LT8918H --- Product Brief

HDMI to MIPI DSI/CSI-2

Features

- **HDMI/Dual-Mode DP Input**
  - Compliant with DVI 1.0 and HDMI 1.4
  - Support Up to 1.65Gbps for DVI
  - Support Up to 3.4Gbps for HDMI
  - Support Resolution Up to 4Kx2K@30Hz
  - Support 8/10/12 bit per component(bpc)
  - Support HDCP Decryption
  - Support On-chip EDID
- **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~1.5Gbps 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
  - 80Mbps~1.5Gbps per Data Lane
  - Resolution Up to 1080P 60Hz
  - Data Lane and Polarity Swapping
  - Support RGB565, RGB666, RGB888, 8-bit YUV422

Video Format

- **Miscellaneous**
  - Support 100KHz and 400KHz I2C slave
  - Support SPI slave
  - External 25MHz Crystal Reference Clock
  - Temperature Range: -40°C to +85°C

Description

The Lontium LT8918H is a high performance HDMI to MIPI DSI/CSI-2 bridge chip between AP and mobile display panel or camera .

For MIPI DSI/CSI-2 output, LT8918H features a single port MIPI DSI or CSI-2 transmitter with 1 high-speed clock lane and 1~4 high-speed data lanes operating at maximum 1.5Gb/s/lane, which can support a total bandwidth of up to 6Gbps. LT8918H supports both Non-Burst and Burst DSI video data transferring, as well as Command Mode through Lane-0.

Applications

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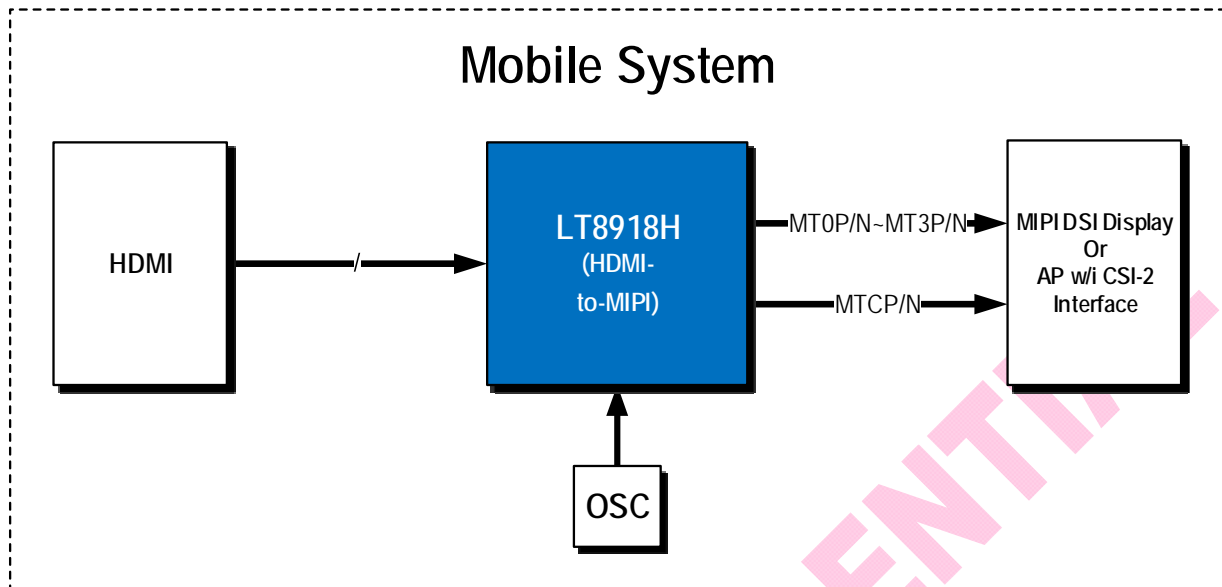- Tablet PC, Notebook PC
- Car Display and Camera System

Mobile System

Figure 1. Typical Application and System Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT8918H	−40° C to +85° C	BGA102 (9.45 * 5.8)	Tray

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