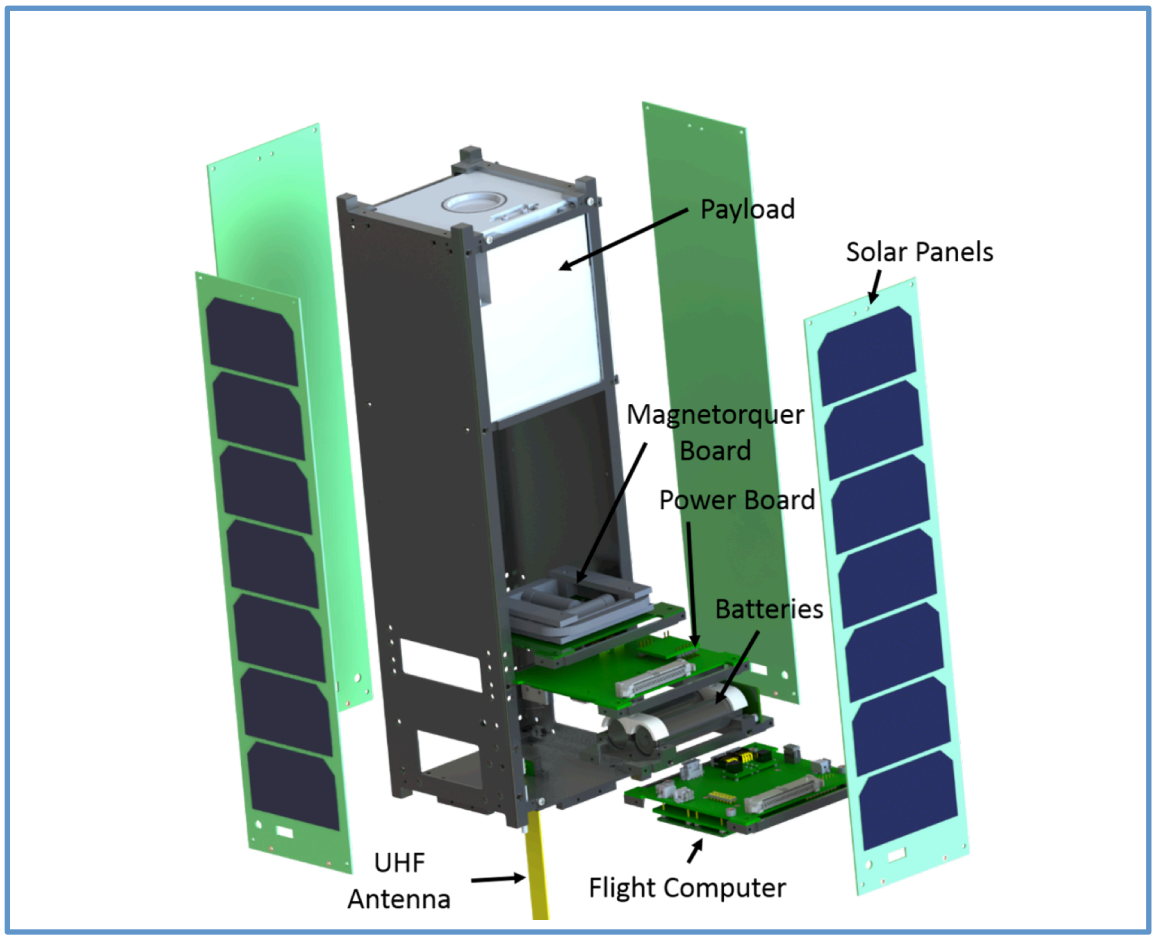
ELaNa 10 ODAR

GRIFEEX – University of Michigan/NASA JPL – 3U



Brief Overview: GRIFEX is a 3U CubeSat developed by the University of Michigan and NASA JPL manifested to be launched in October 2014 on a Delta-II rocket with the ELaNa 10 mission. GRIFEX houses a 1U imaging system built by JPL, which is designed to raise the technology level of the PanFTS, and imaging FTS designed for a geostationary imaging mission.

CONOPS: Upon P-POD ejection, GRIFEX will begin a countdown timer to delay antenna deployment and UHF beaconing. After 30 minutes have passed, GRIFEX will activate a burn resistor, deploying the UHF antenna. Approximately 45 minutes after P-POD ejection, GRIFEX will begin transmitting beacons via a UHF radio.

Materials: The GRIFEX structure is made of Aluminum 6061. The avionics contain PCBs, commercial off the shelf (COTS) electrical components, sensors, and solar cells.

Hazards: There are no pressure vessels, hazardous or exotic materials, or materials likely to be a re-entry concern.

Batteries: The electrical power storage system consists of Panasonic cylindrical Lithium-Ion cells (Panasonic NCR18650A) with overcharge/current protection circuitry. The cells carry the UL-listing number MH12210.