

DP to Type-C Bi-direction Converter



DSC-1X1 FEATURES GENERAL DESCRIPTION

Compliant with Type-C Specification Revision 1.2

Supports VESA Display Port Alt. Mode 1.0a / Bi-directional conversion between the HPD signal and Support DisplayPort AUX Channel DC voltage level detection. Configurable USB Type-C Ports. Device can be designed with Type-C plug or Type-C receptacle connector. CC logic and Power Delivery protocol. support one sink port and one charging port integrated / USB Type-C SBU and Display Port AUX Channel switch integrated. Support Type-C plug orientation detection Integrated USB Billboard Class, Version 1.21 for supporting USB Type-C Alt. Mode. Support VCONN power. REEmbedded MCU and flash IIC slave interface Firmware update capability RoHS compliant and Halogen free package

APPLICATION

USB Type-C to DisplayPort adapter / DisplayPort to USB Type-C adapter Type-C docking USB Type-C to Multi-video adapter controller. The device is targeted for system designers implementing USB Type-C devices with DisplayPort capabilities and USB Power Delivery 2.0 support. The **DSC-1X1** integrates the USB Type-C plug orientation and attached detection mechanism on the CC (Channel Communication) pins. devices operating in various power management roles including Consumer, Provider and Power Role Swap. The DisplayPort Alt. mode is another alternative interface supported in the **DSC-1X1**. A built-in Billboard Class can be automatically exposed to the USB 2.0 D+/- bus if a Type-C PD Source (DFP) does not equip USB Type-C Alt. Mode features that support DisplayPort signal transmission. The system with **DSC-1X1** s DisplayPort Alt. mode enabled can be programmed to support Type-C to DisplayPort display or DisplayPort to a Type -C DP Alt. mode monitor. The **DSC-1X1**'s bi-directional signal converter for the DisplayPort HPD (hot plug detection) and VDM (Vendor Defined Message) is capable of translating the HPD to the appropriated VDM to Type-C DP device and vice versa. In addition to hardware support of PHY and Link layers, Temperature Range: -40°C to +85°C,