HDMI to DisplayPort Bridge Controller

ANX7678 is an ultra-low power **4K Ultra-HD (4096x2160p60)** SlimPort® transmitter designed for embedded applications, such as, virtual reality, docking stations, and other embedded DisplayPort™ applications with internal displays. The ANX7678 converts HDMI™ 2.0 to DisplayPort 1.3 Ultra-HD (4096x2160p60). Overall, the ANX7678 is designed to provide an internal DisplayPort connection between the HDMI interface and the internal DisplayPort panel. For virtual reality applications, the ANX7678 is a companion device to the ANX7530 (DisplayPort to Dual-MIPI) bridge converter.

**Features**

- **Standard compliance**
  - DisplayPort1.3, HDMI2.0/1.4b, HDCP 1.4 receiver
- **DisplayPort transmitter**
  - DisplayPort transmitter (2-lanes @6.75Gbps)
  - Configurable 1-lane or 2-lane output supports: HBR2.5, HBR2, HBR, and RBR data rates
  - Ultra-HD (3840x2160p60) or 4K (4096x2160p60) maximum video resolution
  - Stereo (3D) video output support
  - AUXP and AUXN support
  - HDCP1.4 receiver support
- **HDMI 2.0 receiver**
  - Supports max pixel clock rates up to 600 Mpixels/sec
  - Up to 36bpp color depth support
  - Up to Ultra-HD (3840x2160p60) or 4K (4096x2160p60) maximum video resolution
  - Up to 8-channels digital audio support
- **System operation**
  - Reference input clock: 27MHz
  - Slave I²C device control interface
  - Built-in video BIST patterns and audio tone generator for system self-test
- **Power supply requirements**
  - 1.0V, 1.8V, and 3.3V
- **Package: VFBGA**
## Related Products

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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>ANX7530</td>
<td>DisplayPort to MIPI-DSI Bridge</td>
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<tr>
<td>ANX7625</td>
<td>MIPI-DSI/DPI to USB Type-C Bridge (Port Controller with MUX)</td>
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<tr>
<td>ANX7816</td>
<td>SlimPort Transmitter (Ultra-HD, 2160p30) with HDMI input</td>
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