

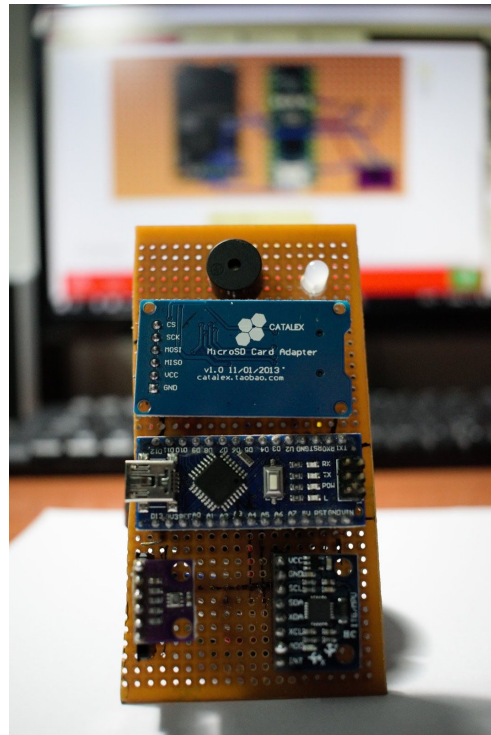


## Flight Computer Apogee Test #2

The Tejas Flight Computer is designed to detect various phases of flight and act accordingly. It has an accelerometer, gyroscope and a barometer for orientation and altitude data.

The Flight Computer was thrown in a parabolic trajectory to simulate the conditions during powered flight.

The sensors didn't perform well because the Avionics Bay has no opening to allow for the sensor perceive actual pressure change.



to

### High Altitude Drop Test:

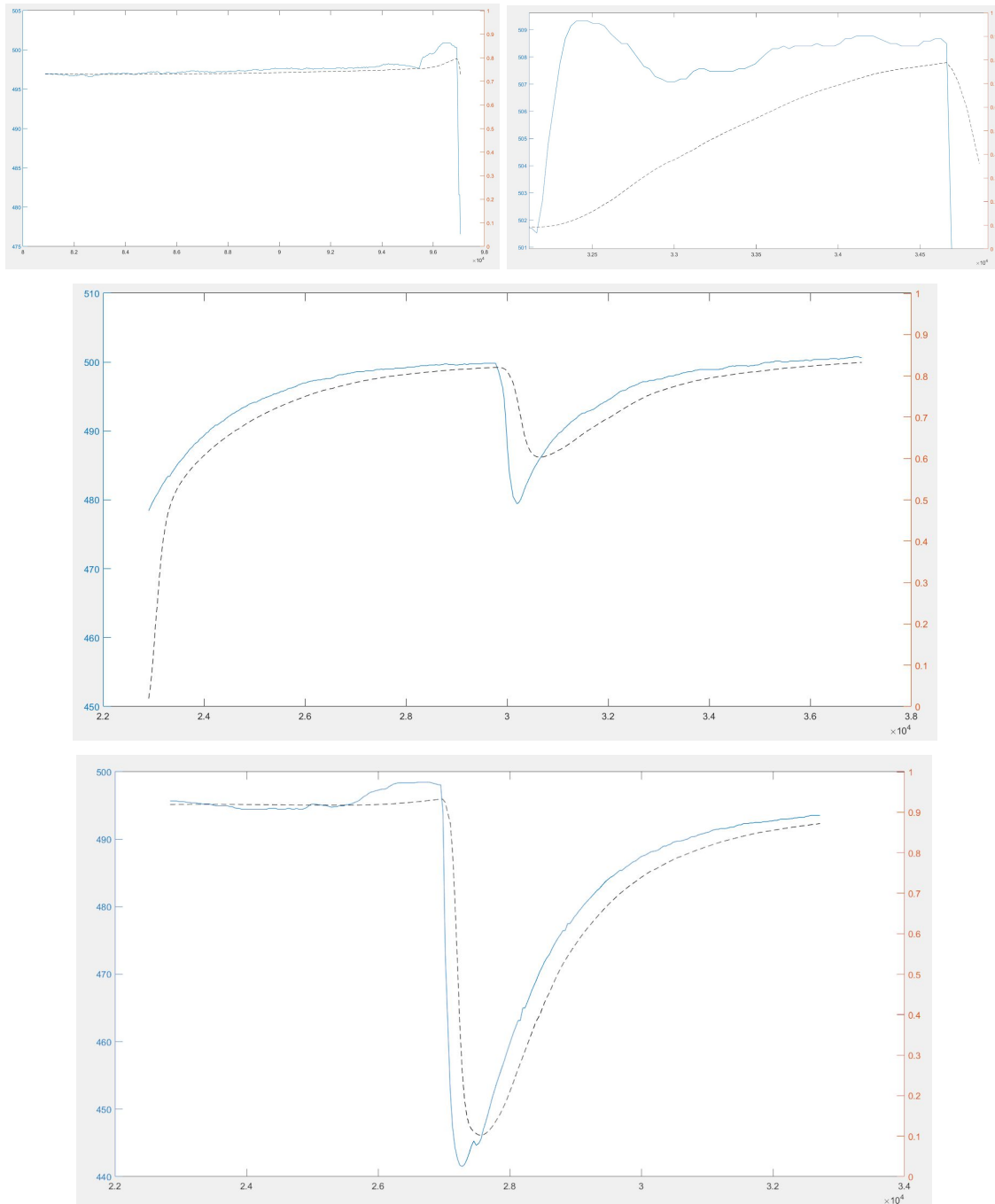
A high altitude drop test is necessary to test the integrity of the system if the rocket were to experience a terminal velocity crash. The test showed that the female header pins were the weakest part of the system. Also, the crash force destroyed the Arduino because of its contact with the inner wall of the Avionics Bay.

Some sort of cushioning could help the TEJAS flight computer survive the fall.

Here's the data:

## Reason for Inconclusive Data:

The BMP280 was enclosed in the Avionics bay with no air gaps. This caused the BMP280 to register false reading despite its flight trajectory. So, to allow the BMP280 breathe there has to be opening in the avionics bay.



More Pics:

