

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

Manufacturer:	Texas Instruments, Inc	TS3A27518ETRTWRQ1 Image
Package/Case:	WQFN-24	Images are for reference only
Product Type:	Switches	Inquiry
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

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

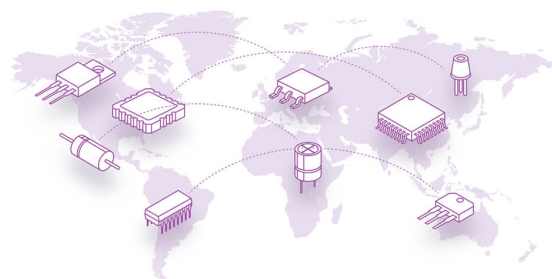
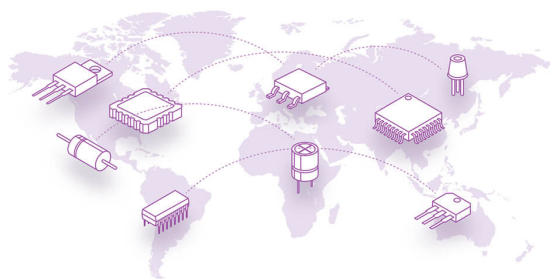
1.8-V logic threshold compatibility for control inputs

3.6-V tolerant control inputs

ESD performance: NC/NO ports

$\pm 6\text{-kV}$ contact discharge (IEC 61000-4-2)

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



Recommended For You

TS3USBA225RUIR

Texas Instruments, Inc
QFN

TS5A22362DGSR

Texas Instruments, Inc
MSOP10

TS3USB221RSER

Texas Instruments, Inc
UQFN10

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

DS25CP114TSQE

Texas Instruments, Inc
QFN