

6G Active Re-driver with Linear Equalization for HDMI 2.0

ANX7494 is an AC-coupled 4-lane HDMI2.0 Re-driver. It can support AC-coupled HDMI or DisplayPort Dual-Mode physical layer input to HDMI2.0, and up to 6Gbps per lanes. It is backward compatible with HDMI1.4. ANX7494 has a built-in high-gain bandwidth linear amplifier with Continuous Time Linear Equalization (CTLE), flat gain and output swing. It can recover HDMI signals with loss compensation up to -10dB. ANX7494 can optimize HDMI signals by reducing the inter-symbol interference via pin strapping or I2C control mode, and it provides Middle Frequency compensation to fine tune eyes in built-in registers. Four-lane of ANX7494 can supply wide-range adjustable receiver terminations to match different SoC impedance request.

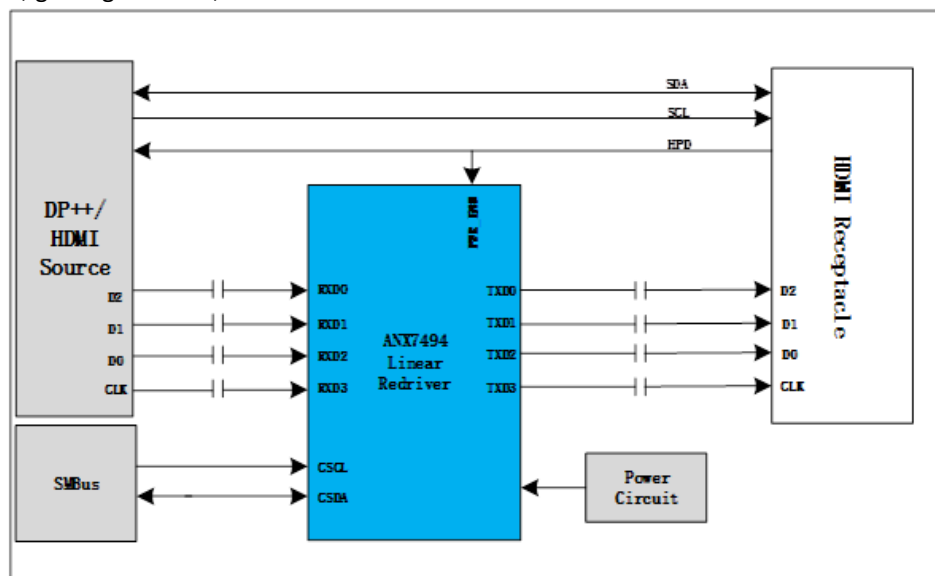
Features

- Built-in Re-driver with CTLE
 - Integrated Re-driver for HDMI2.0 up to 6Gbps
 - Supports DP++, HDMI Source applications
 - Loss compensation to recover up to -10dB channel loss @6Gbps
- CTLE, Flat Gain and Swing configurations
 - Four-lane configurations set by pin strapping.
 - Independent channel configuration for CTLE, Flat Gain and Swing in I2C mode.

- Serial interface
 - I2C slave interface, up to 1MHz, for Re-driver configuration
- Industry standard compatibility
 - HDMI2.0 specification
- Low power design
 - Less than 1mW when PWR_EN# is pulled high.
 - Analog power supply at 1.8V
 - I/O power supply at 1.8V
 - Integrated Core power supply at 1.2V
- Package
 - QFN-42, 9.0mm x 3.5mm, 0.90mm thick (max), 0.35mm pin-pitch
- Commercial temperature range of 0°C to 70°C

Application

- Notebooks, desktops, gaming PCs, workstations, active cables, gaming consoles, set-to boxes and



Related Products

| Part Number | Description |
|-------------|--|
| ANX7451 | 10G Active Mux (4x4) with Integrated Re-timers for USB3.2/DisplayPort |
| ANX7431 | USB3.2 (10G) 1x2 Active Switch USB-C Re-timer |
| ANX7433 | 10G Active Mux (1x2) with Integrated Re-timer and CC Detection for USB 3.2 |
| ANX7443 | 10G Active Mux (6x4) with Integrated Re-timers for USB3.2/DisplayPort |
| ANX7491 | 10G USB 3.2 Re-timer (1-Port) |
| ANX7497 | DisplayPort 4-lane Re-timer |

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