▾ Worldwide (In English)

Three Phase BLDC & PMSM Motor Kit with DRV8301 and Piccolo MCU Status: ACTIVE

DRV8301-HC-C2-KIT

Description/Features   Technical Documents   Support & Community   Order Now

Description

The DRV8301-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 DRV8301-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.

What's Included

- NO Motor! – Instantly spin YOUR motor with InstaSPIN-BLDC
- NO wall power supply, use your own DRV8301 baseboad 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)

Three Phase BLDC & PMSM Motor Kit with DRV8301 and Piccolo MCU - DRV8301-HC-C2-KIT

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Part Number	Texas Instruments	Authorized Distributors	Status	Price (US$)
DRV8301-HC-C2-KIT: **Three Phase BLDC & PMSM Motor Kit with DRV8301 and Piccolo MCU**	TI eStore	Buy from distributor	ACTIVE	
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Technical Documents

Application Notes (2)

Title	Abstract	Type	Size (KB)	Date	Views
InstaSPIN™ BLDC实验		PDF	1641	06 Dec 2011	1,650
InstaSPIN(tm) BLDC Lab		PDF	1434	15 Nov 2011	4,061

Related Products

TI Devices

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

Videos

Three Phase BLDC & PMSM Motor Kit with DRV8301 and Piccolo MCU - DRV8301-...   Page 2 of 2

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 tests with over 50 different motor types, InstaSPIN-BLDC was able to get each motor up and running in less
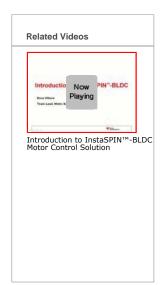
Posted: 21-Sep-2011

Duration: 32:14

Views: 2364

Tags: motor control, motor, instaspin, bldc, brushless dc

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For more information go to www.ti.com/instaspin-bldc

Related Videos

Introduction to InstaSPIN™-BLDC Motor Control Solution

Support and Community

Blogs

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The MSP430F673x/F672x series is the first MSP430 SoC to target utility metering with a 24-bit Sigma-delta converter, industry's largest 320-segment LCD controller and battery backup system. Did we say industry's largest segmented LCD controller...

Posted to Smart Grid Blog on 25 Jan 2012
smart grid, microcontroller, MSP430, MCU, microcontrollers, 430, Software, development tools, single-phase, MSP 430

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Posted to The Official MSP430 Blog on 24 Jan 2012
MCU, Microcontroller, MSP430, MSP 430, 430, Software, development tools, microcontrollers, smart grid, single-phase

C3P-Ho-Ho-Ho: MSP430 powers a holiday sound and light show

Check out this post from our friends over at hackaday.com. It seems Zach, a Hackaday hobbyist and MSP430 fan, figured out a way to program an MSP430 to operate the lights on his Christmas tree in response to the notes of the "Star Wars Main Theme"...

Posted to The Official MSP430 Blog on 22 Dec 2011
MSP430, development tools, msp430f2012

Come and Get It -- DRV8302 Motor Pre-Driver Available Now!

Hi Everyone, As a follow up to our Sept. 9 new release announcing the industry's most highly integrated motor pre-drivers, I'm pleased to announce that samples of the DRV8302 are now available. The DRV8302 is H/W control version of the DRV8301...

Posted to Motor Driver Announcements on 21 Sep 2011
DRV8312-C2-KIT, DRV8412-C2-KIT, drv8301-hc-c2-kit, drv8302-hc-c2-kit, : Motor Drivers

New motor pre-driver reduces board space 60% while driving up to 60-A FETs

Today we announced t he DRV8301 , the most highly integrated motor pre-driver available today, reducing board space as much as 60% compared to the next closest integrated solution. It can drive up to 60-A with external FETs, providing current scalability...

Posted to Motor Driver Announcements on 9 Sep 2011
Motor Drivers, DRV8312-C2-KIT, DRV8412-C2-KIT, drv8301-hc-c2-kit, drv8302-hc-c2-kit

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