Battery Pack

Hardware Requirements:

1. The pack shall be able to power the car ( 28v at x.xx A) for up to 2 hours.
2. The pack shall be able to plug into the cars electrical system.
3. The pack shall be fused to protect the battery pack.
4. The pack shall have the ability to charge itself. (from external power source TBD)
5. The pack shall have a service life of 2+ years.
6. The pack shall run in racing temperature environments.
7. The device shall be able to be stored up to 6 months.
8. The battery pack must be able to perform battery management tasks by itself.

* Balance
* Current
* Voltage
* Temperature
* State of Charge

Software Requirements:

1. The battery pack shall communicate status to the car.

* Battery status (charging / discharging)
* Battery Capacity remaining
* Battery current draw
* Battery temperature

1. The battery pack shall be able to perform battery management tasks by itself.

* Balance
* Current
* Voltage
* Temperature
* State of charge

Mechanical Requirements:

1. The battery pack shall be capable of (TBD) force in the XYZ direction.
2. The pack fuse shall be serviceable.
3. weight limit: TBD
4. size limit: TBD