

# LT8711H --- Product Brief

## Type-C/DP1.2 to HDMI1.4 Converter

### Features

#### USB Type-C

Compliant with VESA DisplayPort Alt Mode on USB Type-C standard V1.0

Compliant with USB Power Delivery specification R2.0, V1.0

Compliant with USB Type-C Cable and Connector specification R1.2

Compliant with HDMI 1.4b Alt Mode on USB Type-C specification V1.0

Compliant with DP Alt Mode 1.0, PD 2.0, Type-C 1.2, HDMI1.4b Alt Mode 1.0

Built-in dual CC controllers for charger and normal communication

3 data roles supported: DFP, UFP and DRP

2 power roles supported: source and sink

#### DP1.2 Receiver

Compliant with VESA DP1.2 and Embedded DisplayPort (eDP) v1.4

No HDCP decryption

1/2 configurable data lanes

1.62/2.7/5.4Gbps per data lane

Support SSC

1Mbps AUX channel

Receiver PHY is HDMI signal compatible

Adaptive or programmable receiver equalization

Support lane swap(arbitrarily) and polarity inversion(independent)

Support 4k@30Hz

Support eDP Authentication: Alternative Scramble Seed Reset and Alternative Framing

Fast and full Link Training for Embedded DisplayPort system

#### HDMI1.4 Transmitter

Compliant with HDMI1.4 and DVI1.0

Data rate up to 3.4Gbps

Support 4k@30Hz

Support channel swap(arbitrarily) and polarity inversion(independent)

Programmable transmitter swing and pre-emphasis

Downstream receiver sensing

5V tolerance DDC/HPD I/Os

#### Miscellaneous

DP receiver to HDMI transmitter bypass to support HDMI Alt Mode

Support Swift Charge

USB billboard module integrated

Internal or external oscillator

Integrated microprocessor

Embedded SPI flash for firmware

GPIOs for VBUS/VCONN/AUX and other system controls

Integrated 100/400kHz I2C slave

Firmware update through SPI, I2C, AUX or USB interface

Low power consumption

Power supply: 3.3V for I/O and 1.2V for core

Embedded 5V to 3.3V LDO

ESD 4kV HBM

Temperature range: -40°C ~ +85°C

Package 6mmx6mm QFN48

### Description

The LT8711H is a high performance Type-C/DP1.2 to HDMI1.4 converter, designed to connect a USB Type-C source or a DP1.2 source to an HDMI1.4 sink.

The LT8711H integrates a DP1.2 compliant receiver, and an HDMI1.4 compliant transmitter. Also, two CC controllers are included for CC communication to implement DP Alt Mode and power delivery function, one



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