

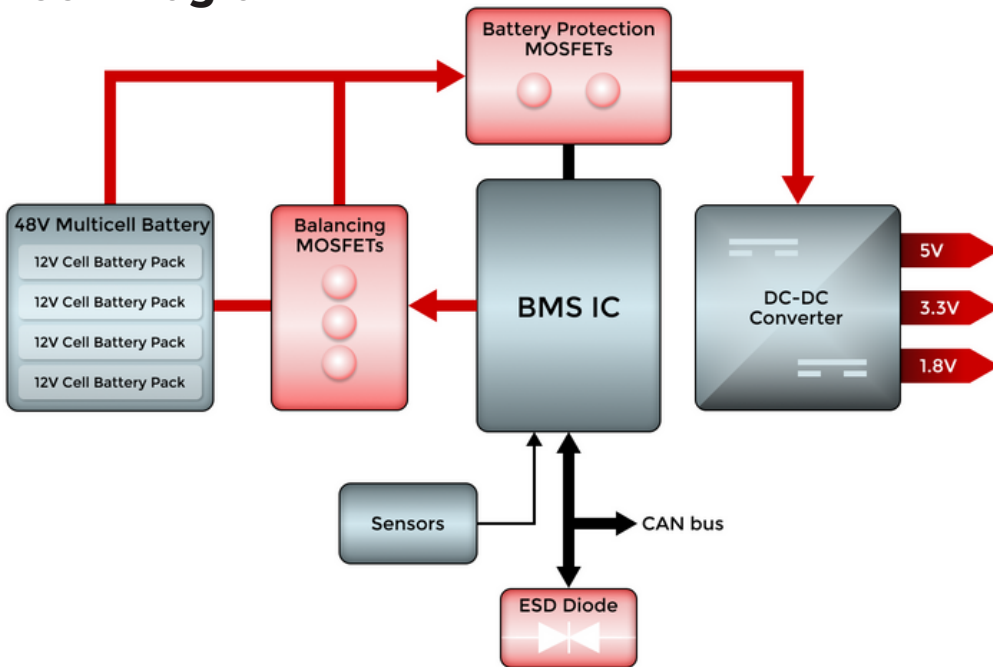
EV BATTERY MANAGEMENT SYSTEM (BMS)

Essential for Safe, Reliable Operation

Real-time Performance Meets Multiple Responsibilities

While EV batteries are the most expensive component, battery management systems do much of the heavy lifting in ensuring the vehicle runs smoothly. From optimizing performance and alerting the driver of any issues to communicating the battery's state of charge and state of health, effective BMS design is essential.

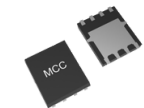
Block Diagram



Design Considerations:

- Charge/discharge
- Efficiency
- ESD and transient suppression
- High current handling
- Fast switching
- High-temperature capability
- Low on-resistance
- Low reverse recovery time
- Applicable industry standards

Recommended Products



Balancing MOSFET
Power MOSFET
40V

✓ AEC-Q Qualified

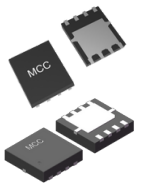
- [MCACL320N04YQ](#)



CAN/BUS
ESD Protection
15V - 24V

✓ AEC-Q Qualified

- [ESD1524D3BHE3A](#)
- [ESD24VD3BHE3](#)



Battery Reverse Protection
Power MOSFETs
40V - 60V

✓ AEC-Q Qualified

- [MCACL320N04YQ](#)
- [MCG53N06AHE3](#)