
- ▶ Research on the necessity of having LoRa Modules on the Printed circuit boards
- ▶ Get acquainted with the on board PCBs controlling the telemetry and flight navigation

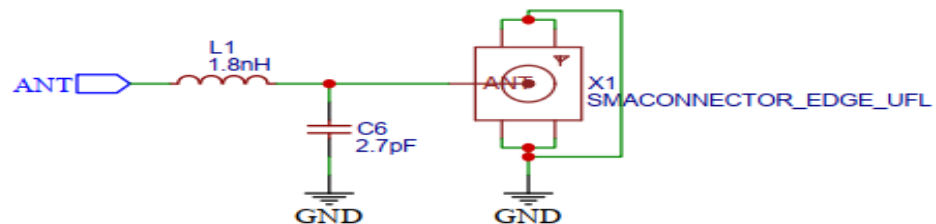
Findings

- Computer 1 and 2 were reviewed and there was no need for using LoRa modules on board because of speed requirements

LORA MODULE



LORA ANTENNA



Findings

- ▶ We instead need to work on designing the relevant Wi-Fi connections required for fast data transmission
- ▶ Components such as the MPU6050 accelerometer and the BMP180 have very sensitive data that needs to be cleaned and filtered before being used for decision making

Tasks last week

[#1 Research on data transmission]

[#43 Test and receive over LoRa]

[#44 Test send image over LoRa]

[#48 Test max distance of LoRa]

[#45 Test speed and bandwidth of LoRa]

Tasks this week

[#30 Research on camera module]

[#23 Avionics bay design]

[#18 Launch pad design]