
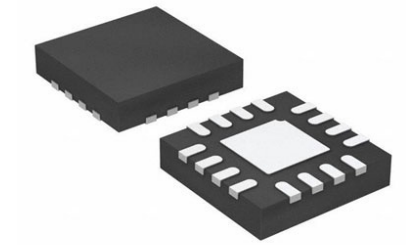


PCI Express Switch Mux/Demux 3 Port 4-CH 42-Pin WQFN EP T/R

| | |
|----------------------|--|
| Manufacturer: | Texas Instruments, Inc |
| Package/Case: | WQFN-42 |
| Product Type: | Drivers |
| RoHS: | RoHS Compliant/Lead free  |
| Lifecycle: | Active |



Images are for reference only

[Inquiry](#)

General Description

The HD3SS3412 device is a high-speed passive switch capable of switching four differential channels, including applications such as two full PCI Express x1 lanes from one source to one of two target locations in a PC/server application. With its bidirectional capability the HD3SS3412 also supports applications that allow connections between one target and two source devices, such as a shared peripheral between two platforms. The HD3SS3412 has a single control line (SEL pin) which can be used to control the signal path between Port A and either Port B or Port C.

The HD3SS3412 is offered in an industry standard 42-pin WQFN package available in a common footprint shared by several other vendors. The device is specified to operate from a single supply voltage of 3.3 V over the full temperature range of -40°C to 85°C.

The HD3SS3412 is a generic 4-CH high-speed MUX/de-MUX type of switch that can be used for routing high-speed signals between two different locations on a circuit board. Although it was designed specifically to address PCI Express Gen III applications, the HD3SS3412 will also support several other high-speed data protocols with a differential amplitude of <1800 mVpp and a common-mode voltage of < 2 V, as with USB 3.0 and DisplayPort 1.2. The device's one select input (SEL) pin can easily be controlled by an available GPIO pin within a system or from a microcontroller.

Key Features

Compatible With Multiple Interface Standards Operating up to 12 Gbps Including PCIeExpress Gen III and USB 3.0

Wide -3dB Differential BW of over 8 GHz

Excellent Dynamic Characteristics (at 4 GHz)
Crosstalk = -35 dB

Off Isolation = -19dB

Insertion Loss = -1.5 dB

Return Loss = -11 dB

Bidirectional "MUX/De-MUX" Type Differential Switch

VDD Operating Range 3.3 V ±10%

Small 3.5-mm × 9.0-mm, 42-PinWQFN Package

Common Industry StandardPinout

Supports XAUI andSGMII

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Recommended For You

HD3SS3202RSVT

Texas Instruments, Inc

UQFN-16

HD3SS3220IRNHR

Texas Instruments, Inc

WQFN30

HD3SS3415RUAR

Texas Instruments, Inc

WQFN42

TLV320AIC23BRHDR

Texas Instruments, Inc

QFN

HD3SS3412RUAR

Texas Instruments, Inc

WQFN42

HD3SS3220RNHR

Texas Instruments, Inc

WQFN30

HD3SS3212RKSRQ1

Texas Instruments, Inc

VQFN20

HD3SS3202IRSVT

Texas Instruments, Inc

UQFN-16

HD3SS3202IRSVR

Texas Instruments, Inc

UQFN-16

HD3SS3220IRNHT

Texas Instruments, Inc

WQFN30

ISO7221CHD

Texas Instruments, Inc

SOP-8

TB5D2HD

Texas Instruments, Inc

SOP16

TLV320AIC23BIRHDR

Texas Instruments, Inc

QFN28

TLV320AIC23BRHD

Texas Instruments, Inc

QFN-28

HD3SS3212RKSTQ1

Texas Instruments, Inc

VQFN20