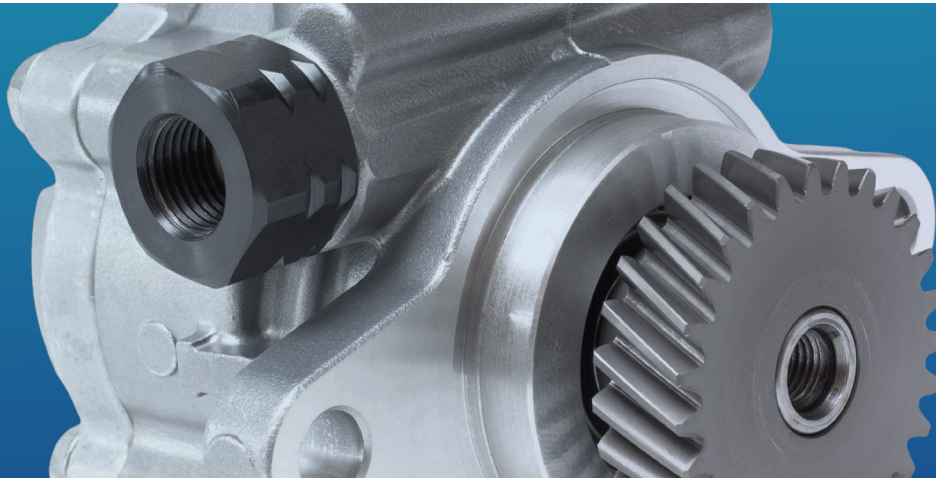
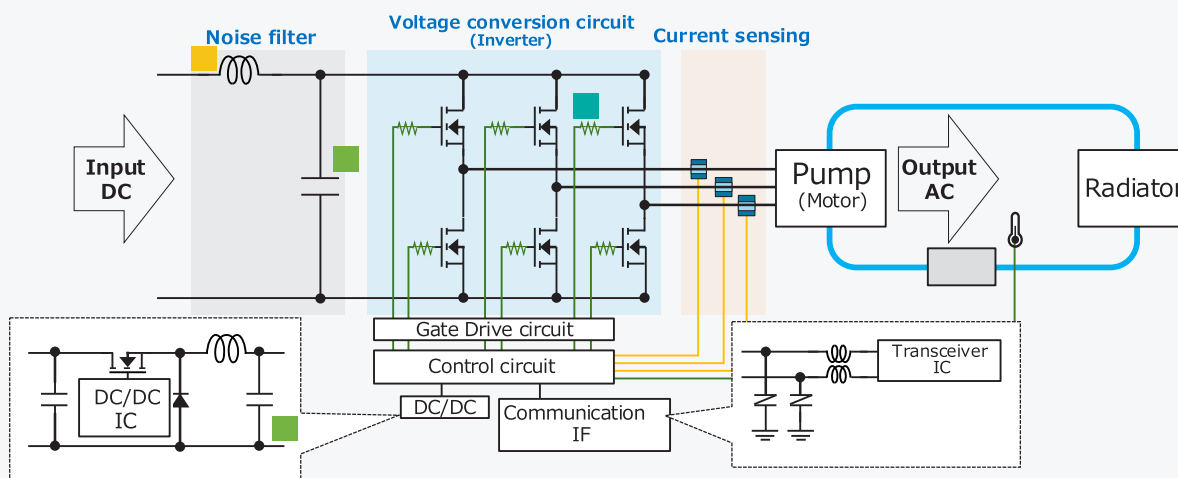




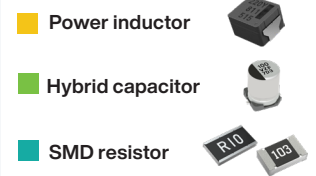
Pump

Automotive pumps transport coolant, oil, fuel, or refrigerant to enable cooling, lubrication, and hydraulic or thermal system operation. Water pumps regulate engine temperature, fuel pumps ensure correct delivery and pressure, and oil pumps maintain lubrication for long-term reliability.

Block Diagram:



Our devices



Design consideration:

- Large current
- Low loss
- High heat resistance
- Measurement accuracy
- Anti-vibration (High vibration resistance)
- High endurance

Recommended product:

Capacitor

- Hybrid capacitors ([ZA](#) / [ZC](#) / [ZE](#) / [ZF](#) / [ZK](#) / [ZKU](#) / [ZS](#) / [ZSU](#) / [ZV](#) / [ZT](#))

Power inductor

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

Resistor

- High precision resistors ([ERJPC](#))
- Low ohmic / wide terminal shunt resistors ([ERJB](#) / [ERJD](#))

Contact:

Tel: +49-89-45354-1000

E-mail: info.pieu@eu.panasonic.com

Web: industry.panasonic.eu