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

Manufacturer:	Texas Instruments, Inc
Package/Case:	WQFN42
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

HD3SS3412RUAR Image

Images are for reference only

Inquiry

General Description

The HD3SS3412 device is a high-speed passive switch capable of switching fourdifferential channels, including applications such as two full PCI Express x1 lanes from one sourceto one of two target locations in a PC/server application. With its bidirectional capability theHD3SS3412 also supports applications that allow connections between one target and two sourcedevices, 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 PortC.

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

The HD3SS3412 is a generic 4-CH high-speed MUX/de-MUX type of switch that can be used forrouting high-speed signals between two different locations on a circuit board. Although it wasdesigned specifically to address PCI Express Gen III applications, the HD3SS3412 will also supportseveral other high-speed data protocols with a differential amplitude of <1800 mVpp and acommon-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 amicrocontroller.

Key Features

Compatible With Multiple Interface Standards Operating up to 12 Gbps Including PCIExpress 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

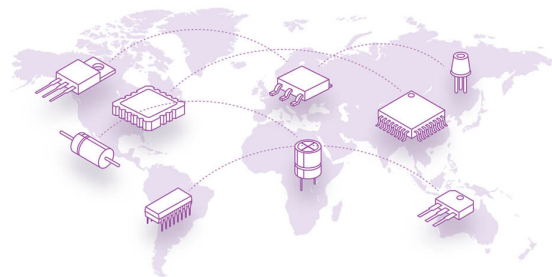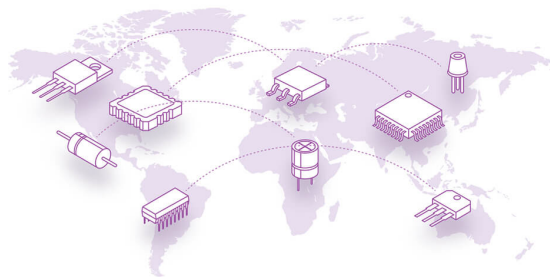Bidirectional "MUX/De-MUX" Type Differential Switch

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	HD3SS3220IRNHR	HD3SS3415RUAR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
UQFN-16	WQFN30	WQFN42

TLV320AIC23BRHDR

Texas Instruments, Inc

QFN

HD3SS3220RNHR

Texas Instruments, Inc

WQFN30

HD3SS3212RKSRQ1

Texas Instruments, Inc

VQFN20

HD3SS3412RUAT

Texas Instruments, Inc

WQFN-42

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