Lepton Balloon

Introduction

* Horizon Sensor Overview

Mission objectives

* Lepton Vetting
* Melexis Vetting
* Horizon Data Acquisition

Functional Block Diagram

Hardware overview

* Lepton
* Melexis
* Pi Zero
* Pi Visible Camera

Electrical Design

* Pi Baseboard
  + Description
  + Schematic
  + Layout
  + Errata
* Lora Board
  + Description
  + Schematic
  + Layout
  + Errata
* Lepton Breakout
  + Description
  + Schematic
  + Layout
  + Errata

Software Architecture

* Balloon Pi
  + Program Flow Diagram
  + Lepton Interface
  + Melexis Interface
  + Temperature Sensor Interface
  + Pressure Sensor Interface
  + Heater interface
  + Servo Interface
  + Visible Camera interface
  + GPS interface
  + Arduino Interface
* Balloon Arduino
  + I2C Slave Interface
  + Radiohead Interface
* Ground Pi
  + Arduino Interface
* Ground Arduino
  + I2C Slave Interface
  + Radiohead Interface