LT89121 --- Product Brief

eDPx to MIPI Converter

1. Features

- **eDPx Receiver**
  - 1/2/4/8 configurable data lanes
  - Input data rate is up to 3.75Gbps
  - Adaptive receiver equalization for PCB and cable losses
  - Support 3-byte,4-byte mode
  - Support 6bit,8bit,10bit color depth
  - Support 2 sections,4 sections input mode
  - Support Center Spread Spectrum ,±5000ppm@30kHz
- **Dual-Port MIPI DSI/CSI Transmitter**
  - Compliant with DCS1.1, D-PHY1.2, DSI1.3 and CSI-2 1.3
  - 1/2 configurable port number
  - 1 clock lane and 1/2/3/4 configurable data lanes per port
  - 80Mbps~2Gbps per data lane
  - Programmable transmitter swing and pre-emphasis
  - DSI support video formats: RGB888, 16-bit YCbCr4:2:2, Loosely 20-bit YCbCr4:2:2
  - CSI support video formats: RGB888, YUV422 8/10-bit
- **Miscellaneous**
  - Integrated microprocessor
  - Embedded SPI flash for firmware
  - Integrated 100k/400kHz I2C slave
  - Firmware update through SPI or I2C interface
  - UART Support
  - Backlight Control Support
  - Power supply: 3.3V for I/O and 1.2V for core
  - Temperature Range: -40°C ~ +85°C
  - 76 pin QFN 9*9 package

2. General Description

The LT89121 is a high performance eDPx to MIPI converter, designed to connect eDPx source to an MIPI sink.

The device is capable of automatic operation which is enabled by an integrated microprocessor that uses an embedded SPI flash for firmware storage. System control is also available through the use of a dedicated configuration I2C slave interface.

3. Applications

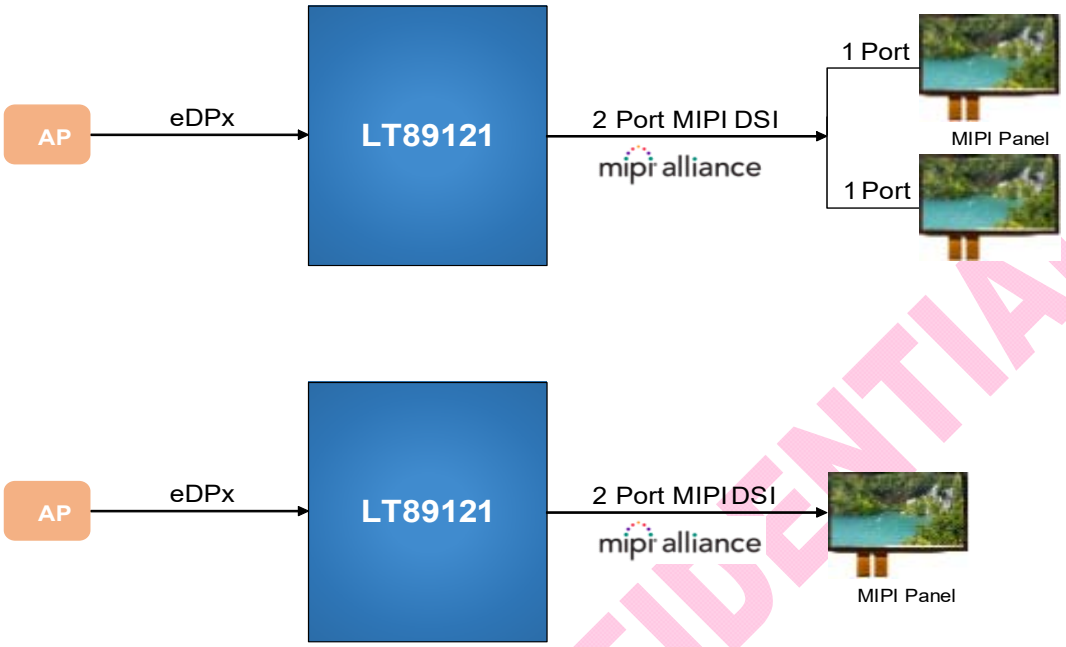

Figure 3.1 Application Diagram

4. Ordering Information

Table 4.1 Ordering Information

Product Name	Part Number	Operating Temperature Range	Package	Packing Method	MPQ
LT89121	LT89121_U2	−40°C to +85°C	QFN76 (9*9)	Tray	2600pcs

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