4A,34V High Efficiency Synchronous Step-Down DC/DC Converter

Description

JT540SKCP is a high efficiency, monolithic synchronous step-down DC/DC converter utilizing a constant frequency, average current mode control architecture. Capable of delivering up to 4A continuous load with excellent line and load regulation. The device operates from an input voltage range of 4.6V to 32V and provides an Fixed 5.1V.

The JT540SKCP features short circuit and thermal protection circuits to increase system reliability. The internal soft-start avoids input inrush current during startup.

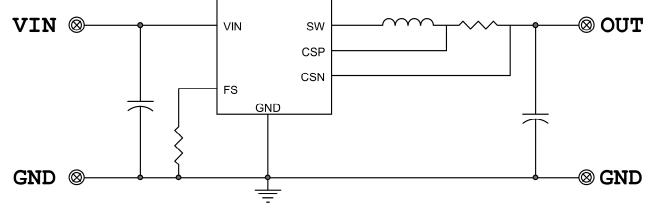
The JT540SKCP require a minimum number of external components. and a wide array of protection features to enhance reliability

Features

- Wide VIN Range : 4.6V to 32V
- 4A Continuous Output Current
- Up to 94% Efficiency
- CC/CV Mode Control
- 100% Max Duty Cycle
- Built in 130mV Cable Drop Compensation
- Fixed 5.1V Output Voltages
- +/-1.5% Output Voltage Accuracy
- +- 5% Current Limit Accuracy.
- Integrated 38mΩ High Side Switch
- Integrated 18mΩ Low Side Switch
- Programable Frequency(130KHz~300KHz)
- Burst Mode Operation at Light Load
- Internal loop Compensation
- Internal Soft Start
- Available in SOP8 Package

Applications

- Car Charger
- Rechargeable Portable Devices
- Networking Systems
- Distributed Power Systems



Typical Application

Note: When using a solid or ceramic input Cap, It is recommended to parallel a TVS diode.