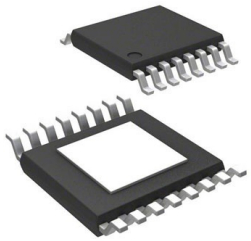
LM63625DQPWPRQ1

Conv DC-DC 3.5V to 36V Synchronous Step Down Single-Out 1V to 20V 2.5A Automotive 16-Pin HTSSOP EP T/R



Images are for reference only

Inquiry

Manufacturer:	Texas Instruments, Inc
Package/Case:	HTSSOP16
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

General Description

The LM636x5-Q1 is an easy-to-use, synchronous, step-down DC/DC converter designed for rugged automotive applications. The LM636x5-Q1 can drive up to 1.5-A or 2.5-A of load current from an input of up to 36 V. The converter has high light load efficiency and output accuracy in a small solution size. Features such as a $\overline{\text{RESET}}$ flag and precision enable provide both flexible and easy-to-use solutions for a wide range of applications. Automatic frequency foldback at light load improves efficiency while maintaining tight load regulation. Integration eliminates many external components and provides a pinout designed for simple PCB layout. Protection features include thermal shutdown, input undervoltage lockout, cycle-by-cycle current limit, and hiccup short-circuit protection. The LM636x5-Q1 is available in the HTSSOP 16-pin power package, with PowerPAD , and the WSON 12-pin power package.
space

Key Features

AEC-Q100-qualified for automotive applications
Device temperature grade 1: –40°C to +125°C ambient operating temperature

Functional Safety-Capable
Documentation available to aid functional safety system design

Supports automotive system requirements
Input voltage range: 3.5 V to 36 V

Short 50-ns minimum on time

Good EMI performance Pseudo-random spread spectrum Compatible with CISPR 25

23-µA low operating quiescent current

–40°C to +150°C junction temperature range

High design flexibility
Pin selectable V_{OUT}: 3.3 V, 5 V, adjustable 1 V to 20 V

Pin compatible with the LM63610 and LM63635 (1 A, 3.25 A)

Pin selectable frequency: 400 kHz, 2.1 MHz, adjustable 250 kHz to 2200 kHz

Pin selectable FPWM, auto, sync modes

TSSOP: thermally enhanced package

WSON: for space-constrained applications

Small solution size
As small as 10 mm × 10 mm for 2.5 A, 2.2 MHz with WSON package

Highly integrated solution

Low component count

Recommended For You

LM2637M

Texas Instruments, Inc

SOP24

LM5116MH

Texas Instruments, Inc

TSSOP20

LM234Z-3

Texas Instruments, Inc

TO-92

LM27761DSGR

Texas Instruments, Inc

WSON8

LM74700QDBVRQ1

Texas Instruments, Inc

SOT23-6

LM2991S

Texas Instruments, Inc

TO-263

LM74800QDRRRQ1

Texas Instruments, Inc

WSON-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

WSON-10

LM5160QPWPRQ1

Texas Instruments, Inc

HTSSOP14

LM5576MH

Texas Instruments, Inc

TSSOP20

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc

VQFN-14