

MSP2536

25A High-Speed, High-Efficiency Monolithic Synchronous Driver

General Description

The MSP2536 is a Half-bridge with monolithic internal power MOSFETs and gate drivers. It achieves 25A continuous output current over a wide input supply range. It can be used from 100KHz to 1MHz. With integrated bootstrap diode, the MSP2536 is offered in 64-bump micro SMD and LLP-48 packages. This module can be used in multiphase operation.

The LM2536 takes a logic level PWM input and splits it into two non overlap complimentary signals, which drive the top and bottom gates. The device has an internal regulator, and is capable of delivery 25A of load current. UVLO (Under-Voltage-Lock-Out) circuits ensure the proper operation of the device in conjunction with other safety features include.

Features

- 25A Output Current
- Wide 4.5V to 36V Operating Input Range
- Synchronous Operation
- Frequency Operation from 100KHz to 1MHz
- Accepts 3-State PWM Input
- Thermal Shutdown
- Internal High and Low Switch Current Limit
- Packages available in 64-bump micro SMD (TBD) and LLP-48 (7mm)X(7mm)X(0.8mm)

Applications

- High Current DC/DC Power Supply
- High Input Voltage Switching Regulators
- Faster Transient Microprocessors
- Notebook Computers

Typical Application

