

ELECTRIC POWER STEERING (EPS)

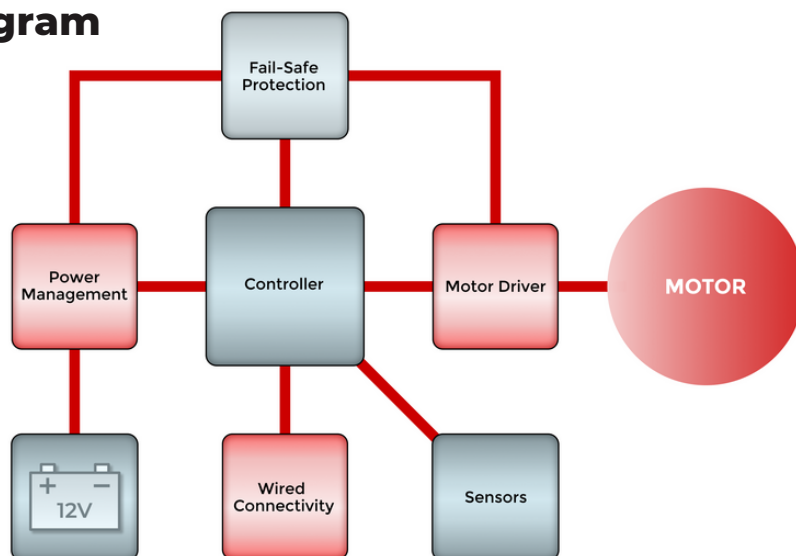
Enhancing Safety and Simplifying Operation

Optimizing Efficiency & Control for EVs and Automotives

Electric power steering utilizes a small electric motor connected to strategically placed sensors to measure how much torque the driver is applying to the wheel and increasing or decreasing power to the steering column in real time. As vehicles become more intelligent and helpful for drivers, EPS design will play a crucial role in driver safety.

Brushless DC (BLDC) motors are relatively compact and cost-effective EPS solutions that deliver long-lasting performance, easy installation, and reduced EMI noise.

Block Diagram



Design Considerations:

- Energy efficiency
- High-temperature capability
- High current handling
- Low on-resistance
- Fast switching speed
- Low reverse recovery time
- EMI protection

Recommended Products

Schottky Barrier Rectifiers

100-200V

✓ AEC-Q Qualified

- [SS110Q-L](#)
- [SK210Q-L](#)
- [SK310Q](#)

Power MOSFETs

40-60V

✓ AEC-Q Qualified

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

MOSFETs

40V - 60V

✓ AEC-Q Qualified

- [MCACL320N04YQ](#)
- [MCU75N06YHE3](#)

ESD Protection

5 - 24 VRWM

✓ AEC-Q Qualified

- [ESD1524D3BHE3A](#)
- [ESD24VD3BHE3](#)
- [ESDSB5V0D3BHE3](#)