Cube1 project

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INTRODUCTION

The Cube1 project acts as a testbed and as an education payload for rockets. It is a cubesat that can do pretty much anything. The first model of it is made from PLA(PolyLatic Acid). The second version will be made PETG(Polyethylene terephthalate glycol). Currently the first version uses the Axion avionics unit which is 20 by 20mm, it features a BMI088 as the IMU and a BMP280 as a barometer. It also features the capability to print data onto a TLM display. I am still looking for a rocket to fly on right now but I am coming close to it. The second version, Cube2 will be made from PETG and will be bigger from Cube1 which is 44 by 44mm, Cube2 will be 75 by 75mm.

CUBE1

Cube1 is under development right now and will fly in late 2021 at URRG or ASTRE. I want to get Cube1 up to 4000 FT for a test flight but later tests will be going up to 8000 FT. There will be a 900MHZ radio on board to transmit data to the ground station and all the data will be displayed on a TLM display. During the duration of the flight there will be a BMI088(IMU) getting acceleration and gyroscope data and a BMP280 to collect altitude data. Lastly there will be a parachute on board using a spring ejection system on the top of Cube1. The first flight is called Polaris. Polaris will fly 5 to 6 flights.

CUBE2

Cube2 will be developed in 2022 and will include a new set of avionics. It will be made from PETG and will be 75 by 75mm. Cube2 will endure the same types of tests Cube1 goes through. Depending on how the testing of the live TLM goes the TLM might change or stay the same for Cube2 flights. Cube1 and Cube2 might later fly as a payload on the BTR rocket I have developed that uses the thrust vectoring method.

More updates will come soon about thing project