Dual Mode DisplayPort™ Transmitter

ANX9804 is a low power dual mode DVO/LVTTL to DisplayPort/HDMI™ transmitter product designed for motherboard. The proprietary circuit technique adopted by ANX9804 makes the power consumption extreme low. With its low power consumption, it can fit into very small form factor devices that fit into modern lifestyle. ANX9804, a first in its class product, can be used in conjunction with ANX9835 (DisplayPort to DisplayPort/HDMI replicator) and ANX9815 (DisplayPort receiver) to provide end-to-end interface connectivity.

Features

- **Product compliance**
  - DisplayPort 1.1a with HDCP 1.3
  - HDMI 1.3 with HDCP 1.2
  - HDMI 1.2 and DVI 1.0 backward compatible
- **Output interface**
  - Dual mode: DisplayPort or HDMI output
  - 1/2/4 lane operation at up to HBR (2.7 Gbps/lane) and RBR (1.62 Gbps/lane)
  - DisplayPort mode spread spectrum clock (SSC) support
  - Support up to 2560 x 1600@60Hz (WQXGA) with 30bpp color depth
  - YCbCr to RGB conversion supported
  - 4:4:4 and 4:2:2 data input formats supported
  - 18/24/30/36 bits per pixel video supported
  - Embedded audio supported
  - Fully integrated HDCP encryption for DisplayPort and HDMI modes
- **Input interface**
  - 24-bit DVO/LVTTL flexible video input
  - S/PDIF audio mode including two-channel uncompressed L-PCM and multi-channel compressed DTS supported
  - Deep color up to 36bpp in DDR supported
  - Audio input interface
  - Deep color up to 36bpp in DDR supported
  - Fully integrated HDCP hardware and keys shared for DisplayPort and HDMI modes
  - Built-in video pattern generator and audio tone generator for system self-test
  - Power management
    - 1.8V and 3.3V power supplies
    - Software controlled power management
- **Package:** 81-ball BGA
## Related Products

<table>
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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>ANX6345</td>
<td>LVTTL (up to 36-bit input) to DisplayPort 1.2 transmitter</td>
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