

8.1G DisplayPort[™] 4-lanes Re-timer

ANX7496 is a DisplayPort 4-lane re-timer capable of conditioning DP signals up to 8.1Gbps (supports HBR3, HBR2, HBR, RBR rates). ANX7496 can compensate signal loss of up to 27dB and can operate in either DP transparent mode or Link-Trainable Tunable PHY Repeater (LTTPR) mode. ANX7496 integrates the DP AUX signal pass-through and is protocol aware for better link power management and power savings. ANX7496 can be in various types of applications such as PCs, mobile, accessories, monitors, and VR HMDs with various connectors such as mini-DP, standard-DP, or even USB Type-C[™] (USB-C[™]).

Features

- Built-in re-timers
 - Integrated re-timers (Link training-tunable PHY repeater) for DisplayPort up to HBR3 @ 8.1Gbps
 - Supports both transparent mode and nontransparent mode (transparent or LTTPR)
 - Loss compensation to recover up to 27dB channel loss
- Integrated AUX pass-through
 - Integrated AUX detection for link training and protocol awareness for better link power management (LPM)
- Reference clock for re-timer
 - Utilizes a 24MHz reference XTAL or 1.05V singleended clock source

- Serial and debug interfaces
 - I²C Slave interface, up to 1MHz, for re-timer configuration
- Industry standard compatibility
 - DisplayPort 1.4 specification
- Low-power design
 - Analog power supply at 1.8V
 - Dedicated supply power pin for I/O power at 1.8V
- Packages
 - BGA-56, 4.0mm x 4.5mm, 0.5mm ball-pitch
 - QFN-60, 7.0mm x 7.0mm, 0.85mm Z-height,
 0.4mm pin-pitch
- Commercial temperature range of 0C to 70C

Applications

Notebooks, desktops, and 2-in-1s





Related Products

Part Number	Description
ANX7430	10G Active Mux (1x2) with Integrated Re-timer for USB 3.1 Gen2
ANX7440	10G Active Mux (6x4) with Integrated Re-timers for USB 3.1/DisplayPort
ANX7490	USB 3.1 Gen2 10G Re-timer (1x1)

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