



GD3160 XM3 Half-Bridge Evaluation Kit

FRDMGD3160XM3EVM

FRDMGD3160XM3EVM is a half-bridge evaluation kit populated with two MC33GD3160 single channel IGBT/SiC MOSFET gate drive devices. The kit includes the Freedom KL25Z microcontroller hardware for interfacing a PC installed with Flex GUI software for communication to the SPI registers on the MC33GD3160 gate drive devices in either daisy chain or standalone configuration.

The KITGD3160TREVB translator board is used to translate 3.3 V signals to 5.0 V signals between the MCU and MC33GD3160 gate drivers. The evaluation kit is designed to connect to an Wolfspeed XM3 SiC MOSFET module for half-bridge evaluations and applications development.

On-Board Devices

Power Management

GD3160 : Advanced Single-Channel High-Voltage Isolated Automotive Gate Driver for SiC MOSFETs/IGBTs

Features

- Compatible with XM3 SiC MOSFET module
- Flex GUI Graphical User Interface available for use with kit
- Daisy chain SPI interface configurability
- Easy to configure jumper options
- SPI configurable register options using Flex GUI
- Double Pulse and Short Circuit evaluations
- Fiber Optic connections for external PWM inputs

Applications

- EV Power Inverter