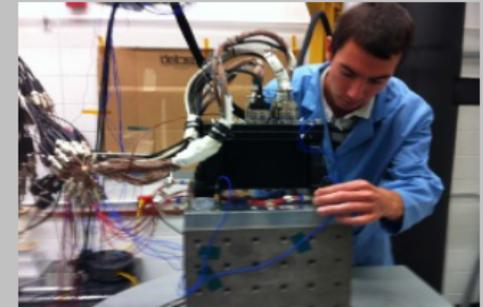


# Next Generation High Fidelity Flight Data Acquisition System (HIDAQ)



- ◆ Flight-qualified 24-bit, 100,000 samples per second data acquisition unit (HIDAQ) prototype for flight dynamic environment and response assessments.
- ◆ Environments / Responses include:
  - Ignition overpressure    • Lift-off acoustics    • Global structure / Component accelerations
  - Aeroacoustics    • Re-entry acoustics    • Propulsion system pressures
- ◆ Will be value added to multiple flight programs over multiple centers:
  - Launch Vehicles    • Flight/Space Payloads    • Propulsion System testing

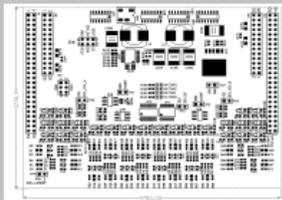


Testing

Chassis



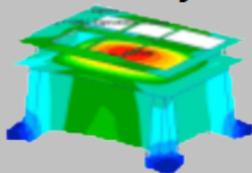
Boards



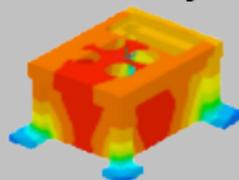
HIDAQ Unit  
28lbs, 11" x 10" x 7"



Structural Analysis



Thermal Analysis



## Future Development

Partnership of High Fidelity Data Acquisition Capabilities with High Rate Telemetry and Mobile Ground Receiver Technologies

- PULSAR -> X-band Telemetry
- GATR -> High Rate Ground Receiver

