LT9211 --- Product Brief

MIPI/TTL/2-Port LVDS to MIPI/TTL/2-Port LVDS Converter

Features

MIPI Transmitter

Compliant with DCS1.02, D-PHY1.2 ,DSI1.2 and CSI-2 1.00
1 Clock Lane and 1~4 Configurable Data Lanes
Two Port Simultaneous Display Supported
Up to 1.8Gb/s per Data Lane
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz
Data Lane and Polarity Swapping
Both Non-Burst and Burst Video Mode Supported
Support RGB666, Loosely RGB666, RGB888, RGB565, 16-bit YCbCr4:2:2, 24-bit YCbCr 4:2:2 Video Format

Dual-Port LVDS Transmitter

Compatible with VESA and JEIDA standard
1~2 Configurable Port
Two Port Simultaneous Display Supported
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz
Support DE Mode
Data Port , Data Lane and Polarity Swapping
Programmable Pre-emphasis
Support output SSC(30KHz ± 5%)

TTL Output

Support 24-bit RGB and BT656/BT1120
Both DDR and SDR Sampling supported
Support both 1.8V and 3.3V Voltage Output
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz

MIPI Receiver

Compliant with DCS1.02, D-PHY1.2 ,DSI1.2 and CSI-2 1.00
1 Clock Lane and 1~4 Configurable Data Lanes
Two Port Input switchable
Up to 1.8Gb/s per Data Lane
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz
Data Lane and Polarity Swapping
Both Non-Burst and Burst Video Mode Supported
Support RGB666, Loosely RGB666, RGB888, RGB565, 16-bit YCbCr4:2:2, 24-bit YCbCr 4:2:2 Video Format

Dual-Port LVDS Receiver

Compatible with VESA and JEIDA standard
1~2 Configurable Port
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz
Support DE Mode
Data Port , Data Lane and Polarity Swapping
Internal Rterm Calibration with Less than 5% Error
Support input Dessc(30KHz ± 5%)

TTL Input

Support 24-bit RGB and BT656/BT1120
Both DDR and SDR Sampling supported
Support SYNC Mode and DE Mode
Support both 1.8V and 3.3V Input Voltage
Resolution Up to 1920x1200 60Hz or any other Resolution whose Pixel Clk less than 200MHz

Miscellaneous

1.8V and 3.3V Power Supply
Alternative Input and Output configuration for LVDS/TTL/MIPI
MIPI/LVDS muxer and splitter supported
MIPI-LVDS Levelshifter for FPGA Application
Support 100KHz and 400KHz I2C Slave
External 25MHz ± 200ppm Crystal Reference Clock is

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Preferred

Temperature Range: -40°C ~ +85°C

Packaged in QFN64 7.5mm x 7.5mm

Description

The Lontium LT9211 is a high performance convertor which interconvertible between MIPI DSI/CSI-2/Dual-Port LVDS and TTL except for 24bit TTL to 24bit TTL with both SYNC and DE. The LT9211 deserializes input MIPI/LVDS/TTL video data, decodes packets, and converts the formatted video data stream to MIPI/LVDS/TTL tS3.5smitedr o-4.98utputbetTAPand onili

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