

# LT89102 --- Product Brief

## MIPI/LVDS Splitter/Level-Shifter

### Features

- **Single-Port 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
  - Up to 1.8Gb/s per Data Lane
  - Resolution Up to 1080P 60Hz
  - 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
  - Up to 1080P 60Hz
  - Data Port ,Data Lane and Polarity Swapping
  - Programmable Pre-emphasis
  - Support output SSC(30KHz±5%)
- **Single-Port 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
  - Up to 1.8Gb/s per Data Lane
  - Resolution Up to 1080P 60Hz
  - 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
  - Up to 1080P 60Hz

- Data Port ,Data Lane and Polarity Swapping
- Internal Rterm Calibration with Less than 5% Error
- Programmable Equalization
- Support input Dessc(30KHz±5%)

#### ● Miscellaneous

- 1.8V and 3.3V Power Supply
- Support 100KHz and 400KHz I2C Slave
- External 25MHz Crystal Reference Clock
- Temperature Range: -40°C ~ +85°C
- Packaged in QFN64 7.5mm x 7.5mm

### Description

The Lontium LT89102 is a high performance MIPI DSI/CSI-2/Dual-Port LVDS splitter between AP and mobile display panel or camera .

Also , The LT89102 can be used as MIPI-LVDS Level-Shifter which separate the input MIPI HS data and LP data,and using LVDS voltage-level output HS data,while using CMOS output LP data.

The LT89102 is fabricated in advanced CMOS process and implemented in 7.5mm x 7.5mm 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
- Cash System
- Advertisement

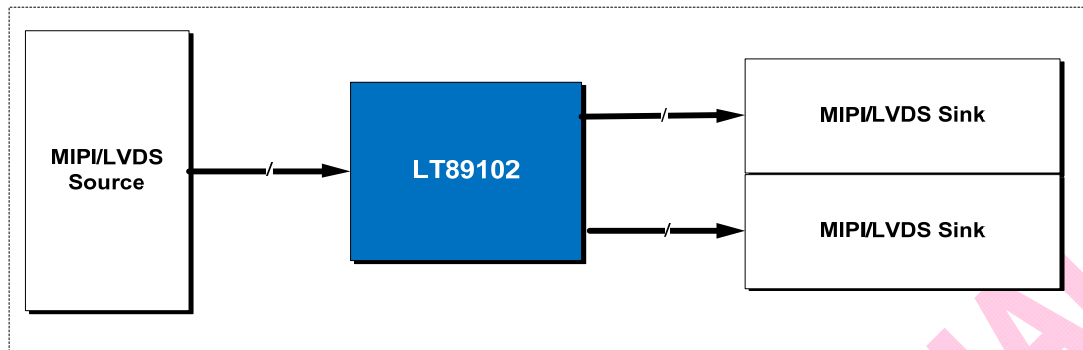


Figure 1. LT89102 Typical Application Diagram

## Ordering Information

Table 1. Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT89102	-40°C to +85°C	QFN64 (7.5*7.5)	

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