

# LDO Regulator Pos 3.3V 0.1A Automotive 8-Pin WSON EP T/R

Manufacturer:	Texas Instruments, Inc	
Package/Case:	SON-8	
Product Type:	Power Management ICs	
RoHS:	RoHS Compliant/Lead free RoHS	
Lifecycle:	Active	



Images are for reference only

Inquiry

# **General Description**

The LP2951-xx-Q1 devices are bipolar, low-dropout voltage regulators that can accommodate a wide input supply-voltage range of up to 35 V. The 8-pin LP2951-xx-Q1 is able to output either a fixed or adjustable output from the same device. By tying the OUTPUT and SENSE pins together, and the FEEDBACK and  $V_{TAP}$  pins together, the LP2951-xx-Q1 outputs a fixed 5 V and 3.3 V (depending on the version). Alternatively, by leaving the SENSE and  $V_{TAP}$  pins open and connecting FEEDBACK to an external resistor divider, the output can be set to any value between 1.235 V to 30 V.

The 8-pin LP2951-xx-Q1 also offers additional functionality that makes it particularly suitable for battery-powered applications. For example, a logiccompatible shutdown feature allows the regulator to be put in standby mode for power savings. In addition, there is a built-in supervisor reset function in which the ERROR output goes low when  $V_{OUT}$  drops by 6% of its nominal value for whatever reasons – due to a drop in  $V_{IN}$ , current limiting, or thermal shutdown.

The LP295x-xx-Q1 devices are designed to minimize all error contributions to the output voltage. With a tight output tolerance (0.5% at 25°C), a very low output voltage temperature coefficient (20 ppm typical), extremely good line and load regulation (0.3% and 0.4% typical), and remote sensing capability, the parts can be used as either low-power voltage references or 100-mA regulators.

# **Key Features**

Qualified for Automotive Applications

Wide Input Range: Up to 35  $\rm V$ 

Rated Output Current of 100 mA

Low Dropout: 380 mV (Typ) at 100 mA

Low Quiescent Current: 75 µA (Typ)

Tight Line Regulation: 0.03% (Typ)

Tight Load Regulation: 0.04% (Typ)

High V<sub>O</sub> Accuracy 1.4% at 25°C

2% Over Temperature

Can Be Used as a Regulator or Reference

Stable With Low ESR (>12 m $\Omega)$  Capacitors

Current- and Thermal-Limiting Features

8-Pin Package Fixed Voltages: 5 V/ADJ and 3.3 V/ADJ

Low-Voltage Error Signal on Falling Output

Shutdown Capability

Remote Sense Capability for Optimal Output Regulation and Accuracy

## **Recommended For You**

LP2997MR	LP2951-50QDRGRQ1	TL4311LP
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP-8	SON-8	TO-92
LP3966ES-ADJ/NOPB	TPL7407LPWR	LP2997MR/NOPB
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
TO263	TSSOP16	SOP8
TL431CLP	LP2996MR/NOPB	LP2951-50QDRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
TO-92	SOP-8	SOP8

## LP5912Q1.8DRVRQ1

Texas Instruments, Inc

WSON-6

# LP2996MX/NOPB

Texas Instruments, Inc

SOP8

## LP5912Q3.3DRVRQ1

Texas Instruments, Inc

WSON-6

# LP2989AIM-3.3/NOPB

Texas Instruments, Inc SOP8

## LP2996MX

Texas Instruments, Inc SOP-8

## LP2998MAX/NOPB

Texas Instruments, Inc

SOP8