LT9611UX --- Product Brief

Dual-Port MIPI DSI/CSI to HDMI2.0 with MIPI Input Switch and Audio

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Features

Single/Dual-Port MIPI DSI/CSI Receiver

- Compliant with D-PHY1.2 & DSI1.3 & CSI-2 1.3
- Integrated DSC1.2 decoder
- 4 physical ports grouped into 2 dual-port receivers, only one receiver activated at a time (2-to-1 switching internally)
- 1/2 configurable ports per dual-port receiver
- 1 clock lane and 1/2/3/4 configurable data lanes per port
- 80Mbps~2Gbps per data lane
- Skew calibration
- Programmable receiver equalizer
- Support data lane swap(arbitrarily) and polarity inversion(independent)
- 3D support: two ports simultaneously receiving L and R frames or odd-L/even-R alternative pixels
- DSI support both burst mode and non-burst mode
- DSI support video formats:

DSC/CSC disabled: Packed 16/18/24/30/36.8(th bud*RGB,d)TJ-11.8382 -1.7267 TD -0.0341 Tc 0.0002 Tw (abld, /CSCenuabldd: sd

Packed 16/24-bit YCbCr4:2:2, Loosely Packed 20-bit YCbCr4:2:2

DSC enabled, CSC disabled: Packed 24-bit RGB, Packed 16-bit YCbCr4:2:2, Packed 12-bit YCbCr4:2:0

DSC/CSC enabled: Packed 24-bit RGB, Packed 16-bit YCbCr4:2:2

CSI support video formats:

DSC/CSC disa
8/10-bit, Legac
DSC disabled,
YUV422 8/10-
DSC enabled,
Legacy YUV42
DSC/CSC ena

Digital Audio Input

- I2S interface supporting 8-channel audio, with sample rates of 32~192 kHz and sample sizes of 16~24 bits
- SPDIF interface supporting PCM, Dolby Digital, DTS digital audio at up to 192kHz frame rate
- IEC60958 or IEC61937 compatible

HDMI2.0 Transmitter

- Compliant with HDMI2.0b, HDMI1.4 and DVI1.0
- Compliant with HDCP2.2 and HDCP1.4
- Data rate up to 6Gbps
- On-die back termination
- Programmable transmitter swing and pre-emphasis
- AC-couple capable
- Support channel swap(arbitrarily) and polarity inversion(independent)
- Support 4k@60Hz
- Supported 3D formats: side-by-side(full)
- Supported video formats:

DSC/CSC disabled: 24/30/36-bit RGB, 16/20/24-bit YCbCr4:2:2, 8-bit YCbCr4:2:0

DSC disabled, CSC enabled: 24-bit RGB/YCbCr4:4:4, 16-bit YCbCr4:2:2

DSC enabled, CSC disabled: 24-bit RGB, 16-bit YCbCr4:2:2, 8-bit YCbCr4:2:0

DSC/CSC enabled: 24-bit RGB/YCbCr4:4:4, 16-bit YCbCr4:2:2

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