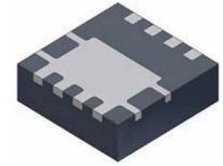


Conv DC-DC 4.5V to 36V Synchronous Step Down Single-Out 1V to 28V 1A Automotive 8-Pin HSOIC EP Tube



Images are for reference only

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: 8-PowerSOIC

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The LMR23610 SIMPLE SWITCHER device is an easy-to-use 36-V, 1-A synchronous step down regulator. With a wide input range from 4 V to 36 V, it is suitable for various applications from industrial to automotive for power conditioning from unregulated sources. Peak current mode control is employed to achieve simple control loop compensation and cycle-by-cycle current limiting. A quiescent current of 75 μ A makes it suitable for battery-powered systems. An ultra-low 2 μ A shutdown current can further prolong battery life. Internal loop compensation means that the user is free from the tedious task of loop compensation design. This also minimizes the external components. An extended family is available in 2.5 A (LMR23625) and 3 A (LMR23630) load-current options in pin-to-pin compatible packages, which allow simple, optimum PCB layout. A precision enable input allows simplification of regulator control and system power sequencing. Protection features include cycle-by-cycle current limit, hiccup-mode short-circuit protection and thermal shutdown due to excessive power dissipation.

Key Features

4-V to 36-V Input Range

1-A Continuous Output Current

Integrated Synchronous Rectification

Current Mode Control

Minimum Switch-On Time: 60 ns

400-kHz Switching Frequency With PFM Mode

Frequency Synchronization to External Clock

Internal Compensation for Ease of Use

75- μ A Quiescent Current at No Load

Soft Start into a Prebiased Load

High Duty-Cycle Operation Supported

Precision Enable Input

Output Short-Circuit Protection With Hiccup Mode

Thermal Protection

8-Pin HSOIC With PowerPAD Package

Create a Custom Design Using the LMR23610 With the WEBENCH Power Designer

Recommended For You

LM2637M

Texas Instruments, Inc

SOP24

LM5116MH

Texas Instruments, Inc

TSSOP20

LM234Z-3

Texas Instruments, Inc

TO-92

LM27761DSGR

Texas Instruments, Inc

WSO8

LM74700QDBVRQ1

Texas Instruments, Inc

SOT23-6

LM2991S

Texas Instruments, Inc

TO-263

LM74800QDRRRQ1

Texas Instruments, Inc

WSO8-12

LMR14030SDDAR

Texas Instruments, Inc

SOP8

LM2940CT-12

Texas Instruments, Inc

TO-220

LM536035QPWPTQ1

Texas Instruments, Inc
HTSSOP-16

LM5575MH

Texas Instruments, Inc
TSSOP16

LM536013QDSXTQ1

Texas Instruments, Inc
WSO-10

LM5160QPWPRQ1

Texas Instruments, Inc
HTSSOP14

LM5576MH

Texas Instruments, Inc
TSSOP20

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc
VQFN-14