

Three Phase BLDC & PMSM Motor Kit with DRV8302 and Piccolo MCU

(ACTIVE) DRV8302-HC-C2-KIT



Description & Features



Technical Documents



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Description

The DRV8302-HC-C2-KIT is a motor control evaluation kit for spinning three phase brushless DC and brushless AC (BLAC) - often referred to as permanent magnet synchronous (PMSM) - motors with examples of both sensorless Field Oriented / Vector Control (FOC) and TI's InstaSPIN-BLDC sensorless BLDC solution. The DRV8302-HC-C2-KIT is a high-performance, power-efficient, cost-effective platform that speeds development for quicker time to market. Applications include CPAP and pumps, E-bikes, E-scooters, medical pumps and drills, power tools, and robotics.

Features

- DRV8302 2.3A sink/1.7A source, three phase inverter with integrated buck converter for 1.5A external loads.
- C2000 Piccolo F28035 MCU controlCARD – preflashed with code to spin motors using GUI
- Isolated XDS100 Emulation
- CCStudio v4.x Integrated Development Environment
- Kit supports 60V and 82.5A full scale range
- All documentation, schematic, software and user's guides available for free through [controlSUITE](#).



Three Phase BLDC & PMSM Motor Kit with DRV8302 and Piccolo MCU - DRV8302-HC-C2-KIT



Take your C2000 design to the next level

Access the vast collection of hardware, software libraries, and application specific tools with C2000 MCUs to further the learning and development of your own custom solutions.

- more

What's Included

- NO Motor! – Instantly spin YOUR motor with InstaSPIN-BLDC
- NO wall power supply, use your own DRV8301 baseboard with controlCARD slot
- Piccolo Isolated F28035 controlCARD
- USB Cable
- USB Stick with GUI, CCStudio IDE, Quick Start Guide, and controlSUITE software (for all HW & SW source)

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Part Number	Buy from Texas Instruments or Third Party	Buy from Authorized Distributor	Status
DRV8302-HC-C2-KIT: Three Phase BLDC & PMSM Motor Kit with DRV8301 and Piccolo MCU	\$299.00(USD) In Stock Typically Ships in 1 to 3 Business Days Buy from TI	Pricing may vary. Buy from distributor	ACTIVE
Contact a Distributor <input type="text" value="California"/> <input type="button" value="Go"/>			

 TI's [Standard Terms and Conditions for Evaluation Modules](#) apply.

Technical Documents

Application Notes (1)

Title	Abstract	Type	Size (KB)	Date	Views
 InstaSPIN(tm) BLDC Lab	Read Abstract	PDF	1434	15 Nov 2011	3,635

Related Products

Software (1)

 **DRV830x Hardware Development Package**
(ZIP, 2454 KB) 820 views, 08 Jul 2013

TI Devices (2)

Part Number ▾	Name	Product Family ▾
DRV8301	3-Phase Brushless Motor Pre-Driver with Dual Current Sense Amps and Buck Converter (PWM Ctrl w/ SPI)	Brushless DC (BLDC) Drivers
DRV8302	3-Phase Brushless Motor Pre-Driver with Dual Current Sense Amps and Buck Converter (PWM Ctrl)	Brushless DC (BLDC) Drivers

Videos

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Introduction to InstaSPIN™-BLDC Motor Control Solution

Learn more about TI's newest motor control technology for low-cost BLDC applications. InstaSPIN-BLDC is a sensorless control technique based on the premise that "simple is better". In field

Posted: 21-Sep-2011
Duration: 32:14
Views: 6119
Tags: OLT, pe real-time support, c2000, microcontrollers, motor drivers, BLDC, English, motor drive & control, industrial, motor, analogindustrial, analog industrial, motor control, Brushless DC, instaspin, pe instaspin
For more information go to www.ti.com/instaspin-bldc

Related Videos

Introduction to InstaSPIN™-BLDC Motor Control Solution

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New MSP430, Sit and Hercules Kits

Three Phase Motor Kits

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Training & events

Name	Type	Available During
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SimpleLink™ Wi-Fi CC3100 and CC3200 Project 0 Series - 5 Part Series Learn about using Software Tools for SimpleLink™ Wi-Fi CC3100 Boosterpack and CC3200 Launchpad	On-Line Training	On Demand
TI-RTOS Update Learn about the latest TI-RTOS features and more in-depth understanding of this TI software tool.	On-Line Training	On Demand
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