LMR34206SC5QRNXRQ1

Conv DC-DC 4.2V to 42V Synchronous Step Down Single-Out 5V 0.6A Automotive 12-Pin VQFN-HR T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	VQFN-HR-12
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The LMR34206-Q1 regulator is an easy-to-use, synchronous, step-down DC/DC converter. With integrated high-side and low-side power MOSFETs, up to of output current is delivered over a wide input voltage range of 4.2 V to 42 V.

The LMR34206-Q1 uses peak-current-mode control to provide optimal efficiency and output voltage accuracy. Precision enable gives flexibility by enabling a direct connection to the wide input voltage or precise control over device start-up and shutdown. The power-good flag, with built-in filtering and delay, offers a true indication of system status eliminating the requirement for an external supervisor.

The LMR34206-Q1 is in a HotRod package which enables low EMI, higher efficiency, and the smallest package to die ratio. The device requires few external components and has a pinout designed for simple PCB layout. The small solution size and feature set of the LMR34206-Q1 are designed to simplify implementation for a wide range of end equipment.

Key Features

AEC-Q100-qualified for automotive applications:
Temperature grade 1: –40°C to +125°C, T_A

Designed for automotive applications
Junction temperature range –40°C to +150°C

Protection features: thermal shutdown, input undervoltage lockout, cycle-by-cycle current limit, hiccup short-circuit protection

0.2-V dropout with 0.6-A load (typical)

±1.5% reference voltage tolerance

3.3-V, 5-V fixed-output voltage options

Suited for scalable power supplies
Pin compatible with:
LMR36015/06-Q1 (60 V, 0.6 A or 1.5 A)

LMR33620/30-Q1 (36 V, 2 A, or 3 A)

2.1-MHz frequency option

Integration reduces solution size and cost
Small, 2-mm × 3-mm VQFN package with wettable flanks
Few external components

Low power dissipation across load spectrum
Increased light load efficiency in PFM

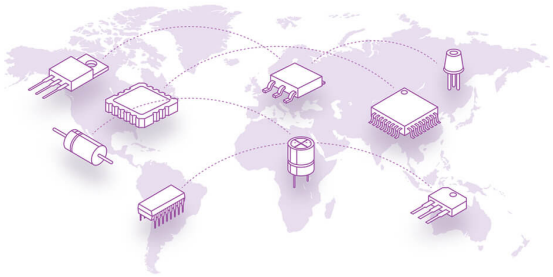
Low operating quiescent current of 24 μA

Optimized for ultra low EMI requirements
Meets CISPR25 class 5 standard

Hotrod package minimizes switch node ringing

Parallel input path minimizes parasitic inductance

Spread spectrum reduces peak emissions



AVAQ

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

LM5036035QPWPTQ1

Texas Instruments, Inc

HTSSOP-16

LM5575MH

Texas Instruments, Inc

TSSOP16

LM5536013QDSXTQ1

Texas Instruments, Inc

WSON-10

LM5160QPWPRQ1

Texas Instruments, Inc

HTSSOP14

LM5576MH

Texas Instruments, Inc

TSSOP20

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc

VQFN-14