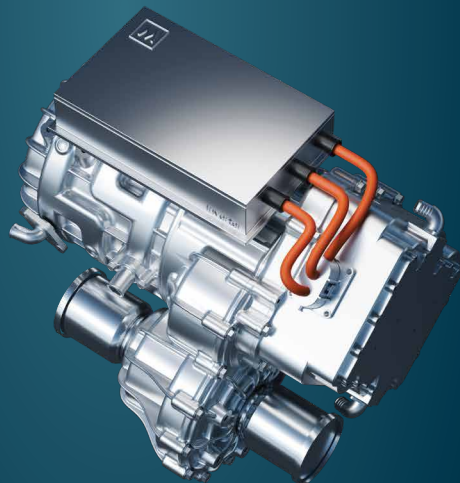


# Digital Current Sensor

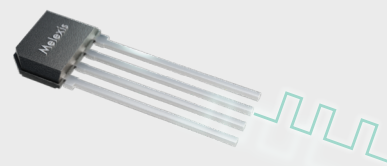
## MLX91229

Discover a high-performance conventional Hall (C-core) current sensor IC featuring an advanced second-order sigma-delta digital output to deliver ultimate signal integrity in noisy traction inverter environments.



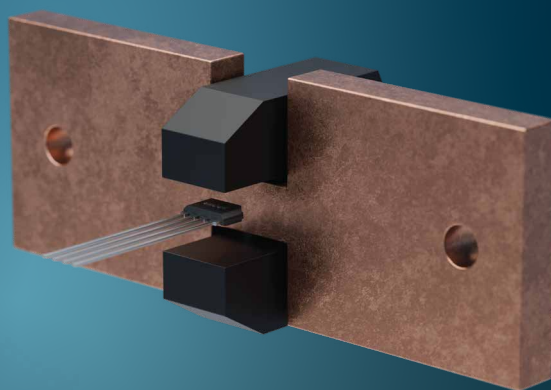
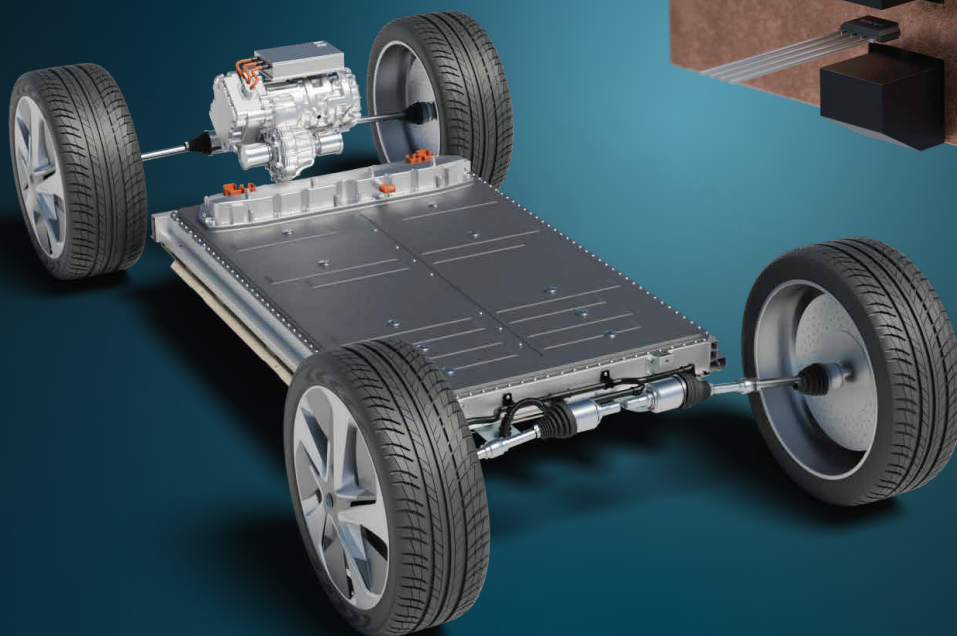
## Key features

- ✔ Sigma-Delta modulator output to tolerate heavy EMI
- ✔ Customer controlled demodulation at MCU for speed (overcurrent) or accuracy (control)
- ✔ Flexible interface
  - Separate Clock and Data pins.
  - Manchester encoding via differential RS-422 or LVDS
- ✔ Drop-in Retrofit: same footprint as existing analog Hall solutions for easy layout replacement
- ✔ Wide range capability
  - Measures peak magnetic fields from 11 to 400 mT
  - Support primary high-power current sensing from 200 to 2000 A
- ✔ Selectable clock options
  - Internal 10.7 MHz clock
  - External 5 MHz to 12.5 MHz clock synchronization
- ✔ 4-SIP (VA packages, RoHS compliant)
- ✔ Automotive AECQ-100
- ✔ Ambient operating temperatures from -40°C to 125°C
- ✔ Selectable 3.3V or 5V voltage supply options



## Applications

- ✔ Traction inverter
- ✔ Battery Management System



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v1.1/06-2026  
The datasheet prevails

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