LT87121 --- Product Brief

eDPx to eDP/DP Converter

Features

- **eDPx Receiver**
  - 1/2/4/8 configurable data lanes
  - Input data rate is up to 3.75Gbps
  - Support lane swap(arbitrarily) and polarity inversion(independent)
  - Adaptive receiver equalization for PCB and cable losses
  - Support 3-byte,4-byte,5-byte mode
  - Support 6bit,8bit,10bit,12bit color depth
  - Support 2 sections,4 sections input mode
  - Support Center Spread Spectrum , 30kHz/5000ppm
- **eDP/DP Transmitter**
  - Compliant with VESA eDP1.4/DP 1.2
  - Support 1.62/2.7/5.4 Gbps
  - Support 1/2/4 lanes
  - Support SSC
  - Support lane swap(arbitrarily) and polarity inversion(independent)
  - Programmable transmitter swing and pre-emphasis
  - 1Mbps AUX channel
  - MCCS Over AUX Support
  - Support ASSR
- **Miscellaneous**
  - Internal or external oscillator
  - Integrated microprocessor
  - Embedded SPI flash for firmware
  - Integrated 100/400kHz I2C slave
  - Firmware update through SPI, AUX or I2C interface
  - IIS/SPDIF input support(transmitter is DP mode)
  - CSC support
  - Dither support
  - UART Support
  - Backlight Control Support
  - Low power consumption
  - Power supply: 3.3V for I/O and 1.2V for core
  - Temperature Range: -40°C ~ +85°C
  - 64 pin QFN 7.5*7.5 package

Description

The LT87121 is a high performance eDPx to eDp/DP converter, designed to connect eDPx source to an eDP/DP 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.

Applications

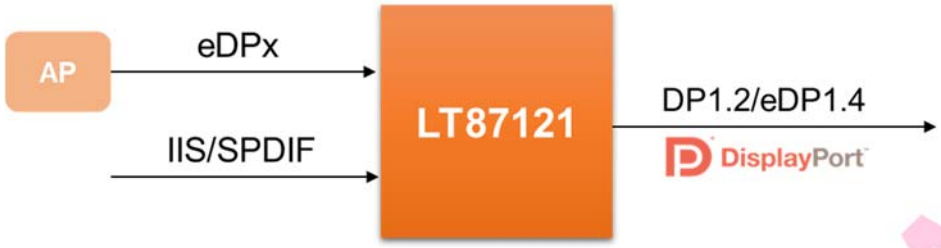

Figure 1. Application Diagram

Ordering Information

Table 1. Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT87121	-40° C to +85° C	QFN64 (7.5*7.5)	Tray

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