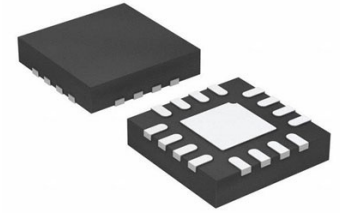


Clock Generator 0.001MHz to 500MHz-IN 1536MHz-OUT 64-Pin WQFN EP T/R



Images are for reference only

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: WQFN-64

Product Type: Clock & Timer ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The LM22676 switching regulator provides all of the functions necessary to implement an efficient high voltage step-down (buck) regulator using a minimum of external components. This easy to use regulator incorporates a 42 V N-channel MOSFET switch capable of providing up to 3 A of load current. Excellent line and load regulation along with high efficiency (> 90%) are featured. Voltage mode control offers short minimum on-time, allowing the widest ratio between input and output voltages. Internal loop compensation means that the user is free from the tedious task of calculating the loop compensation components. Fixed 5 V output and adjustable output voltage options are available. A switching frequency of 500 kHz allows for small external components and good transient response. A precision enable input allows simplification of regulator control and system power sequencing. In shutdown mode the regulator draws only 25 μ A (typ). Built in soft-start (500 μ s, typ) saves external components. The LM22676 also has built in thermal shutdown, and current limiting to protect against accidental overloads.

The LM22676 is a member of Texas Instruments' SIMPLE SWITCHER family. The SIMPLE SWITCHER concept provides for an easy to use complete design using a minimum number of external components and the TI WEBENCH design tool. TI's WEBENCH tool includes features such as external component calculation, electrical simulation, thermal simulation, and Build-It boards for easy design-in.

Key Features

Wide Input Voltage Range: 4.5 V to 42 V

Internally Compensated Voltage Mode Control

Stable with Low ESR Ceramic Capacitors

120 mΩ N-Channel MOSFET PFM Package

100 mΩ N-Channel MOSFET PSOP-8 Package

Output Voltage Options:

-ADJ (Outputs as Low as 1.285 V)

-5.0 (Output Fixed to 5 V)

±1.5% Feedback Reference Accuracy

Switching Frequency of 500 kHz

-40°C to 125°C Operating
Junction Temperature Range

Precision Enable Pin

Integrated Boot-Strap Diode

Integrated Soft-Start

Fully WEBENCH Enabled

LM22676Q is an Automotive Grade Product
that is AEC-Q100 Grade 1 Qualified
(-40°C to +125°C Operating Junction
Temperature)

SO PowerPAD (Exposed Pad)

PFM (Exposed Pad)

Recommended For You

LMK00334RTVR

Texas Instruments, Inc

WQFN32

LMC555CM

Texas Instruments, Inc

SOP8

LM555CM

Texas Instruments, Inc

SOP8

LMC555CMX/NOPB

Texas Instruments, Inc

SOP8

LM555CN

Texas Instruments, Inc

DIP8

LM555J/883

Texas Instruments, Inc

CDIP8

LMC555CMMX

Texas Instruments, Inc

MSOP8

LM555CN/NOPB

Texas Instruments, Inc

DIP8

LMC555CMMX/NOPB

Texas Instruments, Inc

VSSOP8

LMK00101SQE/NOPB

Texas Instruments, Inc
WQFN32

LM555H/883

Texas Instruments, Inc
CAN

LMK1C1102DQFR

Texas Instruments, Inc
WSO8

LMC555CN

Texas Instruments, Inc
DIP

LMC555IMX/NOPB

Texas Instruments, Inc
SOP8

LMC555CTP

Texas Instruments, Inc
DSBGA