

LT7211B --- Product Brief

Type-C/DP1.2 to Quad-port LVDS with Audio

Features

Type-C

- Compliant with VESA DisplayPort Alt Mode on USB Type-C Standard version1.0
- Compliant with USB Power Delivery Rev.2.0
- Compatible with USB Type-C V1.1
- Built-in CC controller for plug and orientation detection
- Dual-port CC for charger and normal communication.

DP1.2 Receiver

- Compliant with DisplayPort Specification 1.2 for 1.62Gbps, 2.7Gbps, 5.4Gbps
- Support DisplayPort 1, 2, 4 lanes
- Support HDCP 1.3
- Adaptive DisplayPort Receiver Equalization for PCB, cable and connector losses
- Support AUX and IIC for firmware updating

Single/Dual-Port/Quad-Port LVDS Transmitter

- Compatible with VESA and JEIDA standard
- 1/2/4 Configurable Port
- 1 clock lane and 4 configurable data lanes per port
- Data Lane and Polarity Swapping
- Support Maximum Data Rate 1.2Gb/s/lane
- Output Color Depth supports 6-bit and 8-bit
- Video stream copy mode for each dual-port
- Side-by-side 3D support

Miscellaneous

- 3.3V/1.2V Supply Power
- Internal CSC support conversions between YCbCr 4:4:4 and RGB, and between YCbCr 4:2:2 and YCbCr 4:4:4
- Support SPDIF and 8-channel IIS audio output
- Support 100KHz and 400KHz I2C slave
- Power from phone or adapter mode selection
- Integrated Microprocessor
- Embedded EDID shadow.
- Temperature Range: -40°C ~ +85°C
- ESD 4kV HBM

Description

The LT7211B is a high performance Type-C/DP1.2 to LVDS chip for VR/Display application.

For DP1.2 input, LT7211B can be configured as 1,2,4 lane, also support lane swap function. Adaptive equalization makes it suitable for long cable application and the maximum bandwidth is up to 21.6Gbps

For LVDS output, LT7211B can be configured as single-port or dual-port or quad-port. For 2D video stream, the same video stream can be mapped to two separated panel, for 3D video format, left side data can be sent to one panel, and right side data can be sent to another panel.



Applications

- Docking Station
- Dongle
- VR

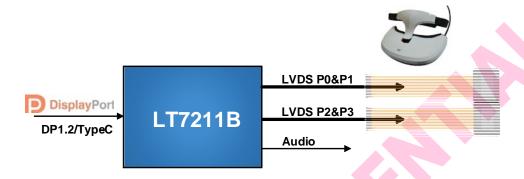


Figure1. Application Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT7211B	-40°C to+85°C	BGA144 7*7	Tray



LT7211B ADVANCE INFORMATION – CONFIDENTIAL AND PROPRIETARY

Copyright © 2016-2017 Lontium Semiconductor Corporation, All rights reserved.

Lontium Semiconductor Proprietary & Confidential

This document and the information it contains belong to Lontium Semiconductor. Any review, use, dissemination, distribution or copying of this document or its information outside the scope of a signed agreement with Lontium is strictly prohibited.

LONTIUM DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THOSE OF NONINFRINGEMENT, MERCHANTABILITY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMERS EXPRESSLY ASSUME THEIR OWN RISH IN RELYING ON THIS DOCUMENT.

LONTIUM PRODUCTS ARE NOT DESIGNED OR INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS WHERE A MALFUNCTION OF A LONTIUM DEVICE COULD RESULT IN A PERSONAL INJURY OR LOSS OF LIFE.

Lontium assumes no responsibility for any errors in this document, and makes no commitment to update the information contained herein. Lontium reserves the right to change or discontinue this document and the products it describes at any time, without notice. Other than as set forth in a separate, signed, written agreement, Lontium grants the user of this document no right, title or interest in the document, the information it contains or the intellectual property in embodies.

Trademarks

Lontium[™] and ClearEdge[™] is a registered trademark of Lontium Semiconductor. All Other brand names, product names, trademarks, and registered trademarks contained herein are the property of their respective owners.

Visit our corporate web page at: www.lontiumsemi.com

Technical support: support@lontium.com

Sales: sales@lontium.com