



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

The Future of Analog IC Technology

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

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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.

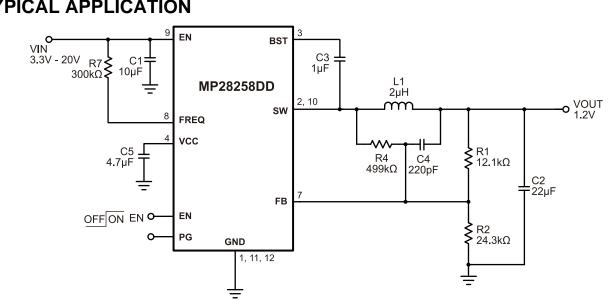
FEATURES

- 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