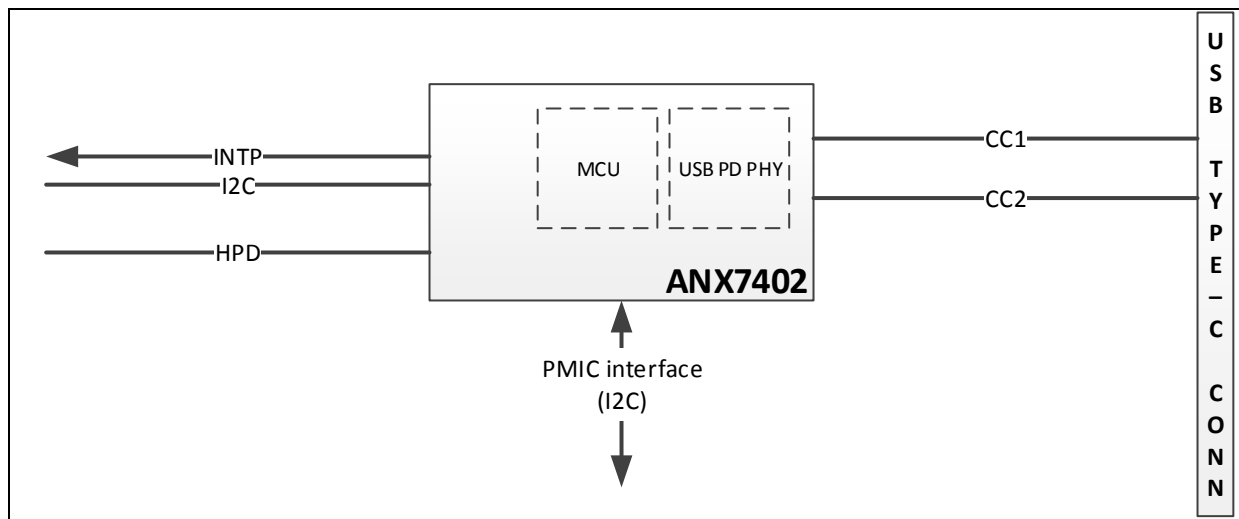


USB Power Delivery PHY with Channel Configuration Control

ANX7402 is a USB Power Delivery (USB-PD) PHY with an On-chip Microcontroller (OCM). The OCM enables ANX7402 to manage the cable detection, USB Power Delivery negotiations, Vendor Defined Message (VDM) communication protocol, and other functions, as defined in the USB Type-C™ v1.1 and USB Power Delivery v2.0 specifications. ANX7402 supports a Hot Plug Detect (HPD) input pin and converts the HPD signal over the Configuration Channel (CC) to enable DisplayPort™ (DP) Alt Mode applications. When paired with a DP-to-HDMI/VGA bridge (such as the ANX7737/9837) and a USB Billboard device IC, the ANX7402 creates an ideal solution for USB Type-C (USB-C™) dongle and docking station applications.

Features

- On-chip Microcontroller (OCM) to implement cable detection and USB-PD messaging for charging 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 switch, Power Management Integrated Circuits (PMICs) or USB charger IC based on the USB-PD configuration
- 3.3V power supply (1.0V Core power generated by internal regulator)
- Supports the following
 - USB Power Delivery Specification v2.0 on CC wire
 - HPD input pin and conversion over CC for DP Alt Mode applications
- Designed to the following specifications
 - USB Type-C Cable and Connector Specification v1.1
 - USB Power Delivery Specification v2.0



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
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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