

# Low Power DisplayPort<sup>™</sup> to LVDS Translator

with 24/30-bit Dual or Single-LVDS Output

### Features

- DisplayPort Input Interface
  - eDPv1.3 compliant
  - 1/2 Lane high speed differential input with configurable speed: 5.4Gbps, 2.7Gbps or 1.62Gbps
  - Standard AUX channel link up to 1Mbps bandwidth
  - Support resolutions up to WQXGA (2560x1600, 60Hz, 24bpp) with pixel clock frequency up to 270MHz
  - DisplayPort ™ mode Spread Spectrum Clock (SSC) support
  - Stereo (3D) video output support
- LVDS Output Interface
  - 8 (10 for ANX1123) BPC LVDS output with single/dual ports
  - Programmable LVDS swing, channel swap and polarity invert
  - LVDS central spectrum spreading with amplitude up to +/-1.75%
  - Improved LVDS backlight control
- Programmable by the DP transmitter through AUX channel, or by local I<sup>2</sup>C slave.

- 2 Channel Audio with S/PDIF Output (ANX1123 only)
- 3.3V(2.5V) IO power supply, 1.2V(1.0) core power supply
- ESD: HBM 6kV, 200V MM, 1000V CDM
- Low power profile
- 64-eTQFP package is offered for ANX1123
- 64-pin QFN package(8 x 8 mm) is offered for ANX1122
- RoHS compliant and Halogen free package

ANX1122/1123 is a high performance, low power DisplayPort 1.2 to 24/30-bit dualchannel LVDS translator IC. It is designed for notebooks, tablets, all-in-one PCs and LCD monitors.

#### Analogix eDP-to-LVDS Display Translator Family

- ANX1121 Generic Single-channel (36 QFN and 64 QFN)
- ANX1122 Generic Dual-channel (64 QFN)
- ANX1123 Generic Dual-channel (64 eTQFP)







## **Parts Ordering Information**

| Part No.       | Description  |
|----------------|--|
| ANX1122FN-AB-T | DisplayPort™ to LVDS translator with 24-bpp LVDS output (64-pin QFN package)             |
| ANX1123TN-AB-T | DisplayPort™ to LVDS translator with 30-bpp LVDS and audio output (64-pin eTQFP package) |

### **Analogix Related Products**

| Part No. | Description   |
|----------|---|
| ANX1120  | Ultra-Low Power DisplayPort Receiver with LVDS Output               |
| ANX1121  | Single channel DP to LVDS translator                                |
| ANX1122  | DisplayPort <sup>™</sup> to LVDS translator with 24-bpp LVDS output |
| ANX1123  | DisplayPort <sup>™</sup> to LVDS translator with 30-bpp LVDS output |
| ANX9832  | DisplayPort <sup>™</sup> to VGA Converter                           |
| ANX9830  | DisplayPort <sup>™</sup> to HDMI Converter                          |

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Tel (+1) 408-988-8848

http://www.analogix.com

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