

LT8918 --- Product Brief

MIPI DSI/CSI-2 Transmitter

Features

- **TTL Input**
 - Support 24-bit RGB and BT656/BT1120 Input
 - Support both SDR and DDR Data Sampling
 - Programmable Rising/Falling Edge Clock Input
 - Support up to 74.25MHz DDR or 148.5MHz SDR Clock Input
 - Support both 1.8V and 3.3V Input Voltage Level
- **Single-Port MIPI DSI Transmitter**
 - Compliant with DCS1.02, D-PHY1.1 & DSI1.02
 - 1 Clock Lane and 1~4 Configurable Data Lanes
 - 80Mb/s~1.5Gb/s per Data Lane
 - Resolution Up to 1080P 60Hz
 - Data Lane and Polarity Swapping
 - Both Non-Burst and Burst Video Mode Supported
 - Command Mode through Lane-0 Supported
 - Support RGB666, Loosely RGB666, RGB888, RGB565, 16-bit YCbCr4:2:2, 24-bit YCbCr 4:2:2 Video Format
- **Single-Port MIPI CSI-2 Transmitter**
 - Compliant with D-PHY1.1 & CSI-2 1.0
 - 1 Clock Lane and 1~4 Configurable Data Lanes
 - 80Mb/s~1.5Gb/s per Data Lane
 - Resolution Up to 1080P 60Hz
 - Data Lane and Polarity Swapping
 - Support RGB565, RGB666, RGB888, 8-bit YUV422 Video Format
- **Miscellaneous**
 - 1.8V Single Supply Power
 - Support 100KHz and 400KHz I2C slave
 - External 25MHz Crystal Reference Clock
 - Temperature Range: -40°C to +85°C

- Packaged in QFN64 7.5mm x 7.5mm and BGA81 5mm x 5mm

Description

The Lontium LT8918 is a high performance MIPI DSI/CSI-2 transmitter for mobile display panel or camera application.

The TTL input of LT8918 supports both 24-bit RGB and BT656/1120 video format under either SDR or DDR sampling. The maximum input pixel clock frequency is SDR 148.5MHz or DDR 74.25MHz for 1080P@60Hz high-end mobile display or video capture application.

For MIPI DSI/CSI-2 output, LT8918 features a single port MIPI DSI or CSI-2 transmitter with 1 high-speed clock lane and 1~4 configurable high-speed data lanes operating at maximum 1.5Gb/s/lane, which can support a total bandwidth of up to 6Gb/s. LT8918 supports both Non-Burst and Burst DSI video data transferring, as well as Command Mode through Lane-0.

The LT8918 is fabricated in advanced CMOS process and implemented in a small outline 7.5mmx7.5mm QFN64 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

Applications

- Mobile systems
- Cellular handsets
- Digital video cameras
- Digital still cameras
- Tablet PC, Notebook PC
- Car Display and Camera System

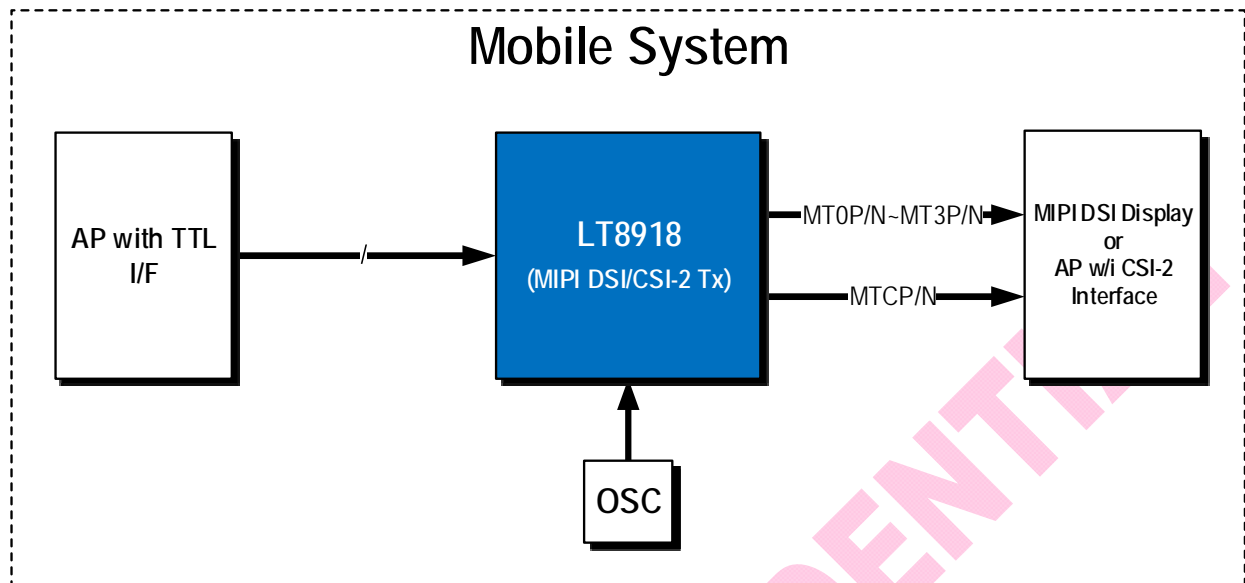


Figure 1. Typical Application and System Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT8918	-40° C to +85° C	QFN64 (7.5*7.5)/BGA81 (5*5)	Tray

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