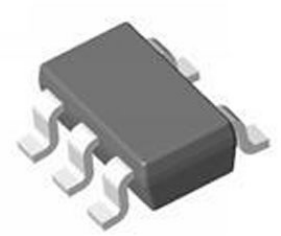



Comparator Single R-R I/P 6.5V Automotive 5-Pin SC-70 T/R

Images are for reference only

[Inquiry](#)

Manufacturer:	Texas Instruments, Inc
Package/Case:	SC70-5
Product Type:	Linear Displacement Sensors
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The TLV703x-Q1/TLV704x-Q1 are low-voltage, nanopower comparators with rail-to-rail inputs. These comparators are applicable for space-critical and power conscious designs like infotainment, telematics, and head unit applications.

The TLV703x-Q1 and TLV704x-Q1 offer an excellent combination of power and speed. The benefit of fast response time at nanopower enables power-conscious systems to monitor and respond quickly to fault conditions. With an operating voltage range of 1.6 V to 6.5 V, these comparators are compatible with 1.8 V, 3 V, and 5 V systems.

The TLV703x-Q1 and TLV704x-Q1 also ensure no output phase inversion with overdriven inputs and internal hysteresis, so engineers can use this family of comparators for precision voltage monitoring in harsh, noisy environments where slow-moving input signals must be converted into clean digital outputs.

The TLV703x-Q1 have a push-pull output stage capable of sinking and sourcing milliamps of current. The TLV704x-Q1 have an open-drain output stage that can be pulled beyond V_{CC} .

Key Features

Qualified for automotive applications

AEC-Q100 qualified with the following results:

Device temperature grade 1: -40°C to 125°C ambient operating temperature range

Device HBM ESD classification level 2

Device CDM ESD classification level C5

Wide supply voltage range of 1.6 V to 6.5 V

Quiescent supply current of 315 nA

Low propagation delay of 3 μs

Internal hysteresis of 6.5 mV

Rail-to-rail common-mode input voltage

Internal Power-On-Reset provides a known startup condition

No phase reversal for overdriven inputs

Push-pull output (TLV703x-Q1)

Open-drain output (TLV704x-Q1)

-40°C to 125°C Operating temperature

Functional Safety Capable

Documentation available to aid functional safety system design (TLV70x1-Q1)

Documentation available to aid functional safety system design (TLV70x2-Q1)

Recommended For You

TLC27M2CP

Texas Instruments, Inc

DIP8

TLV3501AIDR

Texas Instruments, Inc

SOP8

TL071ACP

Texas Instruments, Inc

DIP-8

TL062CDR

Texas Instruments, Inc

SOP8

TLE2142IP

Texas Instruments, Inc

DIP8

TLC272AID

Texas Instruments, Inc

SOP-8

TLV3502AQDCNRQ1

Texas Instruments, Inc

SOT23-8

TL084CD

Texas Instruments, Inc

SOP14

TLV2711DBVR

Texas Instruments, Inc

SOT23-5

TLC074CD

Texas Instruments, Inc

SOP14

TLC2272ACD

Texas Instruments, Inc

SOP-8

TLC2272AIDR

Texas Instruments, Inc

SOP8

TLV2462ID

Texas Instruments, Inc

SOP-8

TLV2471QDBVRQ1

Texas Instruments, Inc

SOT23-5

TLV2381IDBVR

Texas Instruments, Inc

SOT23-5