

JW5510

20V 10A Fully-integrated Synchronous Boost Converter

Parameters Subject to Change Without Notice

DESCRIPTION

The JW[®]5510 is a highly integrated Boost converter and can be widely used in portable applications.

The JW5510 implements a synchronous high-efficiency step-up boost converter with 10A switch current capability and is capable of providing an output voltage up to 20V.

The integrated low Rds(on) MOSFET minimizes physical footprint, maximizes the efficiency, which reduces the power dissipation. Constant current control is utilized to protect the device from overshooting in unwanted conditions. Built-in loop compensation simplifies the circuit and design. PFM is engaged to maintain high efficiency at light load.

JW5510 guarantees robustness with thermal protection and under voltage lockout.

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FEATURES

- 3.0V to 20V input voltage range
- 4.0V to 20V output voltage range
- Integrate Low R_{DSON} Switch Power MOS and Synchronous Rectifier MOS.
- 10A Switch Current Limit
- Switch Frequency: 500kHz.
- High Efficiency over Full Load Range
- Thermal Shutdown
- QFN3*4 package

APPLICATIONS

- Battery Powered system
- Electronic Cigarette
- Bluetooth Speaker

TYPICAL APPLICATION



Typical application circuit