

3A 5.5V 1.2MHz 40uA IQ COT Synchronous Step Down Switcher

Manufacturer: Monolithic Power Systems

Package/Case: SOT23-8

Product Type: Switches

RoHS: RoHS Compliant/Lead free RoHS

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The MP2143 is a monolithic, step-down, switch-mode converter with internal power MOSFETs. It can achieve up to 3A continuous output current from a 2.5V-to-5.5V input voltage with excellent load and line regulation. The output voltage can be regulated as low as 0.6V. Constant-on-time control provides fast transient response and eases loop stabilization. Fault-condition protections include cycle-by-cycle current limiting and thermal shutdown. The MP2143 is available in small TSOT23-8 package and requires only a minimal number of readily-available standard external components. The MP2143 is ideal for a wide range of applications including high-performance DSPs, FPGAs, smartphones, portable instruments, and DVD drivers.

Key Features

Wide 2.5V-to-5.5V Operating Input Range

Output Voltage as Low as 0.6V

100% Duty Cycle in Dropout

Up to 3A Output Current

Low IQ: 40µA

 $80m\Omega$ and $40m\Omega$ Internal Power MOSFET Switches

Default 1.2MHz Switching Frequency

EN and Power-Good for Power Sequencing

Cycle-by-Cycle Over-Current Protection

Auto Discharge at Power Off

Short-Circuit Protect with Hiccup Mode

Stable with Low-ESR Output Ceramic Capacitors

Available in a TSOT23-8 Package

Recommended For You

MP8007HGV-Z

Monolithic Power Systems

QFN

MP2459GJ-P

Monolithic Power Systems

SOT23-6

MP6211DH-LF-Z

Monolithic Power Systems

MSOP8

MP2723GQC-0000-P

Monolithic Power Systems

26-QFN3.5x3.5

MP8009GV-Z

Monolithic Power Systems

QFN28

MP20073DH-LF-Z

Monolithic Power Systems

MSOP-8

MP5073GG-Z

Monolithic Power Systems

QFN

MP171AGS-P

Monolithic Power Systems

8-SOIC

MP8001DS-LF-Z

Monolithic Power Systems

SOP-8

MP8004GQW-Z

Monolithic Power Systems

QFN20

MP2144GJ-Z

Monolithic Power Systems

SOT23-8

MPQ9841GLE-AEC1-P

Monolithic Power Systems

BGA

MP6925GS-P

Monolithic Power Systems

BGA

MP4078GS-P

Monolithic Power Systems

8-SOIC

MP8001DS-LF

Monolithic Power Systems

SOP-8