High Speed/Low Speed Programmable USB Controller USB 3.1 3.3V T/R 28-Pin WQFN EP

Manufacturer:	Texas Instruments, Inc
Package/Case:	WQFN28
Product Type:	Interface ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

HD3SS460IRHRR Image

Images are for reference only

Inquiry

General Description

Key Features

Provides MUX Solution for USB Type-C? Ecosystem Including Alternate Mode (AM)

Provides Wide Channel Selection Choices Including USBSS and 2 Ch AM, 4 Ch AM

Compatible with 5 Gbps USB3.1 Gen 1 and AM Including 5.4 Gbps DisplayPort 1.2a

Compatible for Source/Host and Sink/Device Applications

Provides Cross-point MUX for Low Speed SBU Pins

Bidirectional "Mux/De-Mux" Differential Switch

Supports Common Mode Voltage 0-2 V

Low Power with 1-µA Shutdown and 0.6 mA Active

Single Supply Voltage VCC of 3.3 V ±10%

Industrial Temperature Range of –40 to 85°C

Description
The HD3SS460 is a high-speed bi-directional passive switch in mux or demux configurations. Based on control pin POL the device provides switching to accommodate connector flipping. The device also provides muxing between 2Ch Data / 2Ch Video and all 4Ch Video based on control pin AMSEL.
The device also provides cross points MUX for low speed pins as needed in flippable connector implementation.
The HD3SS460 is a generic analog differential passive switch that can work for any high speed interface applications as long as it is biased at a common mode voltage range of 0-2V and has differential signaling with differential amplitude up to 1800mVpp. It employs an adaptive tracking that ensures the channel remains unchanged for entire common mode voltage range.
Excellent dynamic characteristics of the device allow high speed switching with minimum attenuation to the signal eye diagram with very little added jitter. It consumes <2 mW of power when operational and <5µW in shutdown mode, exercisable by EN pin.
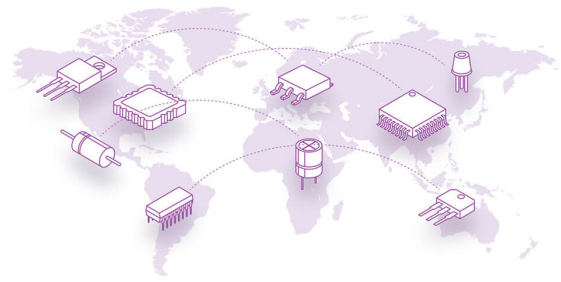
Recommended For You

HD3SS460IRNHR

Texas Instruments, Inc

WQFN30

HD3SS3212RKSR

Texas Instruments, Inc

VQFN20

HD3SS3411TRWARQ1

Texas Instruments, Inc

WQFN14

HD3SS3411IRWAR

Texas Instruments, Inc

WQFN-14

HD3SS460RNHR

Texas Instruments, Inc

WQFN30

HD3SS460RNHT

Texas Instruments, Inc

WQFN-30

HD3SS3411IRWAT

Texas Instruments, Inc

WQFN-14

HD3SS460RHRT

Texas Instruments, Inc

WQFN28

HD3SS3411RWARQ1

Texas Instruments, Inc

WQFN-14

SN74HC4066N

Texas Instruments, Inc

DIP14

SN74CBTD3384DW

Texas Instruments, Inc

SOIC

SN74CBT3306PWR

Texas Instruments, Inc

TSSOP8

CD74HC4066E

Texas Instruments, Inc

DIP

CCB3T16210QDGGRQ1

Texas Instruments, Inc

TSSOP48

SN74CBT3244PWR

Texas Instruments, Inc

TSSOP20