TLS850B0TE50 BOARD

Overview
The TLS850B0TE50 demoboard enables evaluation of Infineon's latest high performance automotive LDOs with ultra-low quiescent current. The
TLS850B0TEV50 (/cms/en/product/power/linear-voltage-regulator/linear-voltage-regulators-for-automotive-applications/tls850b0te-v50/)
has been designed for all ECUs connected to the battery within the automotive application space that need to be switched ON and OFF via an enable feature. The ultra-low quiescent current of typically 20 µA helps Tier1s meet OEM imposed current consumption restrictions on the ECU level. The demoboard allows for an easy plug and play solution to evaluate the TLS850B0TEV50 with all necessary external components already mounted on the board. The TLS850B0TEV50 has a fixed 5.0 V output and board is pre-configured with external components to provide a stable 5.0 V at the output of the linear regulator.

Summary of Features

- Plug and play evaluation capability
- Easy verification and configuration
- Enable, overtemperature shutdown, output current limitation
- AEC-Q100 qualified

Benefits

- Demonstrate the capabilities of TLS850B0TEV50
- Save design time
- Allow easy application adaption for evaluation

Potential Applications

- Automotive or other supply systems that are connected to the battery permanently

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- Automotive supply systems that need to operate in cranking condition

Parametrics

Parametrics	**TLS850B0TE50 BOARD**
Dimensions	100x43
Family	Linear Voltage Regulator (LDO)
Input Type	DC
Mounting	SMD
Output Current max	0.5 A
Output Voltage min max	5.0 V 4.9 V 5.1 V
P_{out} max	1.0 W
Product Description	Low quiescent LDO demoboard TLS850B family
Qualification	Automotive
Supply Voltage min max	13.5 V 3.0 V 45.0 V
Target Application	Automotive
Topology	Linear
Type	Evaluation Board

Type	Evaluation Board
Parametrics	TLS850B0TE50 BOARD

Documents

— Collapse all

— Product Brief

TLS850B0-family High-performance linear voltage regulator (/dgdl/Infineon-TLS850B0x-Family_PB-PB-v01_00-EN.pdf?fileId=5546d46262b31d2e0162d38c3e3b5e3a)
› EN (/dgdl/Infineon-TLS850B0x-Family_PB-PB-v01_00-EN.pdf?fileId=5546d46262b31d2e0162d38c3e3b5e3a)
01_00 | 2018-04-17 | pdf | 303 KB

— User Manual

TLS850B0 Demoboard User Guide (/dgdl/Infineon-Z8F57876664-TLS850B0TxVxx-UserManual-v01_00-EN.pdf?fileId=5546d46261ff577701621ea93cc379be)
› EN (/dgdl/Infineon-Z8F57876664-TLS850B0TxVxx-UserManual-v01_00-EN.pdf?fileId=5546d46261ff577701621ea93cc379be)
01_00 | 2019-09-03 | pdf | 1.1 MB

Order

Sales Product Name	**TLS850B0TE50 BOARD**
OPN	TLS850B0TE50BOARDTOBO1
Product Status	on request
Package name	--
Order online	
Completely lead free	
Halogen free	
RoHS compliant	no

RoHS compliant	no
Sales Product Name	**TLS850B0TE50 BOARD**
Packing Size	1
Packing Type	CONTAINER
Moisture Level	
Moisture Packing	NON DRY

Simulation

+ Expand all

+ Simulation Models

TLS850B0TEV50 PSpice model (/dgdl/Infineon-TLS850B0TEV50-PSpice-TB-SimulationModels-v01_20-EN.zip?fileId=5546d462636cc8fb016417f3c27a37c2)
› EN (/dgdl/Infineon-TLS850B0TEV50-PSpice-TB-SimulationModels-v01_20-EN.zip?fileId=5546d462636cc8fb016417f3c27a37c2)
01_20 | 2019-05-27 | zip | 3.5 MB

+ Simulation Tool

Simulate ONLINE - Automotive Low Dropout Linear Voltage Regulator application circuit for 5 V output voltage with TLS850B0TEV50 (/dgdl/Infineon-atv_LDO_TLS850B0TEV50_application_circuit-SimulationTool-v01_00-EN.htm?fileId=5546d4626bb628d7016bd849b6d5375f)
› EN (/dgdl/Infineon-atv_LDO_TLS850B0TEV50_application_circuit-SimulationTool-v01_00-EN.htm?fileId=5546d4626bb628d7016bd849b6d5375f)
01_00 | 2019-07-09 | htm | 936 B

Support

Search the FAQs! Enter your search terms...

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

Alternative smart driver for use as pump driver

Q: Looking for an alternative smart driver for use as a pump driver in systems. The smart drivers should meet the following requirements:

Overload protection

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iMOTION - ServoDesigner

ServoDesigner is a PC based software program to configure motor drive applications using the IRMCK201 or the IRMCK203. It communicates thru RS232 to the development systems IRMCS2011/13 and IRMCS2031/33 respectively. Servo Designer is required for initial drive parameters configuration and tune-up. After the initial setup, users can use the standalone mode that does not require ServoDesigner or a PC.…

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Final Test of IGBT modules

The applied Viso test is a 100% outgoing test for all our IGBT modules and the test is done according to the IEC standard IEC60747-9. Please see the enclosed information about the final test.
To carry out the test, all the terminals are connected.
The applied Viso voltage tests the isolation capability between the connected terminals and the base plate of the device. This is a pass/fail test. …

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What are the benefits of Gate Drive Control ICs?

The HVIC gate drive solution typically cuts down on component counts and PCB size by 50 percent compared to discrete solutions.

These devices offer an improved immunity to voltage spikes and contribute to lower switching losses for the IGBTs and FETs.…

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Simulation Parameters/SPICE models

Please visit our Simulation Model Finder on the internet at
https://www.infineon.com/simulation (https://www.infineon.com/simulation)
Please select "Simulation Models (SPICE, S-parameters, SABER)"

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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 following support form:

https://www.infineon.com/tac (https://www.infineon.com/tac)
…

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