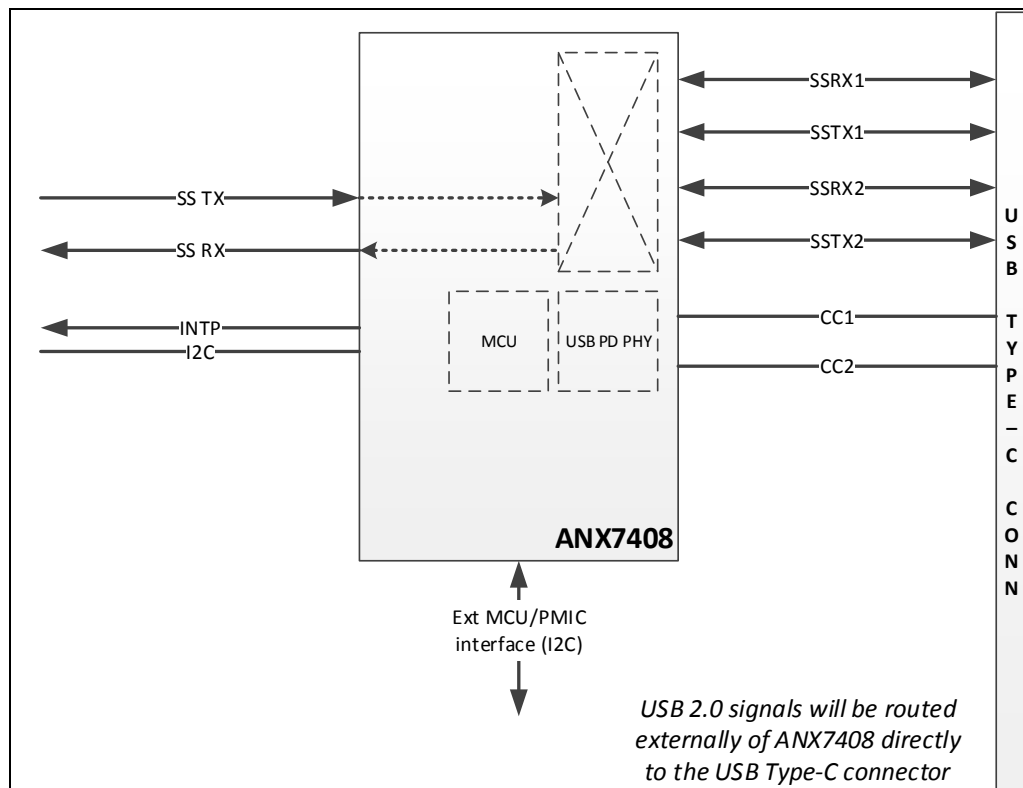


USB Type-C™ Crosspoint Switch

ANX7408 is an intelligent crosspoint switch that supports switching at data rates of up to 6.75Gbps. ANX7408 supports high-speed interfaces, such as USB 3.1 (Gen 1 – 5Gbps). ANX7408 is designed as a companion IC to various CPUs and Application Processors (APs) to enable notebook PCs, tablets, and smartphones to use mobile connectors such as the reversible USB Type-C (USB-C™). An On-chip Microcontroller (OCM) is available to manage the signal switching, Channel Configuration (CC) detection, USB Power Delivery (USB-PD) charging and Vendor Defined Message (VDM) protocol, and other functions as defined in the USB Type-C v1.1 and USB Power Delivery v2.0 specifications. ANX7408 can be configured for a Downstream Facing Port (DFP), Upstream Facing Port (UFP), or Dual-Role Port (DRP) to support a USB-C receptacle.

Features

- High-speed switching up to 6.75Gbps
- USB 3.1 signal (SSTX and SSRX) with Gen1 (5Gbps) link speed
- On-chip Microcontroller (OCM) to implement signal switching, USB-PD messaging, and related functions
- 5V-tolerant CC/VCONN signals
- Dead battery detection support
- I2C slave mode to support external MCU/IC
- VBUS control and USB_ID pins to control external Power Management Integrated Circuits (PMICs) or USB charger IC based on the USB-PD configuration
- 3.3V power supply for analog part (1.0V Core power generated by internal regulator)
- 1.8V~3.3V power supply for digital IO
- Supports the following
 - USB 3.1 signal switching
 - USB Power Delivery Specification v2.0 on CC wire
- Designed to the following specifications
 - USB Type-C Cable and Connector Specification v1.1
 - USB Power Delivery Specification v2.0
 - USB 3.1 Gen 1 electrical specifications



Related Products

Part Number	Description
ANX7401	USB-PD and Channel Configuration Controller
ANX7428	DP Alternate Mode (up to 4L), USB3 Switch, USB-PD and Channel Configuration Controller
ANX7430	USB 3.1 Gen 2 10G Re-timer (1x1, 1x2)
ANX7440	10G Active Mux (6x4) with Integrated Re-timers for USB 3.1/DisplayPort
ANX7688	HDMI to USB Type-C Bridge (Port Controller with MUX)

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