

Analog Multiplexer Hex 1:2 Automotive 24-Pin TSSOP T/R

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: TSSOP24

Product Type: Switches

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active



Images are for reference only

[Inquiry](#)

General Description

The TS3A27518E-Q1 is a 6-bit 1-of-2 multiplexer-demultiplexer designed to operate from 1.65 V to 3.6 V. This device can handle both digital and analog signals, and signals up to V_+ can be transmitted in either direction. The TS3A27518E-Q1 has two control pins, each controlling three 1-of-2 muxes at the same time, and an enable pin that is used to put all outputs in high-impedance mode. The control pins are compatible with 1.8-V logic thresholds and are backward compatible with 2.5-V and 3.3-V logic thresholds as well.

The TS3A27518E-Q1 allows any SD, SDIO, and multimedia card host controllers to be expanded out to multiple cards or peripherals because the SDIO interface consists of 6-bits: CMD, CLK, and Data[0:3] signals. The TS3A27518E-Q1 has two control pins that give additional flexibility to the user, for example, the ability to mux two different audio-video signals in equipment such as an LCD television, an LCD monitor, or a notebook docking station.

Key Features

Qualified for automotive applications

AEC-Q100 qualified with the following results:

Device temperature grade 2: -40°C to 105°C ambient operating temperature range

Device HBM ESD classification level H2

Device CDM ESD classification level C3B

Functional Safety-Capable

Documentation available to aid functional safety system design

1.65-V to 3.6-V single-supply operation

Powered-off protection (isolation in powerdown mode, Hi-Z when $V_+ = 0$)

Low capacitance switches, 21.5 pF (typical)

Bandwidth up to 240 MHz for high-speed rail-to-rail signal handling

Crosstalk and off isolation of 62 dB

1.8-V logic threshold compatibility for control inputs

3.6-V tolerant control inputs

ESD performance: NC/NO ports

±6-kV contact discharge (IEC 61000-4-2)

24-pin TSSOP (7.80 mm × 4.40 mm) and 24-pin QFN (4.00 mm × 4.00 mm) package

Recommended For You

TS3USBA225RUTR

Texas Instruments, Inc

QFN

TS5A22362DCSR

Texas Instruments, Inc

MSOP10

TS3USB221RSER

Texas Instruments, Inc

UQFN10

TS3A27518EIRTWRQ1

Texas Instruments, Inc

WQFN-24

TS3A27518EIRTWRQ1

Texas Instruments, Inc

WQFN-24

TS3USB221AQRSERQ1

Texas Instruments, Inc

UQFN10

TS3L110PWR

Texas Instruments, Inc

TSSOP16

TS3L110DBQR

Texas Instruments, Inc

SSOP16

TS5A3357DCUT

Texas Instruments, Inc

VSSOP-8

TS5A3159ADCKT

Texas Instruments, Inc

SC70-6

TS5A23166DCUR

Texas Instruments, Inc

VSSOP8

TS5A3159ADBVR

Texas Instruments, Inc

SOT23-6

TS5A3159QDBVRQ1

Texas Instruments, Inc

SOT23-6

TS3A4741DGKR

Texas Instruments, Inc

MSOP8

TS3A27518EPWR

Texas Instruments, Inc

TSSOP24