

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

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>	<input type="text" value="TS3A27518EIRTWRQ1 Image"/>
<b>Package/Case:</b>	WQFN-24	Images are for reference only
<b>Product Type:</b>	Switches	<input type="button" value="Inquiry"/>
<b>RoHS:</b>	RoHS Compliant/Lead free 	
<b>Lifecycle:</b>	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:  $-40^{\circ}\text{C}$  to  $105^{\circ}\text{C}$  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

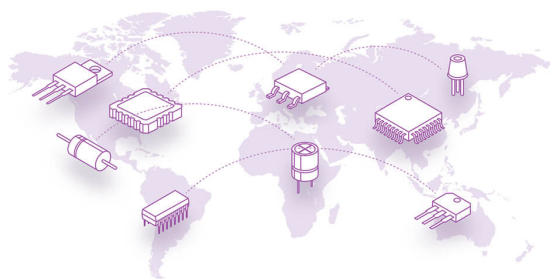
1.8-V logic threshold compatibility for control inputs

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