

3A, 24V, Synchronous Step-Down Converter

DESCRIPTION

The EUP3293 is a high frequency synchronous rectified step-down current mode converter with built-in power MOSFETs. It offers a very compact solution to achieve a 3A continuous output current with excellent load and line regulation over a wide input supply range from 4.5V to 24V. The EUP3293 has synchronous mode operation for higher efficiency over the output current load range. Current-mode operation provides fast transient response and eases loop stabilization. Full protection features include input under voltage lockout, input over voltage protection, output under voltage protection, over-current protection and thermal shutdown.

The EUP3293 requires a minimal number of readily-available standard external components, and is available in a space-saving 8-pin TSOT23 package.

FEATURES

- Wide Input Voltage Range: 4.5V to 24V
- 80mΩ/30mΩ Low $R_{DS(ON)}$ Internal Power MOSFETs
- High-Efficiency Current Mode Control
- Fixed 500kHz Switching Frequency
- Synchronizes from a 200kHz-to-1MHz External Clock
- Power Saving Mode at Light Load
- Internal Soft-Start
- Power Good Indicator
- Over Current Protection and Hiccup
- Thermal Shutdown
- Input Under Voltage Lockout
- Available in an 8-pin TSOT23 package
- RoHS Compliant and Halogen-Free

APPLICATIONS

- Notebook Systems and I/O Power
- Digital Set-top Boxes
- LCD Monitors and TVs
- Distributed Power Systems

Typical Application Circuit

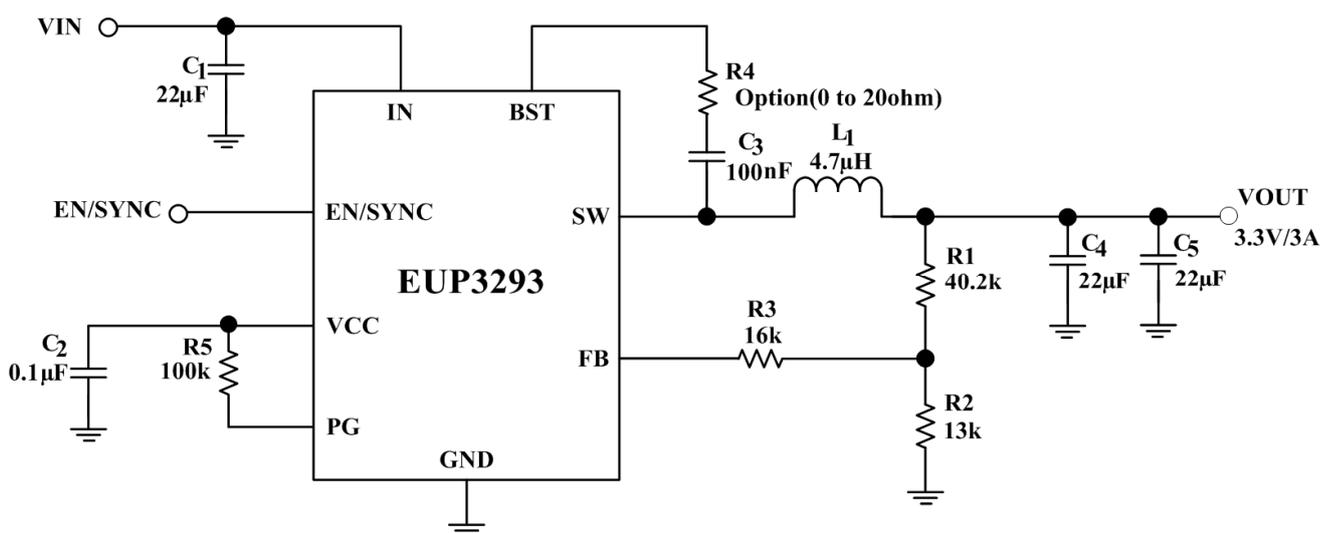


Figure1. Application Circuit