

# LT8918L --- Product Brief

## Dual-Port LVDS to MIPI DSI/CSI-2 Bridge

### 1. Features

- **Single/Dual-Port LVDS Receiver**
  - Compatible with VESA and JEIDA standard
  - 1~2 Configurable Port
  - 1 Clock Lane and Up to 5 Data Lanes per Port
  - Resolution up to 1080P 60Hz
  - Input Color Depth Supports 6-bit, 8-bit and 10-bit
  - Support Input De-SSC (30kHz±5%)
- **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
  - Both Non-Burst and Burst Video Mode Supported
  - Support RGB888Video 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
  - Support RGB888, 8-bit YUV422 Video Format
- **Miscellaneous**
  - 1.8V Single Supply Power
  - Support 100KHz I<sup>2</sup>C slave
  - External 25MHz Crystal Reference Clock
  - Temperature Range: -40°C to +85°C

- Packaged in QFN64 7.5mm x 7.5mm

### 2. General Description

The Lontium LT8918L is a high performance Dual-Port LVDS to MIPIDSI/CSI-2 bridge chip between AP and mobile display panel or camera.

LT8918L can be configured as single-port or dual-port with optional De-SSC function. The bridge deserializes input LVDS data, decodes packets and converts the formatted video data stream to MIPIDSI/CSI-2 transmitter output.

For MIPI DSI/CSI-2 output, LT8918L 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. LT8918L supports both Non-Burst and Burst DSI video data transferring.

The LT8918L is fabricated in advanced CMOS process and implemented in a small outline 7.5mm x 7.5mm QFN64 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

### 3. Applications

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

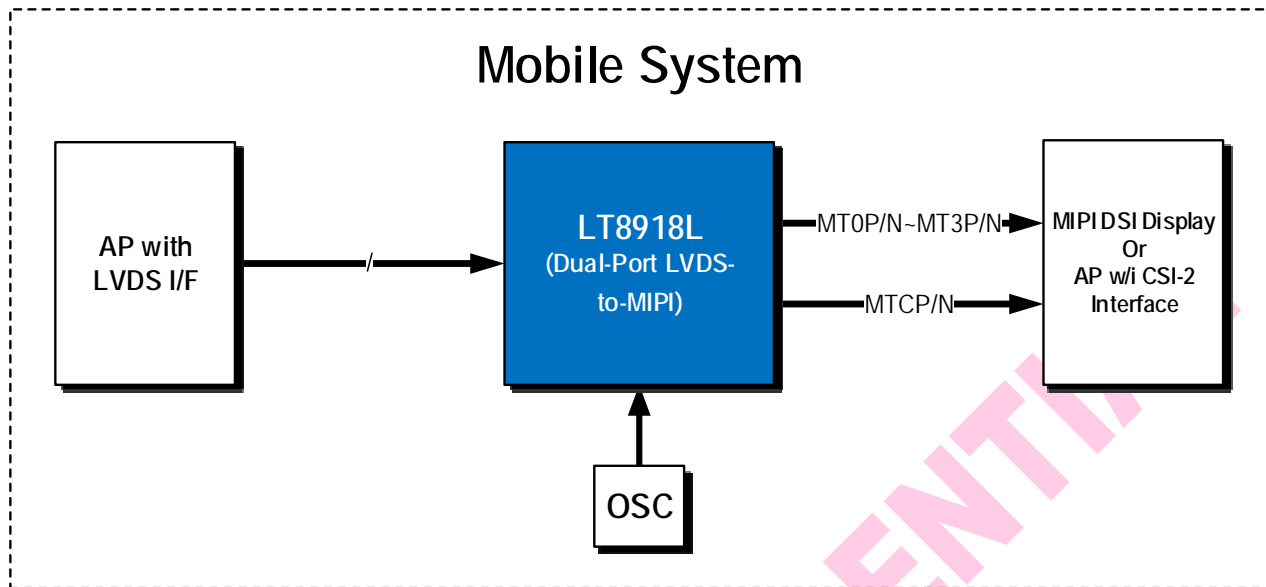


Figure 3.1 Typical Application and System Diagram

## 4. Ordering Information

Table 4.1 Ordering Information

| Part Number | Operating Temperature Range | Package         | Packing Method | MPQ     |
|-------------|-----------------------------|-----------------|----------------|---------|
| LT8918L     | -40°C to +85°C              | QFN64 (7.5*7.5) | Tray           | 2600pcs |

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