



The Future of Analog IC Technology®

MP28258

High Efficiency, Fast Transient, 3A, 3.3V-20V Input
Synchronous Step-down Converter
in 2x3mm QFN

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

MPS CONFIDENTIAL AND PROPRIETARY INFORMATION- INTERNAL USE ONLY

DESCRIPTION

The MP28258 is a fully integrated, high efficiency synchronous rectified step-down switch mode converter. It offers a very compact solution to achieve 3A continuous output current over a wide input supply range with excellent load and line regulation. The MP28258 operates at high efficiency over a wide output current load range.

Constant-On-Time (COT) control mode provides fast transient response and eases loop stabilization.

Full protection features include SCP, OCP, OVP, UVP and thermal shut down.

The MP28258 requires a minimum number of readily available standard external components and is available in a space saving 2mm x 3mm 12-pin QFN package or an 8-pin SOIC package.

FEATURES

- Wide 3.3V to 20V Operating Input Range
- 3A Output Current
- Low $R_{DS(ON)}$ Internal Power MOSFETs
- Proprietary Switching Loss Reduction Technique
- Power Good Indicator in QFN Package
- Soft Startup and Soft Shutdown
- Programmable Switching Frequency
- SCP, OCP, OVP, UVP Protection and Thermal Shutdown
- Output Adjustable from 0.85V to 13V
- Available a 2x3mm QFN Package

APPLICATIONS

- Networking Systems
- Distributed Power Systems

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TYPICAL APPLICATION

