**SlimPort® (4K Ultra-HD) Receiver**

ANX7538 is a low-power Ultra-HD (3840x2160p120) mobile HD receiver targeted primarily for Virtual Reality (VR) headsets. With a 4-lane DisplayPort1.4 input and dual MIPI outputs, the ANX7538’s feature set is optimized to meet the high-performance requirements for current and next generation Head-Mounted Displays (HMD) for Virtual Reality (VR) and Augmented Reality (AR). Moreover, with data rate support of up to 8.1Gbps on its DisplayPort input, ANX7538 is an ideal companion device for today’s high performance GPUs used in Virtual Reality applications.

**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: HBR3 (8.1Gbps), HBR2 (5.4Gbps), HBR (2.7Gbps) and RBR (1.62Gbps)
  - Horizontal left / right line splitting
  - 3D stereo modes
  - HDCP2.2 and HDCP1.4 support
  - VESA DSC v1.2a (v1.1 compatible)
- **Resolution**
  - DisplayPort Receiver Input Bandwidth supports up to 3840x2160 at 120Hz

- **Two MIPI DSI transmitter interface outputs**
  - Two MIPI ports per display output
  - VESA DSC v1.2a (v1.1 compatible)
  - 8-MIPI lanes total per MIPI interface output
  - Combo PHY configurable for D-PHY or C-PHY (1.5Gbaud)
- **System operation and power supply**
  - Slave I²C interface
- **I²S Stereo Audio Output**
  - 2-channels, 192Khz sample rate
  - Up to 8-channels TDM
- **Integrated video scaler**
- **Package:** 169-BGA, 8x8mm²

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**ANX7538 Block Diagram**

- **DisplayPort Receiver**
- **D-PHY/CPHY**
- **32-bit MCU**
- **I²C Slave/Slave**
- **Audio PLL**
- **I²C Master**
- **EDID**
## Related Products

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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>ANX7327</td>
<td>10G Demux (4:6) with Integrated PD 3.0 Controller for USB3.1 and DisplayPort 1.4</td>
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<td>ANX7441</td>
<td>10G Active Re-timers for USB3.1 and DisplayPort 1.4</td>
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<td>ANX7496</td>
<td>8.1G Active Re-timer for DisplayPort 1.4</td>
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<tr>
<td>ANX7490</td>
<td>10G Active Re-timer for USB3.1</td>
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<tr>
<td>ANX7539</td>
<td>SlimPort DisplayPort 1.4 to Dual-MIPI Output Display Converter with DSC decoder/encoder</td>
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<td>ANX7530</td>
<td>SlimPort DisplayPort to Dual-MIPI Output Display Converter</td>
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<tr>
<td>ANX7533</td>
<td>SlimPort DisplayPort to Dual-MIPI converter with 3:1 DSC on its MIPI Transmitters</td>
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<tr>
<td>ANX7580</td>
<td>SlimPort DisplayPort to Single-MIPI converter with 3:1 DSC on its MIPI Transmitter</td>
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<td>ANX7688</td>
<td>SlimPort HDMI to USB Type-C Controller and Transmitter (Ultra-HD, 2160p60)</td>
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