



## MP2319

3A, 18V, 650kHz, High-Efficiency, Synchronous, Step-Down Converter in 8-Pin TSOT23

### DESCRIPTION

The MP2319 is a fully-integrated, high-frequency, synchronous, rectified, step-down, switch-mode converter with internal power MOSFETs. The MP2319 offers a very compact solution that achieves 3A of continuous output current with excellent load and line regulation over a wide input range. The MP2319 has synchronous mode operation for higher efficiency over the output current load range.

Constant-on-time control operation provides a very fast transient response, easy loop design, and very tight output regulation.

Full protection features include short-circuit protection (SCP), over-current protection (OCP), under-voltage protection (UVP), over-voltage protection (OVP), and thermal shutdown.

The MP2319 requires a minimal number of readily available, standard, external components and is available in a space-saving, 8-pin, TSOT23 package.

### FEATURES

- Wide 4.5V to 18V Operating Input Range
- 3A Output Current
- 105mΩ/57mΩ Low RDS(ON) Internal Power MOSFETs
- Output Adjustable from 0.8V
- EN Shutdown Output Discharge
- Internal Soft Start
- High-Efficiency Synchronous Mode Operation
- Fixed 650kHz Switching Frequency
- EN and Power Good for Power Sequencing
- Over-Current Protection (OCP) and Hiccup
- Thermal Shutdown
- Auto-Retry Over-Voltage Protection (OVP)
- Available in a TSOT23-8 Package

### APPLICATIONS

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

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### TYPICAL APPLICATION

