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## STR-30-60V-BLDC-MDK-GEVK: 1kW, 30-60V Motor Development Board

The STR-30-60V-BLDC-MDK-GEVK is a comprehensive motor development board and a reference design for drive low voltage 3-phase BLDC motors. The power board consists of 6 NTMFS6H800N MOSFETs for the inverter stage and NCP1034 PWM synchronous buck controller for power conversion. The 3-phase power board is rated for a maximum of 60V DC and consists of all necessary system blocks for a BLDC motor driver. As part of the motor development kit, the power board is compatible with the power Universal controller board enabling high-end control



strategies and Al capabilities for industrial motor control. The complete kit is Strata enabled and the graphical user interface can be used to set control parameters for the motor drive.

The STR-30-60V-BLDC-MDK-GEVK comprises of the 1kW, 60V power board, hardware adapter for the UCB, and the Universal controller board (UCB)

For the Power board only, visit STR-30-60V-BLDC-MDK-GEVB

Features and Applications

## Features

- Power board for Motor Development Kit (MDK)
- Compatible with the Universal Controller Board (UCB) FPGA/ARM
- Fully compatible with Xilinx® development tools for Zynq®-7000
- Strata Enabled
- Downloadable Trapezoidal control use cases for the UCB
- VIN: 30V 60V DC
- Compatible with three-phase BLDC motors
- Over current protection (OCP), Over voltage protection (OVP)
- Plug-in connector interface for MCU cards (Arduino DUE footprint)
- Sensored Trapezoidal control strategy implemented
- Strata enabled and available for a quickstart evaluation
- Xilinx® development tools and environments are available for the MDK, such as Vitis and Vivado to program the FPGA

## **Applications**

- Industrial drives and Robots
- Automated Guided Vehicles
- Power Tools
- Fans, Pumps, and Compressors

Product   Status   Compliance   Short Description   Parts Used   Action
STR-30-60V-BLDC-MDK-GEVK

Type	Document Title	Document ID/Size	Dov
Туре	Document Title	Document ID/Size	Rev
Eval Board:	STR-30-60V-BLDC-MDK-GEVB Bill of	STR-30-60V-BLDC-MDK-	0
вом	Materials (ROHS Compliant)	GEVB_BOM_ROHS.pdf - 477 KB	
Eval Board:	STR-30-60V-BLDC-MDK-GEVB	STR-30-60V-BLDC-MDK-	0
Gerber	Gerber Layout Files (Zip Format)	GEVB_GERBER.zip - 1338 KB	
Eval Board:	STR-30-60V-BLDC-MDK-GEVB	STR-30-60V-BLDC-MDK-	0
Schematic	Schematic	GEVB_SCHEMATIC.pdf - 2382 KB	
Eval Board:	STR-30-60V-BLDC-MDK-GEVB Test	STR-30-60V-BLDC-MDK-	0
Test Procedure	Procedure	GEVB_TEST_PROCEDURE.pdf - 11418	
		KB	
Eval Board:	STR-30-60V-BLDC-MDK-GEVB User	STR-30-60V-BLDC-MDK-	0
Manual	Guide	GEVB_USER_GUIDE.pdf - 1190 KB	

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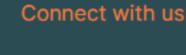
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Leadership	Financials	Press	University Relations	Technical Support
Quality & Reliability	Resources	Announcements	Search Jobs	Sales & Distribution
Ecosystem Partners	Governance	In The News		Support
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