


High Speed Basic USB Type-C Controller USB 3.1 3.3V T/R 16-Pin UQFN

Manufacturer:	Texas Instruments, Inc
Package/Case:	UQFN-16
Product Type:	Interface ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The HD3SS3202 is a high-speed bidirectional passive switch in mux or demux configurations suited for USB Type-C applications that support USB 3.1 Gen 1 and Gen 2 data rates. Based on control pin SEL, the device supplies switching on differential channels between Port B or Port C to Port A.

The HD3SS3202 is a generic analog differential passive switch. It works with any high-speed interface application that requires a common mode voltage range of 0 to 2 V, and requires a differential signaling with differential amplitude at a maximum of 1800 mVpp. The device has adaptive tracking that makes sure the channel stays unchanged for the full common mode voltage range.

The device allows high-speed switching with minimum attenuation to the signal eye diagram with little added jitter. It uses < 1.65 mW (typical) of power when in operation. It has a shutdown mode that is used by the OEn pin resulting < .02 μW (typical).

Key Features

Provides MUX/DEMUX Solution for USB Type-C? Ecosystem for USB 3.1 Gen 1 and Gen 2 Data Rates

Compatible With MIPI DSI/CSI-2 DPHY, LVDS, PCIE GenIII, SATA Express, SATA

Operates up to 10 Gbps

Wide-3-dB Differential BW of over 8 GHz

Excellent Dynamic Characteristics (at 5GHz)

Crosstalk = -41 dB

Off Isolation = -20 dB

Insertion Loss = -2.4 dB

Return Loss = -8dB

Bidirectional "Mux/De-Mux" Differential Switch

Supports Common Mode Voltage 0 to 2 V

Single Supply Voltage VCC of 3.3 V ±10%

Commercial Temperature Range of 0°C to 70°C (HD3SS3202)

Industrial Temperature Range of -40°C to 85°C (HD3SS3202I)

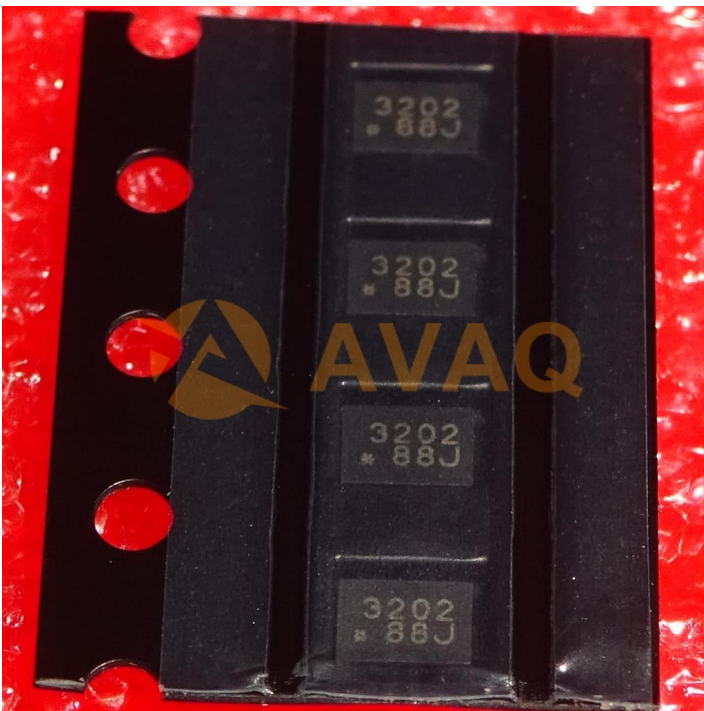
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Recommended For You

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

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