
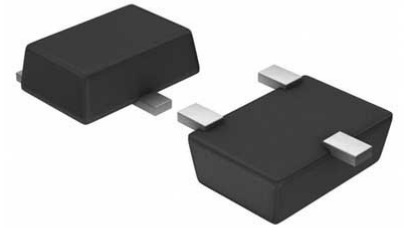


## 2A 5.5V 1.2MHz 40uA IQ COT Synchronous Step Down Switcher

<b>Manufacturer:</b>	<u>Monolithic Power Systems</u>
<b>Package/Case:</b>	SOT23-8
<b>Product Type:</b>	Switches
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	NRND



Images are for reference only

[Inquiry](#)

### General Description

The MP2144 is a monolithic, step-down, switch-mode converter with internal power MOSFETs. It can achieve up to 2A continuous output current from a 2.5V-to-5.5V input voltage with excellent load and line regulation. The output voltage can be regulated to as low as 0.6V. The constant-on-time control scheme provides fast transient response and eases loop stabilization. Fault condition protections include cycle-by-cycle current limiting and thermal shutdown. The MP2144 is available in small TSOT23-8 package and requires only a minimal number of readily available standard external components. The MP2144 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 2A Output Current
- Low IQ: 40 $\mu$ A
- 90m $\Omega$  and 60m $\Omega$  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

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### MP8007HGV-Z

Monolithic Power Systems  
QFN

### MP20073DH-LF-Z

Monolithic Power Systems  
MSOP-8

### MP2143DJ-LF-Z

Monolithic Power Systems  
SOT23-8

### MP2459GJ-P

Monolithic Power Systems  
SOT23-6

### MP5073GG-Z

Monolithic Power Systems  
QFN

### MPQ9841GLE-AEC1-P

Monolithic Power Systems  
BGA

### MP6211DH-LF-Z

Monolithic Power Systems  
MSOP8

### MP171AGS-P

Monolithic Power Systems  
8-SOIC

### MP6925GS-P

Monolithic Power Systems  
BGA

### MP2723GQC-0000-P

Monolithic Power Systems  
26-QFN3.5x3.5

### MP8001DS-LF-Z

Monolithic Power Systems  
SOP-8

### MP4078GS-P

Monolithic Power Systems  
8-SOIC

### MP8009GV-Z

Monolithic Power Systems  
QFN28

### MP8004GQW-Z

Monolithic Power Systems  
QFN20

### MP8001DS-LF

Monolithic Power Systems  
SOP-8