

DC-MOTORCONTR_BTN8982

Overview



Description:

DC Motor Control Shield with BTN8982TA

Hardware Compatible with Arduino

The DC motor control shield from Infineon technologies is one of the first high current motor control boards being compatible to Arduino as well as to Infineon's XMC1100 Boot Kit. The DC motor control shield is capable to drive two uni-directional DC motors (half bridge configuration) or one bi-directional DC motor (H-Bridge configuration). The implemented integrated BTN8982TA NovalithIC™ half bridges can be controlled by a PWM via the IN Pin. Interfacing to a microcontroller is made easy by the integrated driver IC which features logic level inputs, diagnosis with current sense, slew rate adjustment, dead time generation and protection against overtemperature, undervoltage, overcurrent and short circuit.

Summary of Features:

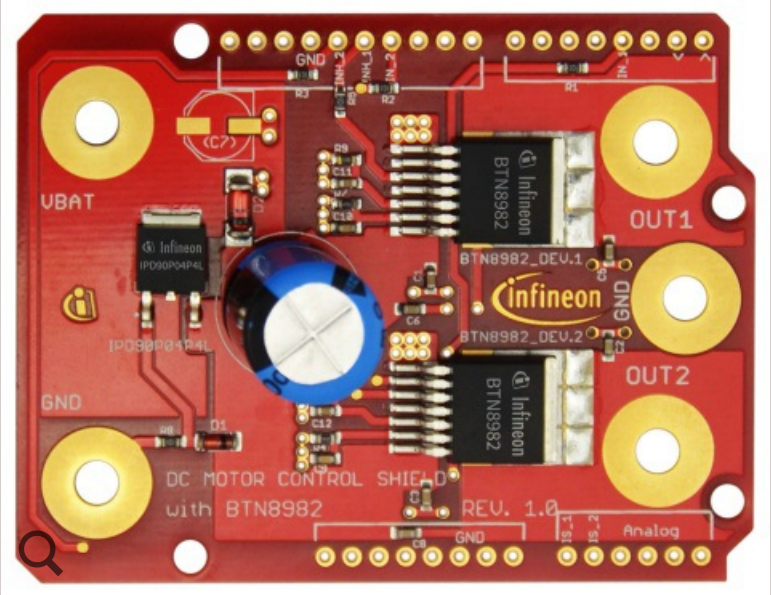
- Compatible with Arduino Uno R3
- Capable of high frequency PWM e.g. 30kHz
- Adjustable slew rates for optimized EMI by changing external resistor
- Driver circuit with logic level inputs
- Diagnosis with current sense
- Protection e.g. against overtemperature and overcurrent

Benefits:

- Fast and inexpensive prototyping of DC motor control
- Easy testing of half and full bridge motor control
- Status flag diagnosis with current sense capability
- Overtemperature shut down with latch behavior and undervoltage shut down

Target Applications:

- Brushed DC motor control up to 250W continuous load
 - 8–18V nominal input voltage (max. 6–40V)
 - Average motor current 30A restricted due to PCB (BTN8982 current limitation @ 55A min.)




Parametrics

Parametrics	DC-MOTORCONTR_BTN8982
Applications	Brushed DC motor control up to 250W continuous load
Configuration	BTN8982 XMC1100 Boot Kit
Family	Microcontroller Motor Driver
Input Type	DC
Product Description	The DC motor control shield from Infineon is one of the first high current motor control boards being compatible to Arduino as well as to Infineon’s XMC1100 Boot Kit. It is capable of driving two uni-directional DC motors (half bridge configuration) or one bi-directional DC motor (H-Bridge configuration).
Product Name	DC Motor Control Shield
Qualification	Automotive
Target Application	Motor Control & Drives
Type	Evaluation Board

Documents

+ Expand all

+ Product Brief



BTN8982TA Product Brief (/dgd/Infineon-BTN8982TA_PB-PB-v01_00-EN.pdf?fileId=db3a30434177d23d0141926412cb3817)

> EN (/dgd/Infineon-BTN8982TA_PB-PB-v01_00-EN.pdf?fileId=db3a30434177d23d0141926412cb3817)

01_00 | 2016-05-02 | pdf | 246 KB

User Manual

Motor Control Shield with BTN8982TA for Arduino User Manual (/dgd/Infineon-Motor_Control_Shield_with_BTN8982TA_for_Arduino-UM-v01_00-EN.pdf?fileId=5546d4624ca27d02014cb20b89867eed)

> EN (/dgd/Infineon-Motor_Control_Shield_with_BTN8982TA_for_Arduino-UM-v01_00-EN.pdf?fileId=5546d4624ca27d02014cb20b89867eed)

01_00 | 2016-07-01 | pdf | 1.1 MB

Order

Sales Product Name	DC-MOTORCONTR_BTN8982
OPN	DCMOTORCONTRBTN8982TOB01
Product Status	active and preferred
Package name	--
Order online	
Completely lead free	
Halogen free	
RoHS compliant	no
Packing Size	1
Packing Type	CONTAINER
Moisture Level	
Moisture Packing	NON DRY

Boards

PCB Design Data

DC Motor Control Shield (/dgd/Infineon-DC_Motor_Control_Shield-PCB-v01_00-EN.zip?fileId=5546d4624cb7f111014cc23eebe1325f)

> EN (/dgd/Infineon-DC_Motor_Control_Shield-PCB-v01_00-EN.zip?fileId=5546d4624cb7f111014cc23eebe1325f)

01_00 | 2015-04-16 | zip | 100 KB

Tools & Software

Software



BTN8982 BDC Drive Arduino Uno (/dgd/Infineon-BTN8982_BDC_Drive_Arduino_Uno-SW-v01_00-EN.zip?fileId=5546d4624cb7f111014cc76e6c062738)
> EN (/dgd/Infineon-BTN8982_BDC_Drive_Arduino_Uno-SW-v01_00-EN.zip?fileId=5546d4624cb7f111014cc76e6c062738) 01_00 | 2015-04-16 | zip | 712 B



H-Bridge - Dave - XMC1100BootKit (/dgd/Infineon-H-Bridge_Dave_XMC1100BootKit-SW-v01_00-EN.zip?fileId=5546d4624cb7f111014cc23ef37f3261)
> EN (/dgd/Infineon-H-Bridge_Dave_XMC1100BootKit-SW-v01_00-EN.zip?fileId=5546d4624cb7f111014cc23ef37f3261) 01_00 | 2015-04-16 | zip | 1.6 MB

Simulation



+ Simulation Tool



Simulate ONLINE - 12V DC Motor Control Shield with BTN8982TA and XMC1100 for two uni-directional or one bi-directional DC brushed motor (/dgd/Infineon-motor_brushed_12V_full-bridge_BTN8982TA_XMC1100-ST-v01_00-EN.htm?fileId=5546d4625ee5d4cd015eebec62ec5ab5)
> EN (/dgd/Infineon-motor_brushed_12V_full-bridge_BTN8982TA_XMC1100-ST-v01_00-EN.htm?fileId=5546d4625ee5d4cd015eebec62ec5ab5) 01_00 | 2017-10-02 | htm | 895 B



Simulate ONLINE - 12V DC Motor Control Shield with BTN8982TA for two uni-directional or one bi-directional DC brushed motor (/dgd/Infineon-motor_brushed_12V_full-bridge_BTN8982TA-ST-v01_00-EN.htm?fileId=5546d4625ee5d4cd015eebeca4775aec)
> EN (/dgd/Infineon-motor_brushed_12V_full-bridge_BTN8982TA-ST-v01_00-EN.htm?fileId=5546d4625ee5d4cd015eebeca4775aec) 01_00 | 2017-10-02 | htm | 879 B

Videos



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Assistance Center
技术支持中心 (TAC)



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E-Mail*

Phone

Company*

Company website (URL)

Industry*

Other Industry

Country / Territory*

Preferred Distributor / Reseller*

Other Distributor / Reseller

Product Name*

Estimated annual production volume (pieces) per year*

[please select]



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