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BTS70015-1ESP EVALBRD

Overview

PROFET+2 12V BTS70015-1ESP EVALUATION BOARD

This Evaluation board comes with 1 high-side switch of BTS70015-1ESP. 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, reverse polarity, short-circuit
- **Diagnosis:** 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

Benefits

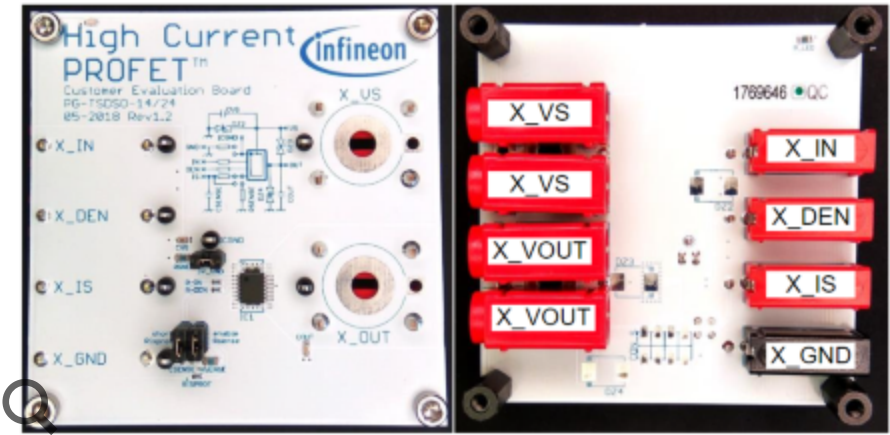
- 50% reduced internal operating current consumption
- Simplified & cost efficient ground network
- Current sense accuracy (kILIS) $\leq 8\%$ @ nominal load current
- Benchmark cranking voltage capability able to work down to 3.1 V
- Smaller package size for area savings
- Very low output leakage current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

Potential Applications

- Suitable for driving 27.6 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



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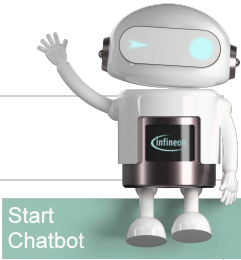


Parametrics

Parametrics	BTS70015-1ESP EVALBRD
Board Type	Evaluation Board
Family	High Side Switch
Product Description	This Evaluation board comes with 1 high-side switch of BTS70015-1ESP. 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

Sales Product Name	BTS70015-1ESP EVALBRD
OPN	BTS700151ESPEVALBRDTOB01
Product Status	active and preferred



Infinion Package name	BTS70015-1ESP EVALBRD
Sales Product Name	
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

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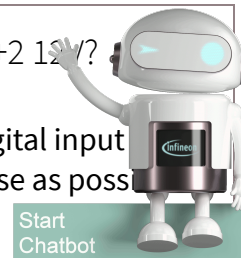
PROFET™ +2 12V: Advantages of high-side switches compared to relays

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



What to consider for layout when using PROFET™ +2 12V?

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



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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)

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>
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