

LT8718 --- Product Brief

TTL to DP with Type-C

Features

USB Full-Featured, Orientation and Role Detection

3-level Current Ability Advertise (Host Mode) or

TTL Input

Support up to 24-bit RGB/YUV and BT656/BT1120

Input

Support SDR and DDR Data Sampling

Support Resolution up to 4Kx2K@30Hz for RGB

Support Resolution up to 4Kx2K@60Hz for YUV420

DP1.2 Transmitter

Compliant to VESA DP1.2 Standard

Support Two Lanes with 1.62Gbps (RBR), 2.7Gbps

(HBR) or 5.4Gbps (HBR2) Data Rate

Data Lane and Polarity Swapping

Support HDCP1.3 Encryption

Support up to 24-bit RGB/YUV Data Format

Support Resolution up to 4Kx2K@30Hz for RGB

Support Resolution up to 4Kx2K@60Hz for YUV420

Build-in Pattern Generation

Support Hot-Plug Detect

Support Backlight Control for Screen Application

Optional SSC 0.5% Down-Spreading Output

Configurable and Power-on-Calibrated Output Swing for

Optimized EMI

Internal Rterm Calibration with Less than 5% Error

USB Type-C

Compatible with USB3.1 Gen1, USB Type-C R1.0, DP

Alt Mode V1.0 and USB PD R2.0

3 Data Roles Supported: DFP, UFP and DRP

2 Power Roles Supported: Source and Sink

USB PD-PHY (Tx/Rx) and BMC Encoding/Decoding

USB PD Protocol Control by Software

Bi-directional Differential Passive Switch for USB3.1

Gen1 SS signal with less than 2.5-dB Insertion Loss,

Controlled by Internal or External CC logic module

Applications

Mobile systems

Cellular handsets

Digital video cameras

Digital still cameras

Tablet PC, Notebook PC

Car Display and Camera System

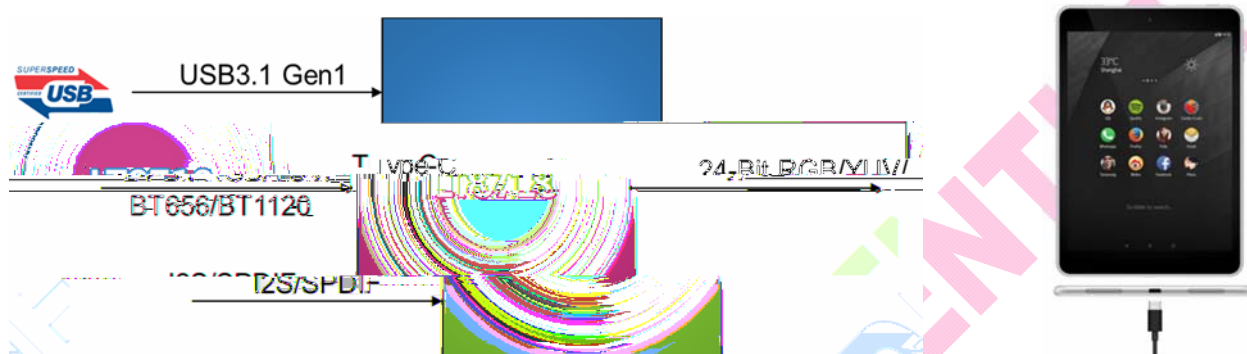


Figure 1. Application Diagrams

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT8718-Q88	-40°C to +85°C	QFN88 (10*10)	Tray

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 RISK 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