

# Project Specifications

Team Rocket | NASA Near Space Senior Design Team

## End-of-Term Deliverables

- > High-altitude balloon flight demonstrating full system functionality
- > All hardware and software products ready for integration on TechEdSat

## Products

### Hardware

- > 9523 Iridium Modem Development Board
- > TechEdSat Communications/Carrier Board

### Software

- > 9523 Iridium Modem Teensyduino Library
- > JavaDoc-Quality Library Documentation Webpage

## Hardware Specifications

### Primary

- > Dev board
  - o Breaks out all 9523 functionality
  - o LED visual feedback
- > CubeSat board
  - o Standard CubeSat form factor
  - o Data interfaces to existing TechEdSat hardware

### Secondary

- > CubeSat board
  - o Integrate other peripherals TechEdSat needs

## Software Specifications

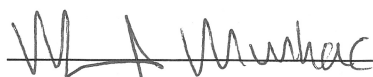
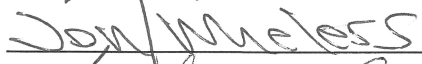
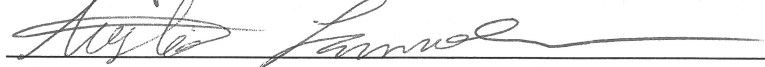
### Primary

- > Interface with the 9523 Iridium Modem
  - o Packet mode backward compatibility
  - o Data streaming capability
- > Unit Test
  - o 90% code coverage
- > Package into library
- > JavaDoc Documentation Webpage

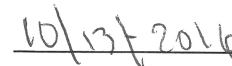
### Secondary

- > Ground support software
  - o Integrate with existing Flight Dashboard

## Sponsor Signatures

## Date

  
Oct 13, 2016  
10-13-16