



**MP2319** 

3A, 18V, 650kHz, High-Efficiency, Synchronous, Step-Down Converter in 8-Pin

## DESCRIPTION

The MP2319 is a fully-integrated, high-frequency, • Wide 4.5V to 18V Operating Input Range synchronous, rectified, step-down, switch-mode converter • 3A Output Current with internal power MOSFETs. The MP2319 offers a very • 105mΩ/57mΩ Low RDS(ON) Internal Power MOSFETs compact solution that achieves 3A of continuous output • Output Adjustable from 0.8V current with excellent load and line regulation over a wide • EN Shutdown Output Discharge input range. The MP2319 has synchronous mode operation • Internal Soft Start for higher efficiency over the output current load range.

Constant-on-time control operation provides a very fast • Fixed 650kHz Switching Frequency transient response, easy loop design, and very tight output • EN and Power Good for Power Sequencing

Full protection features include short-circuit protection (SCP), • Thermal Shutdown over-current protection (OCP), under-voltage protection • Auto-Retry Over-Voltage Protection (OVP) (UVP), over-voltage protection (OVP), and thermal shutdown. • Available in a TSOT23-8 Package The MP2319 requires a minimal number of readily available, standard, external components and is available in a spacesaving, 8-pin, TSOT23 package.

## **FEATURES**

- High-Efficiency Synchronous Mode Operation

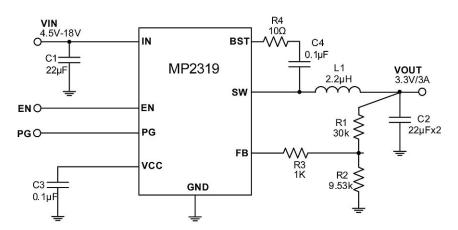
  - · Over-Current Protection (OCP) and Hiccup

## **APPLICATIONS**

- · Security Cameras
- · Portable Devices, xDSL Devices
- · Digital Set-Top Boxes
- · Flat-Panel Televisions and Monitors
- · General Purposes

All MPS parts are lead-free, halogen-free, and adhere to the RoHS directive. For MPS green status, please visit the MPS website under Quality Assurance. "MPS" and "The Future of Analog IC Technology" are registered trademarks of Monolithic Power Systems, Inc.

## TYPICAL APPLICATION











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