EV Power Inverter Control Reference Platform Gen 2

EV-INVERTERHDBT

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This second generation of automotive grade IGBT/SiC- EV power inverter control reference platform includes following changes:

- Standard form-factor P6 HybridDrive power module conformance to ease evaluation with the onsemi VE-Trac™ and Infineon HybridPACK™ IGBT module for example or StarPower P6 modules using Cree SiC die
- Migration from GD3100 gate driver to GD3160 allowing more efficiency and IGBT/SiC compatibility
- Adding Etherent Interface capability with THA1100
- Allowing higher ouptut voltage up and higher power density
- System IP reduces system bill of materials (BOM) count by using a SW resolver embedded in the MCU eliminating the need for HW resolver

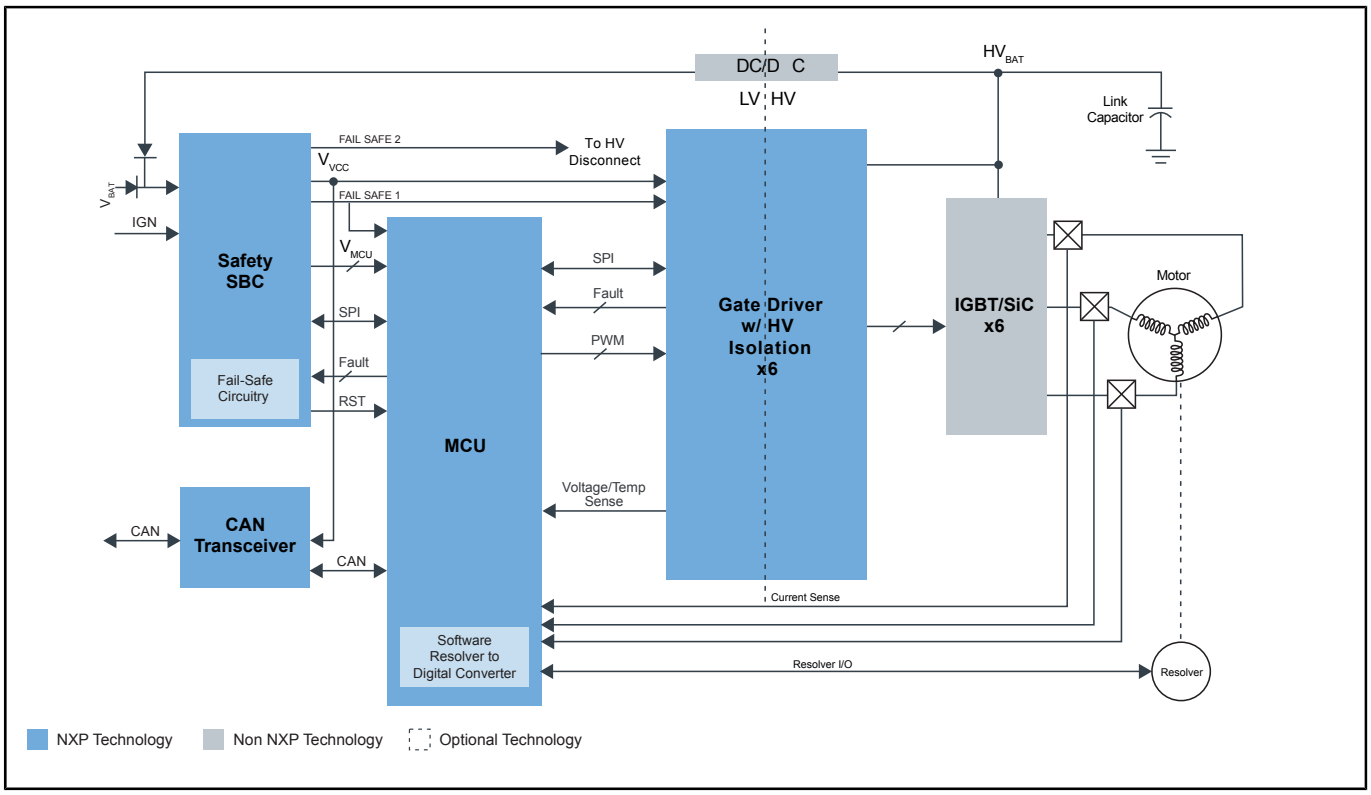
To ensure high levels of functional safety to protect the vehicle operator and systems like 1st generation, system level functional safety whitepaper, devices FMEDAs and safety runtime framework are part of the enablement kit for customers targeting ASIL C/D EV-Inverter implementation.

Functional safety consultation and safety software are optional add-on services available with the platform.

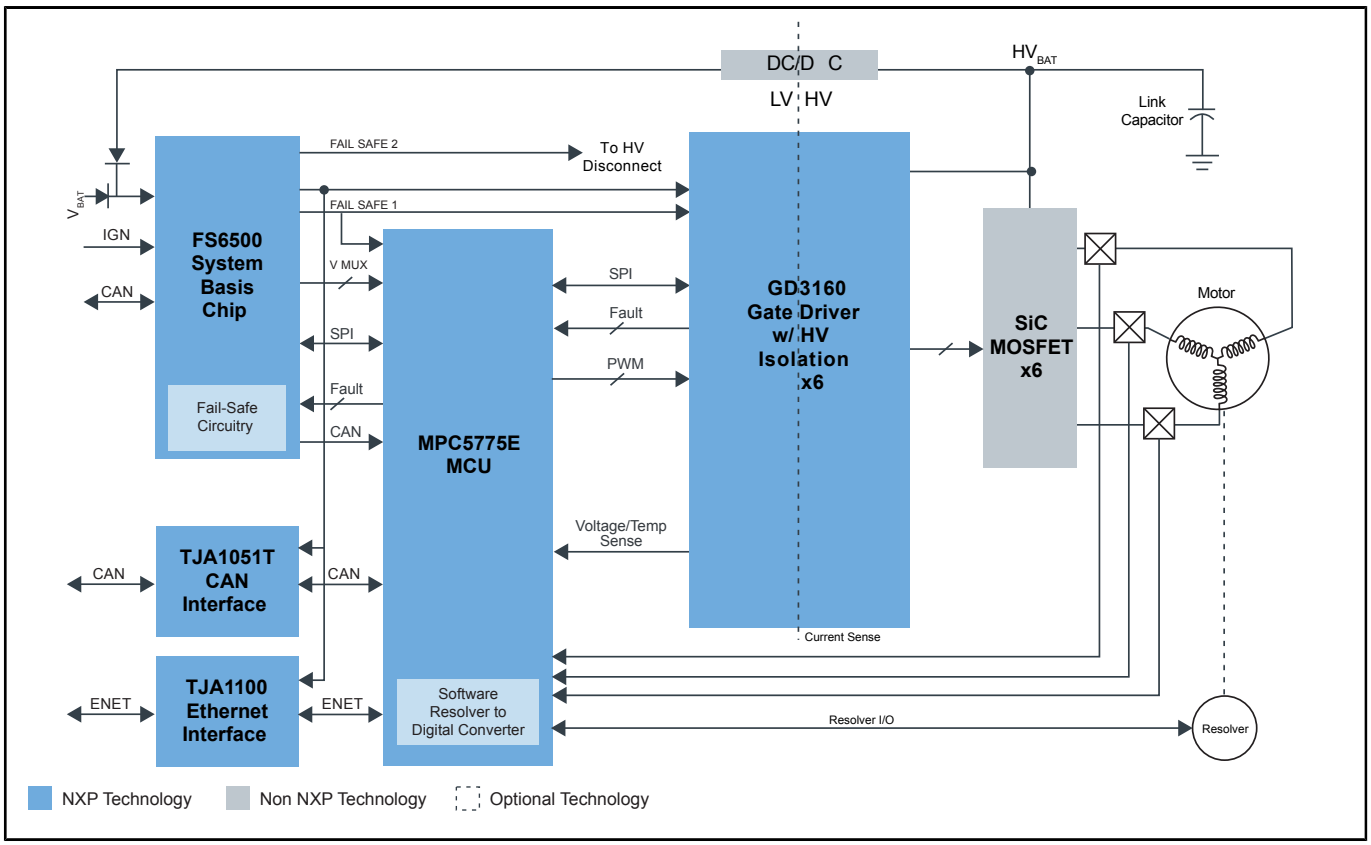
This platform provides a comprehensive foundation that has been validated and dyno tested for developing an IGBT inverter control system solution.

A complete Inverter control reference platform is available through Vepco Technologies Inc. It includes the four boards, IGBT module, DC link capacitor, bus bar, cooling plate, motor options, case and software.

EV-INVERTERHDBT Block Diagram Block Diagram



EV-INVERTERHD Block Diagram Block Diagram



View additional information for EV Power Inverter Control Reference Platform Gen 2.

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