
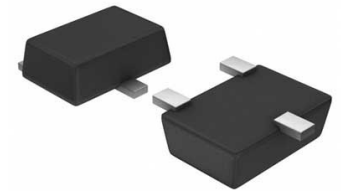


Processor Supervisor 0.4V 2 Active Low/Open Drain Automotive 6-Pin TSOT-23 T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOT23-6
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The TPS3700-Q1 wide-supply window voltage detector operates over a 1.8 V to 18 V range. The device has two high-accuracy comparators with an internal 400-mV reference and two open-drain outputs rated to 18 V for overvoltage and undervoltage detection. The TPS3700-Q1 device can be used as a window voltage detector or as two independent voltage monitors; the monitored voltage can be set with the use of external resistors. For even wider input voltage capability up to 65 V, see the TPS37A-Q1 or the TPS38A-Q1 devices.

The OUTA terminal is driven low when the voltage at the INA+ terminal drops below ($V_{IT+} - V_{hys}$), and goes high when the voltage returns above the respective threshold (V_{IT+}). The OUTB terminal is driven low when the voltage at the INB- terminal rises above V_{IT+} , and goes high when the voltage drops below the respective threshold ($V_{IT+} - V_{hys}$). Both comparators in the TPS3700-Q1 device include built-in hysteresis for filtering to reject brief glitches, thereby ensuring stable output operation without false triggering.

The TPS3700-Q1 device is available in a Thin SOT-6 and a 1.5-mm x 1.5-mm WSON-6 package and is specified over the junction temperature range of -40°C to 125°C.

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 H2

Device CDM ESD Classification Level C6

Functional Safety-Capable

Documentation available to aid functional safety system design

Wide Supply Voltage Range: 1.8 V to 18 V

Adjustable Threshold: Down to 400 mV

Open-Drain Outputs for Overvoltage and Undervoltage Detection

Low Quiescent Current: 5.5 μ A (typ)

High Threshold Accuracy:

1% Over Temperature

0.25% (typ)

Internal Hysteresis: 5.5 mV (typ)

Available in ThinSOT23-6 and WSON Packages

Recommended For You

TPS3700QDSERQ1

Texas Instruments, Inc

WSON6

LMC8101TPX/NOPB

Texas Instruments, Inc

DSBGA8

TLC27M2CP

Texas Instruments, Inc

DIP8

INA823DT

Texas Instruments, Inc

SOP8

INA333AIDRGR

Texas Instruments, Inc

SON-8

TLV3501AIDR

Texas Instruments, Inc

SOP8

THS3092D

Texas Instruments, Inc

SOP-8

LMB11MX

Texas Instruments, Inc

SOP8

INA101AM

Texas Instruments, Inc

CAN10

INA141UA

Texas Instruments, Inc

SOP8

INA111AP

Texas Instruments, Inc

DIP8

TL071ACP

Texas Instruments, Inc

DIP-8

MC3403N

Texas Instruments, Inc

DIP

TL062CDR

Texas Instruments, Inc

SOP8

THS7316DR

Texas Instruments, Inc

SOP-8