LVDS / DVI to eDP Converter Box

Specification Sheet

Features:

- Enhanced DisplayPort(DP) transmitter
  - DP 1.1z compliant
  - Embedded DisplayPort(eDP) compliant 1, 2, or 4 lanes

- Higher bandwidth 3.24Gbps per lane, supports:
  - 1920 x 1080 (FHD) 120Hz/10-bit color video standard timings
  - 2560 x 1600 (WQVGA), 2560 x 2048 (QXGA) 60 Hz/10-bit color graphics

- Interface compatibility with wide range of display controller ICs
  - LVDS (quad bus) video interface

- Robust AUX channel
  - Link service, maintenance
  - I2C-over-AUX(MCCS, DDC)

- Supports HDCP 1.3 with on-chip keys

- HDCP repeater capability
  - Acts as downstream transmitter

- Supports deep color and color format conversion
  - RGB/YUV (4:4:4) – 10-bit color
  - YUV (4:2:2/4:2:0) – 12-bit color
  - RGB (4:4:4) to YUV (4:4:4) conversion and vice-versa

- JEIDA/VESA/PSWG(non-JEIDA) compliant data mapping from 18/24/30-bit source

- I2C to AUX bridge for EDID, MCCS pass through

- Support DVI Dual Link resolution up to 2560 x 1600

- Intelligent EDID handshaking pout accurate display resolution

- True pixel to pixel signal

- 4-steps LED backlight control

- Highest video resolution modes supported

- Support PSR mode in DP 1.3 Version
<table>
<thead>
<tr>
<th>Resolution</th>
<th>Refresh</th>
<th>Color depth</th>
<th>Reduced blanking</th>
<th>DPTX lane</th>
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<tbody>
<tr>
<td>1920 x 1080P</td>
<td>120 Hz</td>
<td>8 bpc</td>
<td>Extended Blanking</td>
<td>4L</td>
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<tr>
<td>2560 x 1600</td>
<td>60 Hz</td>
<td>8 bpc</td>
<td>RB</td>
<td>4L</td>
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<tr>
<td>1600 x 1200</td>
<td>60 Hz</td>
<td>8 bpc</td>
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<td>4L</td>
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<tr>
<td>1920 x 1080p</td>
<td>60 Hz</td>
<td>10 bpc</td>
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<td>2L</td>
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<td>1L</td>
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</tbody>
</table>

**Specification:**

- **Input/Output port:**
  - Input port: 1, 2, or 4-channel LVDS (50 pins) and Dual Link DVI
  - Output port: 1, 2, or 4-Lane Embedded Display port (eDP)
- **Video**
  - Up to 2560 x 2048 60Hz, 2560 x1600 60Hz, FHD 120Hz at 10-bit per color
  - 8/10/12 bits per color option
  - RGB/YUV color format
- **HDCP**
  - On-chip keys, HDCP repeater
- **Color format conversion**
  - RGB 4:4:4 to YUB 4:4:4 and vice-versa
- **Power**
  - Power adapter: Input 110V~220V, output 12V, 3A
  - Support VBL power supply from patent generator