BATTERY MANAGMENT SYSTEM
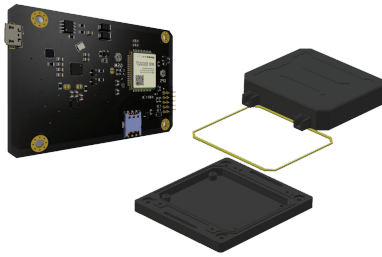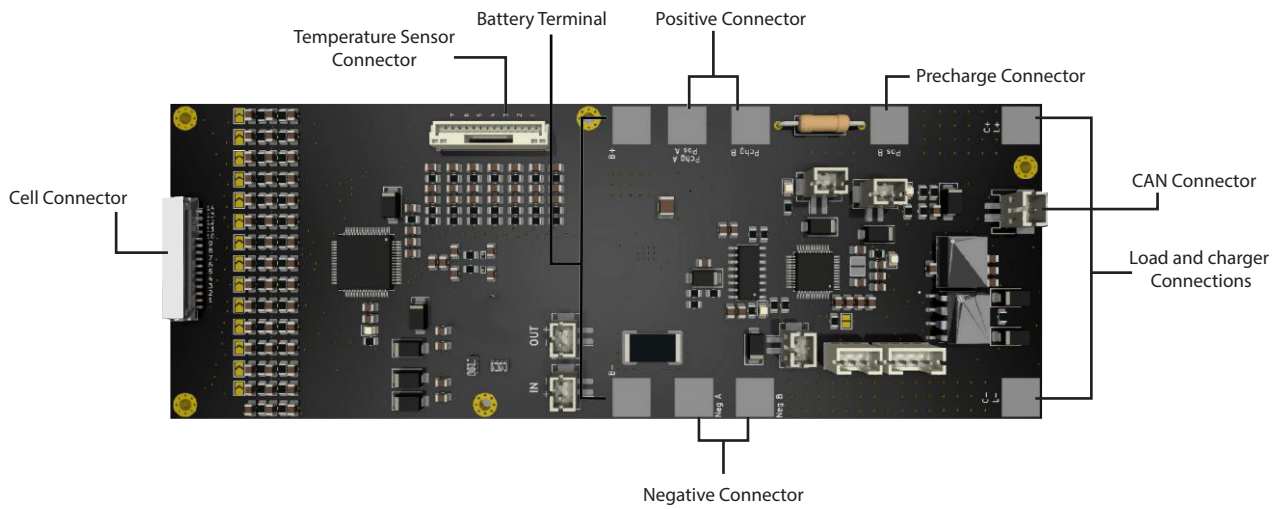

BMS is an advanced battery managementsystem with robust protection mechanisms, predictive algorithms, and detailed mathematical models to characterize cells and estimate thecurrent state of the battery pack.
It is also designed to be highly modular, with the ability to easily configure the hardware and software for multiple voltage and current levels.

Temperature Sensor Connector · Battery Terminal · Positive Connector · Precharge Connector · Cell Connector · CAN Connector · Load and charger Connections · Negative Connector

Hardware Configuration

- Voltage Range - 12 V to 3 kV
- Max. no. of modules in daisy chain - 6 3
- Max. no. of cells per module - 14 S
- Max. continuous current - 50 A
- No. of Temperature Sensors - 5 per module
- Balancing Technology - Passive
- Balancing current - 30 0 mA
- CAN Communication - Yes
- UART debugging - Yes
- Protection Mechanism - Relay
- IoT Functionality (with GPS) - Optional
- Main board PCB Dimensions - 16 0 x 58 x 10 mm
- Additional Module PCB Dimensions - 80 x 58 x 10 mm
- SoC Estimation - Coulomb Counting

Fault Protections

- Short Circuit
- Over Current
- Over Temperature
- Under Temperature
- Over Voltage
- Under Voltage
- Low SoH
- Insulation monitoring
- Low SoC

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