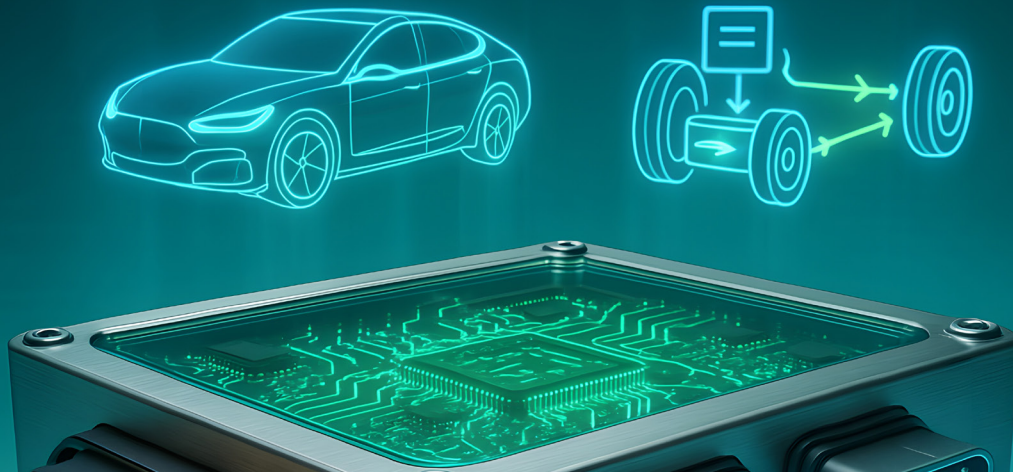


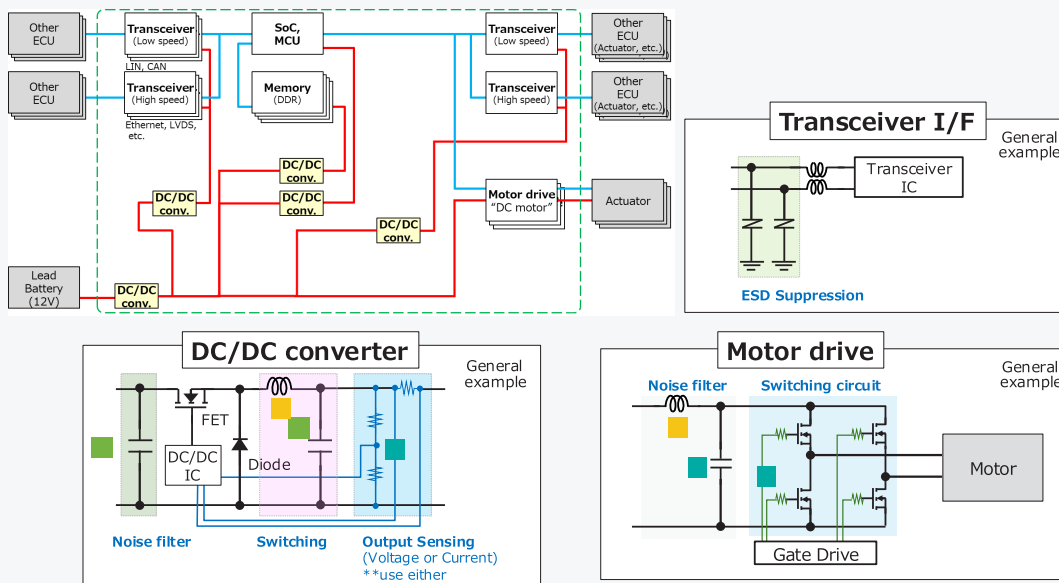


Vehicle Control Unit (VCU)

The Vehicle Control Unit (VCU) is often referred to as the “brain” of the vehicle, particularly in electric and hybrid vehicles. It is responsible for managing and coordinating various electronic systems within the vehicle, ensuring they operate harmoniously. The VCU interacts with multiple Electronic Control Units (ECUs), such as the Motor Controller (MCU), Battery Management System (BMS), and On-Board Charger (OBC), to facilitate efficient vehicle operation.

Block Diagram:

Each circuit



Our devices

Hybrid capacitor

Power inductor

SMD resistor



Design consideration:

- Large current
- Low loss
- High frequency
- High precision
- Miniaturization

Recommended product:

Capacitor

- Hybrid capacitors ([ZC](#) / [ZKU](#) / [ZV](#) / [ZL](#))

Power inductor

- Low cost / low profile series ([LE](#) / [LP](#))

Resistor

- High precision resistors ([ERJPC](#))
- High power resistors ([ERJB](#) / [ERJP](#))