

AVL Battery Management System 5th Generation



Development Platform, Prototype Application or Serial Development – Meet AVL’s State-of-the-Art solution for Battery Management.

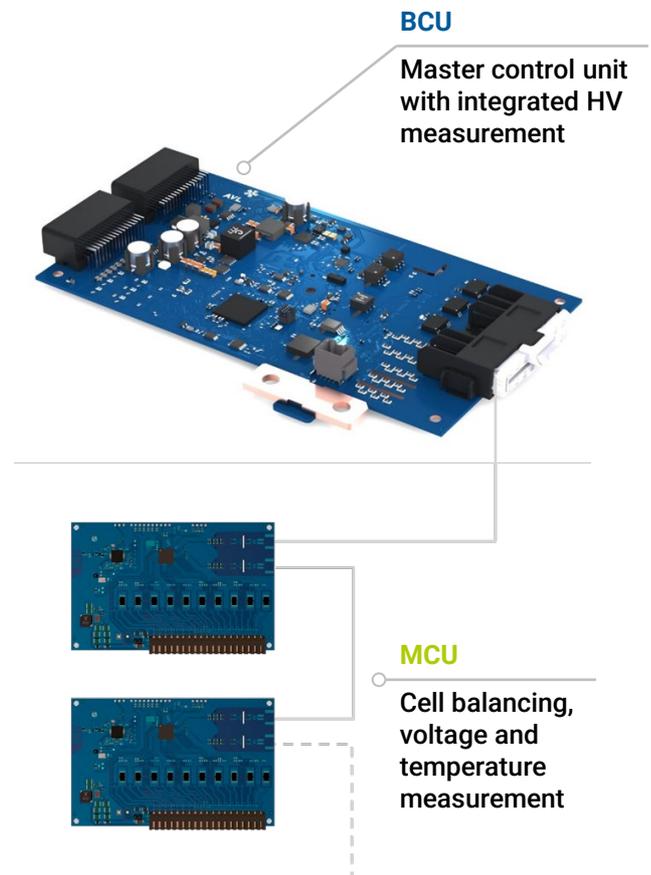
The AVL high-voltage Battery Management System (BMS) is engineered for highly flexible battery solutions up to 1,000 V. It ensures complete functionality for safe and secure battery operation and monitoring. The platform complies with the ASIL D standard according to ISO 26262 for functional safety and ISO/SAE 21434 for automotive cyber security. It features CAN, Ethernet, and isoSPI communication interfaces, contactor control with voltage booster interfaces, HV and isolation measurement, pyrofuse control, and spare I/Os for integrating additional sensors and actuators.

CUSTOMER BENEFITS

The modular system platform provides the flexibility to adapt to customer-specific requirements in various applications – hardware and software.

AVL CONTRIBUTION

- BMS development experience for more than 15 years
- Customer support in all stages of the development process – from first drawing to SOP
- State of the Art BMS platform including hardware, basic software and application software
- **Optional:** wireless interface (add-on board) and onboard shunt current measurement



TECHNICAL FACTS

Battery Control Unit (BCU)

- Battery system voltage: up to 1,000 V
- External HV measurement unit: up to 1,500 V
- MCU: Cell monitoring based on ADBMS6832
- Infineon 32-bit AURIX™ TC367
- Microcontroller platform
- Suitable for 12 V and 24 V low-voltage boardnets
- Passive balancing with 300 mA