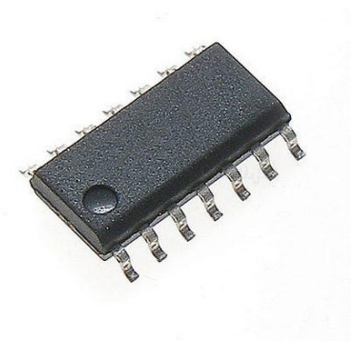


Op Amp Quad High Gain Amplifier $\pm 16V/32V$ Automotive 14-Pin SOIC T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: SOP14

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The TPS40200-Q1 is a flexible, nonsynchronous controller with a built-in 200-mA driver for P-channel FETs. The circuit operates with inputs up to 52 V, with a power-saving feature that turns off driver current once the external FET has been turned on fully. This feature extends the flexibility of the device, allowing it to operate with an input voltage up to 52 V without dissipating excessive power. The circuit operates with voltage-mode feedback and has feed-forward input-voltage compensation that responds instantly to input voltage change. The integral 700-mV reference is trimmed to 2%, providing the means to accurately control low voltages. The TPS40200-Q1 is available in an 8-pin SOIC package and supports many of the features of more complex controllers. Clock frequency, soft start, and overcurrent limit are each easily programmed by a single, external component. The device has undervoltage lockout (UVLO) and can be easily synchronized to other controllers or a system clock to satisfy sequencing and/or noise-reduction requirements.

Key Features

Qualified for Automotive Applications

AEC-Q100 Qualified With the Following Results:

Device Temperature Grade 1: -40°C to 125°C

Device HBM ESD Classification Level 1B

Device CDM ESD Classification Level C6

Input Voltage Range 4.5 V to 52 V

Output Voltage (700 mV to 90% V

IN

200-mA Internal P-channel FET Driver

Voltage Feed-Forward Compensation

Undervoltage Lockout (UVLO)

Programmable Fixed-Frequency (35-kHz to

500-kHz) Operation

Programmable Short-Circuit Protection

Hiccup Overcurrent Fault Recovery

Programmable Closed-Loop Soft Start

700-mV 1% Reference Voltage

External Synchronization

Small 8-Pin SOIC (D) Package

Recommended For You

LM311MX

Texas Instruments, Inc

SOP8

LMV7219M5

Texas Instruments, Inc

SOT23-5

LM348D

Texas Instruments, Inc

SOP-14

LM224N

Texas Instruments, Inc

DIP14

LM239J

Texas Instruments, Inc

CDIP14

LMV331M5

Texas Instruments, Inc

SOT23-5

LM393ADR

Texas Instruments, Inc

SOP8

LM293DR

Texas Instruments, Inc

SOP8

LM293D

Texas Instruments, Inc

SOP8

LMV824MEX

Texas Instruments, Inc

TSSOP

LMV358M

Texas Instruments, Inc

SOP8

LMV321M5

Texas Instruments, Inc

SOT23-5

LM741H

Texas Instruments, Inc

CAN8

LMI93AH

Texas Instruments, Inc

CAN8

LMI11H/NOPB

Texas Instruments, Inc

CAN8