

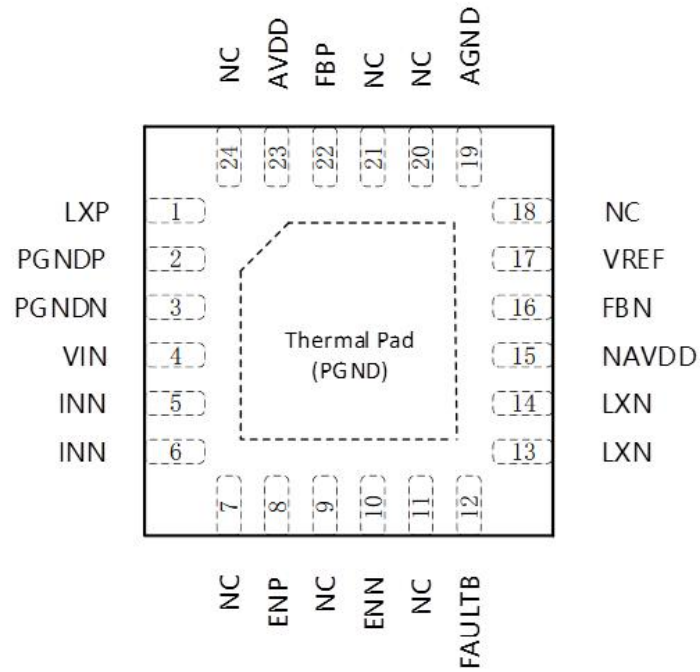
EPA9900 is a dual-output power IC that provides symmetrical or asymmetrical positive and negative voltages up to 10.5V and down to -10.5V with output currents of typically 200mA, depending on the input voltage to output voltage ratio. The input voltage of 2.7V to 5.5V allows, for example, 3.3V and 5V power rail. It incorporates a fully integrated current-mode boost converter and a current-mode buck-boost converter with external rectifier.

The two output voltages can be programmed independently or can be made to track each other. Independent enable pins allow complete flexibility in powering the outputs up and down.

The outputs are protected against overcurrent and under voltage. The EPA9900 is available in a compact 4x4mm VQFN packaging and operates within the -40 to 105°C temperature range.

Features

- Qualified for Automotive Applications
- AEC-Q100 Test Guidance with the Following Results:
 - Device Temperature Grade 2: -40°C to 105°C Ambient Operating Temperature
 - Electrical Characteristics Tested Over -40°C to 150°C Junction Temperature Range
 - Device HBM: $\pm 3\text{KV}$
 - Device CDM: $\pm 800\text{V}$
 - Device MM: $\pm 300\text{V}$
- 2.7V to 5.5V Input-Voltage Range
- High Integration
 - Dual Adjustable Output Voltages up to 10.5 V and down to -10.5 V
 - 2A Typical Switch-Current Limit for Boost and Inverter Main Switches
 - High Conversion Efficiency
 - ✓ Up to 91% for AVDD
 - ✓ Up to 85% for NAVDD
 - Minimum 1.25-MHz Fixed-Frequency PWM Operation
 - Independent Enable Inputs for Power-Up and Power-Down Sequencing
 - Complete Supply Disconnect When Shut Down
- Protection
 - OVP, UVP, OCP, TSD
 - Fault Pin
- 4mm x 4mm QFN-24 Packaging



COPYRIGHT

© 2024 BEIJING ESWIN COMPUTING TECHNOLOGY CO., LTD. and its affiliates ("ESWIN Computing"). All rights reserved. Any modification, reproduction, adaptation, translation, distribution is prohibited without consent.

DISCLAIMER

ESWIN Computing reserves the right to update the document at any time or improve the product described in this document without notice. The information contained in this document is furnished for informational purposes only. ESWIN Computing makes no warranty of any kind in connection with this document. ESWIN Computing is not liable for any losses caused, including the loss of profits and loss of use.