# OPA2991QDGKRQ1

**Op Amp Dual Low Noise Amplifier R-R I/O ±20V/40V Automotive 8-Pin VSSOP T/R**

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| **Manufacturer:** | Texas Instruments, Inc |
| **Package/Case:** | VSSOP8 |
| **Product Type:** | Amplifier ICs |
| **RoHS:** | RoHS Compliant/Lead free |
| **Lifecycle:** | Active |

OPA2991QDGKRQ1 Image

Images are for reference only

Inquiry

## General Description

The OPAx991-Q1 family (OPA991-Q1, OPA2991-Q1, and OPA4991-Q1) is a family of high voltage (40 V) general purpose operational amplifiers for automotive application. These devices offer exceptional DC precision and AC performance, including rail-to-rail input/output, low offset (±125 µV, typ), low offset drift (±0.3 µV/°C, typ), low noise (10.8 nV/√Hz and 1.8 µVpp), and 4.5-MHz bandwidth.

Unique features such as differential and common-mode input-voltage range to the supply rail, high output current (±75 mA), high slew rate (21 V/µs), and high capacitive load drive (1 nF) make the OPAx991-Q1 a robust, high-performance operational amplifier for high-voltage automotive applications.

The OPAx991-Q1 family of op amps is available in standard packages (such as SOT-23, SOIC, VSSOP, and TSSOP) and is specified from –40°C to 125°C.

## Key Features

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

Device HBM ESD classification level 2A

Device CDM ESD classification level C6

Low offset voltage: ±125 µV

Low offset voltage drift: ±0.3 µV/°C

Low noise: 10.8 nV/√Hz at 1 kHz

High common-mode rejection: 130 dB

Low bias current: ±10 pA

Rail-to-rail input and output

Wide bandwidth: 4.5 MHz GBW

High slew rate: 21 V/µs

High capacitive load drive: 1 nF

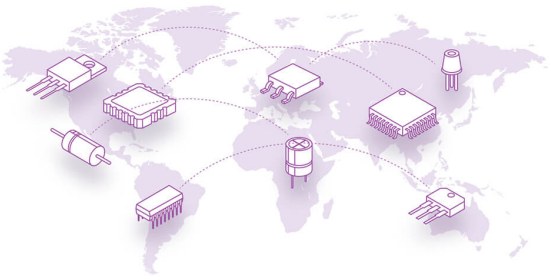
MUX-friendly/comparator inputs
Amplifier operates with differential inputs up to supply rail

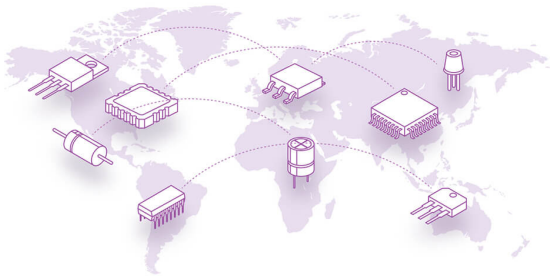
Amplifier can be used in open-loop or as comparator

Low quiescent current: 560 µA per amplifier

Wide supply: ±1.35 V to ±20 V, 2.7 V to 40 V

Robust EMIRR performance: EMI/RFI filters on input and supply pins





## Recommended For You

**OPA445BM**

Texas Instruments, Inc

CAN

**OPA1611AIDR**

Texas Instruments, Inc

SOP8

**OPA388QDBVRQ1**

Texas Instruments, Inc

SOT23-5

**OPA2365AQDRQ1**

Texas Instruments, Inc

SOP8

**OPA334AIDBVR**

Texas Instruments, Inc

SOT23-6

**OPA2835IDGSR**

Texas Instruments, Inc

MSOP10

**OPA656U**

Texas Instruments, Inc

SOP8

**OPA360AIDCKR**

Texas Instruments, Inc

SC70-6

**LM111H/NOPB**

Texas Instruments, Inc

CAN8

**OPA353UA**

Texas Instruments, Inc

SOP8

**LM13700MX/NOPB**

Texas Instruments, Inc

SOP16

**OPA633KP**

Texas Instruments, Inc

DIP8

**OPA453FAKTWT**

Texas Instruments, Inc

TO263-7

**OPA4251UA**

Texas Instruments, Inc

SOP14

**LMV321M5X/NOPB**

Texas Instruments, Inc

SOT23-5