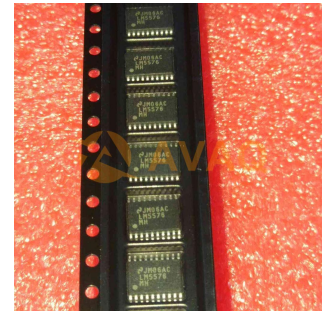


Conv DC-DC 6V to 75V Inv/Step Down Single-Out 1.225V to 70V 3A 20-Pin HTSSOP EP Tube



Images are for reference only

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: TSSOP20

Product Type: Power Management ICs

Lifecycle: NRND

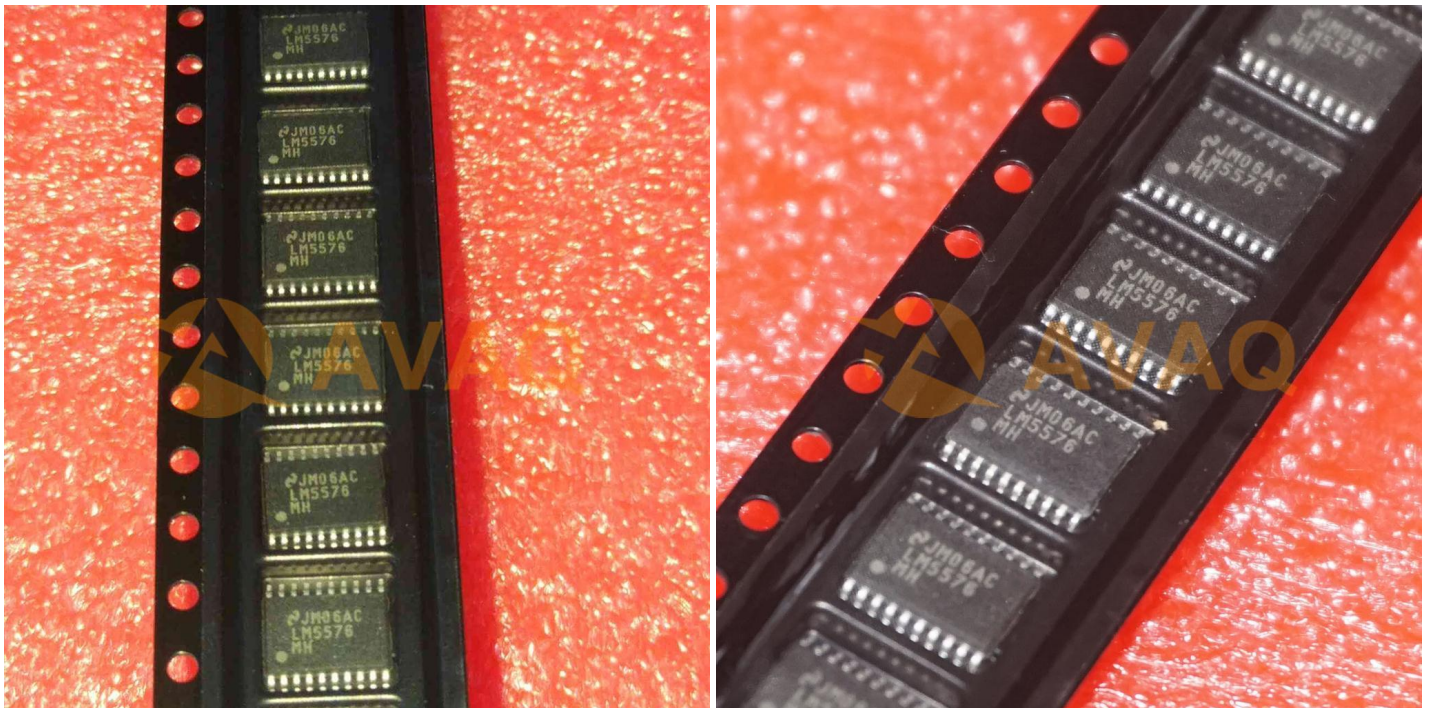
[Inquiry](#)

General Description

The LM5576 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 - 75 V, the LM5576 delivers 3 A of continuous output current with an integrated 170 mΩ 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 50 kHz to 500 kHz to allow optimization of size and efficiency. To reduce EMI, a frequency synchronization pin allows multiple ICs from the LM(2)557x family to self-synchronize or to synchronize to an external clock. The LM5576 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-20 package featuring an exposed die attach pad for thermal dissipation. The LM5576 is supported by the full suite of WEBENCH On-Line design tools.

Key Features

LM5576-Q1 is an Automotive Grade Product that is AEC-Q100 grade 1 Qualified (40°C to + 125°C Operating Junction Temperature) and AEC-Q100 Grade 0 Qualified (40°C to + 150°C Integrated 75 V, 170 m N-channel MOSFET Ultra-Wide Input Voltage Range from 6 V to 75 V Adjustable Output Voltage as Low as 1.225 V 1.5% (Q1) and 1.65% (Q0) Feedback Reference Accuracy Operating Frequency Adjustable Between 50 kHz and 500 kHz with Single Resistor Master or Slave Frequency Synchronization Adjustable Soft-Start Emulated Current Mode Control Architecture Wide Bandwidth Error Amplifier Built-in Protection HTSSOP-20EP (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

LM5575MH

Texas Instruments, Inc
TSSOP16

LM536013QDSXTQ1

Texas Instruments, Inc
WSO8-10

LM5160QPWPRQ1

Texas Instruments, Inc
HTSSOP14

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc
VQFN-14

LM5071MIX-80

Texas Instruments, Inc
TSSOP16