

MPS CONFIDENTIAL AND PROPRIETARY INFORMATION - INTERNAL USE ONLY

### DESCRIPTION

The MP28254 is a high frequency synchronous rectified step-down switch mode converter with built in internal power MOSFETs. It offers a very compact solution to achieve 4A continuous output current over a wide input supply range with excellent load and line regulation. The MP28254 has synchronous mode operation for higher efficiency over output current load range.

Current mode operation provides fast transient response and eases loop stabilization.

Full protection features include OCP and thermal shut down.

The MP28254 requires a minimum number of readily available standard external components and is available in a space saving 3mm x 4mm 14-pin QFN package.

### FEATURES

- Wide 4.5V to 21V Operating Input Range
- 4A Output Current
- Low Rds(on) Internal Power MOSFETs
- Proprietary Switching Loss Reduction Technique
- High Efficiency Synchronous Mode Operation
- Fixed 500KHz Switching Frequency
- Sync from 300KHz to 2MHz External Clock
- Internal Compensation
- Integrated Bootstrap Diode
- OCP Protection and Thermal Shutdown
- Output Adjustable from 0.805V
- Available in a 3mm x 4mm 14-Pin QFN Package

### APPLICATIONS

- Notebook Systems and I/O Power
- Networking Systems
- Digital Set Top Boxes
- Personal Video Recorders
- Flat Panel Television and Monitors
- Distributed Power Systems

"MPS" and "The Future of Analog IC Technology" are Registered Trademarks of Monolithic Power Systems, Inc.

### TYPICAL APPLICATION

