

Team: P18262 - EVT BMS

Engineer: Greg Malanga

Entering Phase: Preliminary Design Review

What did I plan for the system design review, and what did I get done?

1. I planned on researching current sense methods. I did a comprehensive analysis and test with these two methods. My work has helped the team in concept selection.
2. SoC estimation techniques. This was meant to be a group effort with Murali. I did not spend much time on this subject. I did not contribute in a significant way to the team in this area.
3. SoH techniques. Did not spend much time on this area. Still needs to be done in the next phase.
4. Power specs of the LVSS are still up in the air. No power requirements have been determined. 5V and 3.3V buses will be required for master and slave boards. No further research has been done.
5. Ensure master-related decisions don't conflict. Throughout Phase 2, no blocking issues have risen. This task is on-going through the next phases.
6. Project created in Altium, and I created some components.
7. I worked on balance current equations and discharge estimations.
8. I did the Pugh analysis for current sensing and both safety categories.
9. I wrote test plans for current sensing and BMS chip demo boards.

What do I plan on doing to ensure that Team P18262 has a successful Phase (Preliminary Design Review) review?

1. I will supervise the hardware design (schematic entry to Altium) and make sure team members do what is assigned to them. I will do my part in schematic capture as well with the BMS chip and balancing/discharge array.
2. I will be sure to double check people's work and try to find any potential errors in either schematic or pcb design. Likewise for custom components created in altium.
3. I will work on the BMS chip test plan and execute it, in order to verify functionality of our selected design.
4. I will help in speccing out components for the discharge array.
5. I will implement our selected safety related solutions in the schematics and at a system level.
6. I will help with schematic integration, to make sure things match up where they need to.

You will answer these three questions when you submit at the end of Phase (Preliminary Design Review).

1. What did I actually do?
2. What did I learn?
3. What do I plan to do to ensure my team succeeds in Phase 3?