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BTS70020-1ESP EVALBRD

Overview

PROFET+2 12V BTS70020-1ESP EVALUATION BOARD

This Evaluation board comes with 1 high-side switch of BTS70020-1ESP. The purpose of this board is to provide a quick and easy solution for customers' lab evaluations. The Evaluation board is capable to drive resistive, capacitive and/or inductive loads.

Summary of Features

- High-Side Switch with Diagnosis and Embedded Protection
- Capacitive Load Switching mode
- Operating voltage range 3.1-28V with 3.3V and 5V compatible logic input
- **Protection**: current tripping, over-temperature, overvoltage, load dump, polarity, short-circuit
- **bsis**: load current sense output
- Optimized for design flexibility across the family by pin to pin and external components compatibility
- Miniaturization / Shrink of the PCB Area

Potential Applications

- Suitable for driving 23.2 A resistive, inductive and capacitive loads
- Replaces electromechanical relays, fuses and discrete circuits
- Suitable for driving glow plug, heating loads, DC motor and for power

Benefits

- 50% reduced internal operating current consumption
- Simplified & cost efficient ground network
- Current sense accuracy (kILIS) ≤ 8% @ nominal load current
- Benchmark cranking voltage capability able to work down to 3.1 V
- Smaller package size for area savings
- Very low output leakage current (≤ 0.5 μA up to 85°C)







Parametrics

Parametrics	BTS70020-1ESP EVALBRD
Board Type	Evaluation Board
Family	High Side Switch
P Description	This Evaluation board comes with 1 high-side switch of BTS70020-1ESP. The purpose of this board is to provide a quick and easy solution for customers' lab evaluations. The Evaluation board is capable to drive resistive, capacitive and/or inductive loads.

Order

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Infineon Package name Sales Product Name > Home (/cms/en/) > Products (/cms/en/p	BTS70020-1ESP EVALBRD roduct/) > BTS70020-1ESP EVALBRD
Standard Package name	
Order online	
Completely lead free	
Halogen free	
RoHS compliant	no
Packing Size	1
Packing Type	CONTAINER
Moisture Level	
Moisture Packing	NON DRY

Support



Q

Top 6 FAQs. Use the search bar above to show more!

PROFET™ +2 12V: Advantages of high-side switches compared to relays

- *Reduced wire harness to optimize system cost and weight
- *Enhanced diagnostics, protection and EMC robustness
- *More switching cycles can be achieved with a smart switch

*Minimize parasitic capacitance associated with the digital input (IN. DEN. DSEL) by placing RIN, RDEN and RDSEL as close as poss to the pin; add openings in supply and GND layers

What to consider for layout when using PROFET™ +2 121/?

*Place RGND as close as possible to the device

*Place CVS and COUT as close as possible to the device

Why is the PROFET™ +2 12V better than the PROFET™ + 12V?

- *Power dissipation is drastically reduced by 50%
- *PCB area can be saved due to the integrated network
- *Smaller available package in the market
- *Best-in-class diagnosis and protection concept

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Where can I find more FAQs on PROFET™ +2 12V?

Please refer to the FAQ note (https://www.infineon.com/dgdl/Infineon-Z8F65048819_PROFET_2_FAQ-ApplicationNotes-v01_20-EN.pdf? fileId=5546d462712ef9b7017187ba86301623)

> BTS70020-1ESP EVALBRD

Technical Support

In order to enable us to process your inquiry as efficiently as possible and ensure your case is duly reported, we kindly ask you to submit your request via the support form: https://www.infineon.com/tac (https://www.infineon.com/tac)

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