

5V 600kHz Synchronous Boost Converter With 6.5A Switches

DESCRIPTION

The MT5035 is high efficiency, Synchronous step-up DC/DC converter, MT5035 provides high efficient power conversion and is capable of delivering output currents up to 3A at 5V at an input supply voltage down to 3V at 600kHz switching frequency and enters pulse-skip-mode (PSM) operation at light load currents to maintain high efficiency over the entire load current range. Protection features cycle-by-cycle 6.5A (typical) current limit, thermal shutdown, and a low-EMI anti-ringing switch when the converter enters the discontinuous conduction mode. During shutdown, the load is completely disconnected from the INtery.

FEATURES

- Input Range V_{IN} from 2.7V to 5.5V
- Synchronous Step-up Converter with 3A Output Current From 3V Input
- Up to 95% Efficient
- Fixed and Adjustable Output Voltage
- Light-Load Pulse Skip Mode with 50 μ A Quiescent Current
- Low V_{IN} Comparator at EN pin
- Light-Load Pulse Skip Mode
- Low EMI-Converter (Integrated Anti-ringing Switch)
- Load Disconnect in Shutdown
- Active Thermal Regulation and Overload Protection
- Available in SOP8EP Packages
- Pb-Free(ROHS compliant)

APPLICATIONS

- Tablet PC and Notebook
- Power Bank
- USB Charging Port (5V)
- DC/DC Micro Modules

TYPICAL APPLICATIONS

