P1 BMS Guidelines

Purpose

The purpose of this document is to document and plan the future implementations needed once the hardware is connected and the electronics system is in place.

Component Details

The purpose of the BMS is to monitor the state of rechargeable batteries.

To meet the <u>overall & subsystem requirements</u>, the things *the BMS* needs to do are:

- 1. Power the internal power supply
 - a. Connect the I7 and I6 together connected to a fuse
- 2. Connect the probes to the cells and bms to monitor the temperature and voltage of the cells
- 3. Set up the operator interface
 - a. https://www.nuvationenergy.com/sites/default/files/resources/babbage/Nuvation-BMS-Operator-Interface.pdf
- 4. Connect the bms to the pixhawk using CAN

Timeline

{Please color code the list in the previous section with the following key}

Low Priority

Medium Priority

High Priority

Additional Details and Notes

Here is the link to the software guide -

https://www.nuvationenergy.com/sites/default/files/resources/babbage/Nuvation-BMS-Software-Reference-Manual.pdf

Gives a more detailed view into the bms and how everything connects:

https://www.nuvationenergy.com/sites/default/files/resources/babbage/Nuvation-Energy-Low-Voltage-BMS-Installation-Guide 2.0.pdf

Supporting Documentation (For Reference)

Concept of Operations
Allocation Requirements
SDR - Internal Version
Design Logic