

Conv DC-DC 6V to 75V Synchronous Step Down Single-Out 1.23V to 70V 1.5A 16-Pin HTSSOP EP Tube



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: TSSOP16

Product Type: Power Management ICs

Lifecycle: NRND

General Description

The LM5575 is an easy to use SIMPLE SWITCHER buck regulator which allows design engineers to design and optimize a robust power supply using a minimum set of components. Operating with an input voltage range of 6 - 75V, the LM5575 delivers 1.5A of continuous output current with an integrated 330m N-Channel MOSFET. The regulator utilizes an Emulated Current Mode architecture which provides inherent line regulation, tight load transient response, and ease of loop compensation without the usual limitation of low-duty cycles associated with current mode regulators. The operating frequency is adjustable from 50kHz to 500kHz to allow optimization of size and efficiency. To reduce EMI, a frequency synchronization pin allows multiple IC's from the LM(2)557x family to self-synchronize or to synchronize to an external clock. The LM5575 ensures robustness with cycle-by-cycle current limit, short-circuit protection, thermal shut-down, and remote shut-down. The device is available in a power enhanced HTSSOP-16 package featuring an exposed die attach pad for thermal dissipation. The LM5575 is supported by the full suite of WEBENCH On-Line design tools.

Key Features

LM5575Q is an Automotive Grade Product that is AEC-Q100 Grade 1 Qualified (40°C to + 125°C Operating Junction Temperature)

Integrated 75V, 330m N-channel MOSFET

Ultra-wide Input Voltage Range from 6V to 75V

Adjustable Output Voltage as Low as 1.225V

1.5% Feedback Reference Accuracy

Operating Frequency Adjustable Between 50kHz and 500kHz with Single Resistor

Master or Slave Frequency Synchronization

Adjustable Soft-Start

Emulated Current Mode Control Architecture

Wide Bandwidth Error Amplifier

Built-in Protection

Automotive Grade Product Datasheet that is AEC-Q100 Grade 0 Qualified is Available Upon Request.

HTSSOP-16EP (Exposed Pad)



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

LM536013QDSXTQ1

Texas Instruments, Inc
WSO8-10

LM5160QPWPRQ1

Texas Instruments, Inc
HTSSOP14

LM5576MH

Texas Instruments, Inc
TSSOP20

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc
VQFN-14

LM5071MIX-80

Texas Instruments, Inc
TSSOP16