



Battery Electronics

ISOSPI2CAN

Isolated SPI to CAN Converter

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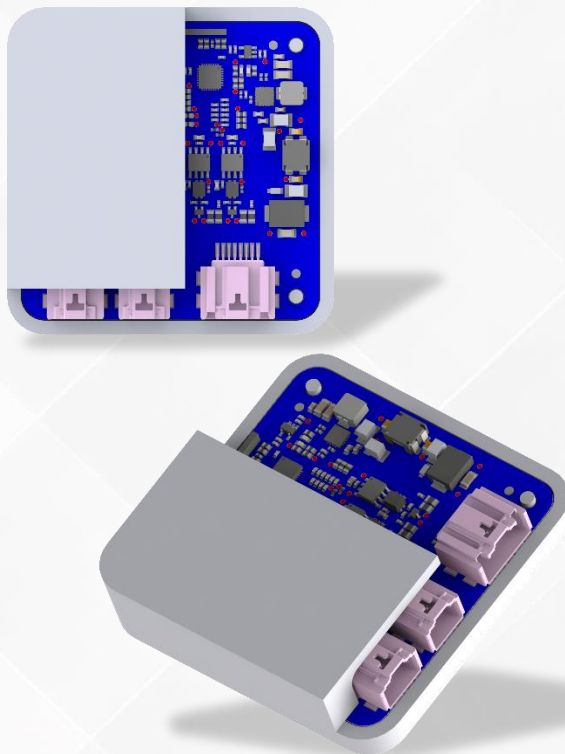
ISOSPI2CAN

Isolated SPI to CAN Converter

Product Overview

The ISOSPI2CAN device serves as a bridge between a CAN Bus and up to 32 Cell Monitoring Units (CMUs) that communicate over the ISOSPI protocol. Designed for applications requiring isolated, high-reliability communication, such as electric and hybrid electric vehicles, backup battery systems, and grid energy storage, the ISOSPI2CAN facilitates seamless data exchange across complex power systems.

Supporting a wide input voltage range of 9-60V, the device provides robust bidirectional communication, ensuring data integrity even in the event of transmission errors. Through the DBC file, precise request and response control is enabled over CAN Bus, allowing efficient management of multiple CMUs. Additionally, the device features automatic sleep and wake-up functions, open wire detection, and cell-based discharge control, optimizing both performance and safety.



Applications

- System & Energy Isolation Communication
- Electric and Hybrid Electric Vehicles
- Backup Battery Systems

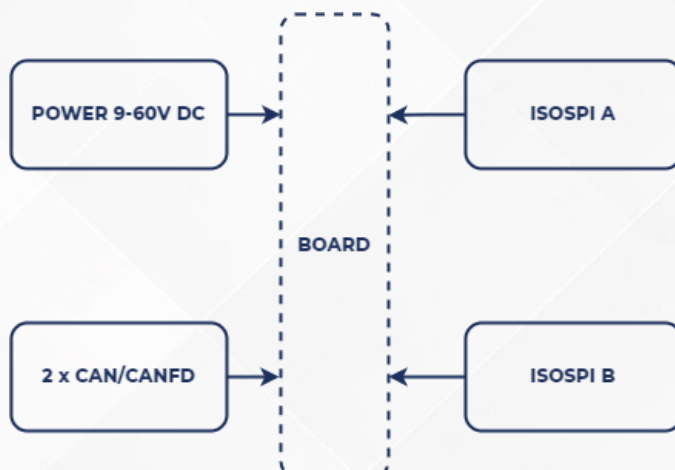
Hardware Features

- 9-60V Power Supply
- Bidirectional ISOSPI
- CAN STD 2.0a

Software Features

- Supports up to 32 CMUs (Cell Monitoring Units) over ISOSPI
- Request & Response control with DBC over CAN Bus
- Auto sleep and wake-up control for CMUs
- Cell-based discharge control
- Open wire & error detection
- Bidirectional communication upon error

Functional Block Diagram



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