SlimPort® DisplayPort to Single MIPI Receiver

ANX7580 is a low-power mobile HD receiver targeted primarily for single display protocol conversion from DisplayPort to MIPI. With a 4-lane DisplayPort1.4 input and a single MIPI Output with 3:1 DSC support, ANX7580’s feature set is optimized to meet the high performance requirements for current and next generation single and dual clamshell display applications as well as Head-Mounted Displays (HMD) for Augmented Reality (AR) and Virtual Reality. Moreover, with data rate support of up to 6.75Gbps on its DisplayPort input, ANX7580 is an ideal companion device for SlimPort transmitters currently implemented in many leading smart phones. The ANX7580 can also supports eDP on its input making it an ideal converter for x86 based mobile platforms.

Features

- Standard compliance
  - DisplayPort1.4, HDCP2.2/1.4
  - MIPI-DSI 1.2 and D-PHY 1.1
- DisplayPort Receiver
  - DisplayPort1.4 receiver
  - Configurable 1, 2 or 4-lane input supports:
    HBR2.5 (6.75Gbps), HBR2 (5.4Gbps), HBR (2.7Gbps), and RBR (1.62Gbps) data rates
  - Horizontal left / right line splitting
  - 3D stereo modes
  - HDCP2.2 and HDCP1.4 support
- Resolution
  - DisplayPort Receiver Input Bandwidth supports up to 3600 x 2100 at 60Hz
- Single MIPI DSI transmitter interface outputs
  - Single MIPI ports per display output
  - Display synchronization
  - 4-MIPI lanes total per MIPI interface output
  - MIPI-DSI data rates up to 1.5 Gbps per lane
- 3:1 DSC (VESA) on it MIPI Output Transmitters
- System operation and power supply
  - Slave I²C interface
  - 1.0V and 1.8V
- I²S Stereo Audio Output
  - 2-channels, 192Khz sample rate
  - Up to 8-channels TDM
- Package: 100-pin BGA, 5mm x 5mm
Related Products

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANX7530</td>
<td>SlimPort DisplayPort to Quad-MIPI converter without DSC on its MIPI Transmitters</td>
</tr>
<tr>
<td>ANX7533</td>
<td>SlimPort DisplayPort to Dual-MIPI converter with 3:1 DSC on its MIPI Transmitter</td>
</tr>
<tr>
<td>ANX7688</td>
<td>SlimPort HDMI to USB Type-C Controller and Transmitter (Ultra-HD, 2160p60)</td>
</tr>
<tr>
<td>ANX7625</td>
<td>SlimPort MIPI-DSI to USB Type-C Controller and Transmitter (Ultra-HD, 2160p30)</td>
</tr>
<tr>
<td>ANX7805</td>
<td>SlimPort Transmitter (Full-HD, 1080p60) with RGB-24, MIPI-DSI, SPDIF, iPS and SLIMbus inputs</td>
</tr>
<tr>
<td>ANX7816</td>
<td>SlimPort Transmitter (Ultra-HD, 2160p30) with HDMI input</td>
</tr>
<tr>
<td>ANX7747</td>
<td>SlimPort to VGA (WUXGA, 1920x1080p60) converter</td>
</tr>
<tr>
<td>ANX7738</td>
<td>SlimPort to HDMI 1.4b (Ultra-HD, 2160p30 and 3D) converter</td>
</tr>
</tbody>
</table>