

TUSB212QRWBRQ1

Full Speed USB 2.0 High Speed Signal Conditioner USB 2.0 3.3V T/R Automotive 12-Pin X2QFN

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: X2QFN12

Product Type: Interface ICs

RoHS: RoHS Compliant/Lead free RoHS

Lifecycle: Active

TUSB212QRWBRQ1 Image

Images are for reference only

Inquiry

General Description

The TUSB212-Q1 is a USB High-Speed (HS) signal conditioner, designed to compensate for ISI signal loss in a transmission channel.

TUSB212-Q1 has a patent-pending design which is agnostic to USB Low Speed (LS) and Full Speed (FS) signals. LS and FS signal characteristics are unaffected by the TUSB212-Q1 while HS signals are compensated.

Programmable signal AC boost and DC boost permits fine tuning device performance to optimize High Speed signals at the connector. This helps to pass USB High Speed electrical compliance tests.

In addition, TUSB212-Q1 is compatible with the USB On-The-Go (OTG) and Battery Charging (BC) protocols.

Key Features

Qualified for Automotive Applications:

Device Temperature Grade 2: -40°C to 105°C Ambient Operating Temperature

Device HBM Classification Level H1C

Device CDM Classification Level C3

Compatible with USB 2.0, OTG 2.0 and BC 1.2

Pin strap or I²C configurable

Support for LS, FS, HS signaling

Ultra-low USB Disconnect and Shutdown Power Consumption

Selectable Signal Gain Via Daisy Chain Device for High Loss Applications

D1P/M and D2P/M Interchangeable and Host/Device Agnostic

Supports up to 5m pre-channel or 2m post-channel Cable Length Four Selectable AC Boost Settings Via External Pulldown Resistor

DC Boost Along With AC Boost for Best Signal Integrity





Recommended For You

CD1	077	A TOT	TD.
 36 /		ΔP	116

Texas Instruments, Inc

LQFP48

TUSB211QRWBRQ1

Texas Instruments, Inc

X2QFN-12

TUSB319IDRFRQ1

Texas Instruments, Inc

WSON8

TUSB1105RGTR

Texas Instruments, Inc

VQFN16

TUSB1002AIRGET

Texas Instruments, Inc

VQFN-24

TUSB1002RGER

Texas Instruments, Inc

QFN

TUSB4041IPAPRQ1

Texas Instruments, Inc

HTQFP-64

TUSB1211A1ZRQ

Texas Instruments, Inc

BGA

TUSB321RWBR

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X2QFN12

TUSB3210PM

Texas Instruments, Inc

QFP64

TUSB1105RTZR

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WQFN-16

TUSB1210BRHBR

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VQFN32

TUSB4020BIPHP

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TQFP48

TUSB8020BPHP

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TQFP48

TUSB214IRWBT

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X2QFN-12