

10G Active Mux (1x2) with Integrated Re-timer for USB 3.1

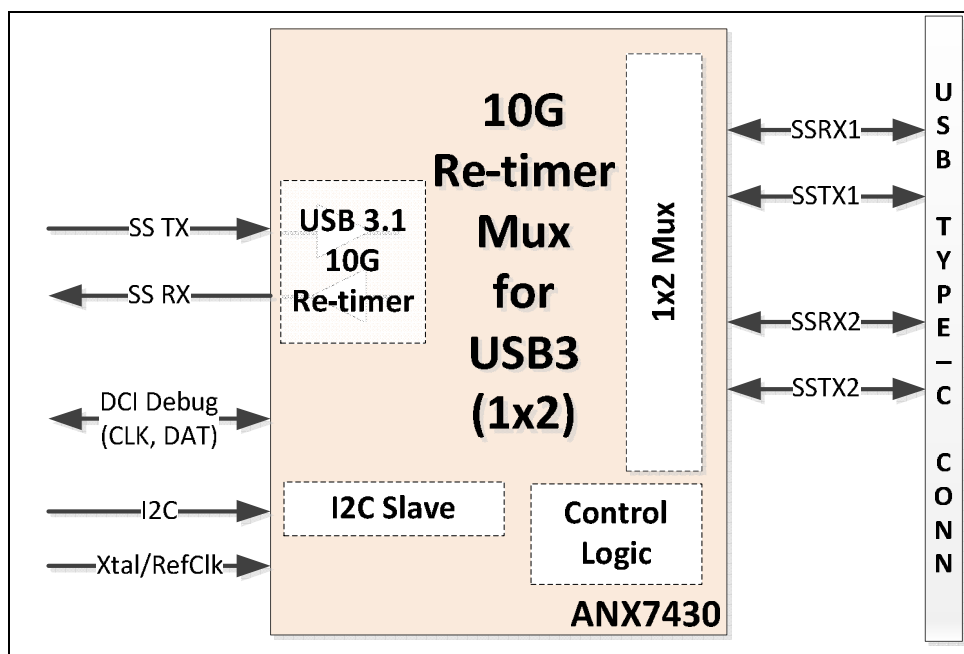
ANX7430 is a USB 3.1 Gen 2 10G active mux with integrated re-timer capable of recovering the USB signals with loss compensation of up to 23dB. ANX7430 also integrates a mux (1x2) for USB Type-C™ (USB-C™) applications. Digital muxing is supported by ANX7430 to ensure the enhanced signals from the re-timer are preserved and outputted over the USB-C connector.

Features

- Built-in re-timer
 - Integrated re-timer for USB 3.1 up to Gen 2 @ 10Gbps
 - Loss compensation to recover up to 23dB channel loss
- Integrated mux
 - Digital (1x2) mux switches USB signals and preserves enhanced signal output over USB-C connector
 - Mux control input through I2C commands from external I2C master (or, optionally through FLIP/OP_MODE pins)
- Reference clock for re-timers
 - Utilizes a 24MHz crystal or 1.05V swing single-ended clock source
- Serial and debug interfaces
 - I²C Slave interface, up to 1MHz, for mux and re-timer configuration
 - DCI debug interface support
- Industry standard compatibility
 - USB 3.1 specification, Appendix E
 - USB Type-C r1.2 specification
 - Intel USB 3.1 Repeater and Active Switch specification
- Low-power design
 - Analog power supply at 1.8V
 - Dedicated 3.3V power for DCI interface
 - Dedicated supply power pin for I/O power at 1.8V
- Packages
 - BGA-42, 3.5mm x 4.0mm, 0.5mm ball-pitch
 - QFN-48, 6mm x 6mm, 0.85mm Z-height, 0.4mm pin-pitch
 - QFN-60, 7mm x 7mm, 0.85mm Z-height, 0.4mm pin-pitch
- Commercial temperature range of 0C to 70C

Applications

Notebooks, desktops, 2-in-1s, and docking stations



Related Products

Part Number	Description
ANX7401	USB-PD and Channel Configuration Controller
ANX7408	USB3 Switch, USB-PD and Channel Configuration Controller
ANX7428	DP Alternate Mode (up to 4L), USB3 Switch, USB-PD and Channel Configuration Controller
ANX7440	10G Active Mux (6x4) with Integrated Re-timers for USB 3.1/DisplayPort™
ANX7490	10G USB 3.1 Re-timer (1-Port)
ANX7496	8.1G DisplayPort 4-lanes Re-timer

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