

## 10G USB 3.1 Re-timer (1-Port)

ANX7490 is a USB 3.1 1-port re-timer capable of conditioning USB signals at both Gen 1 (5Gbps) and Gen 2 (10Gbps) speeds. ANX7490 can compensate signal loss of up to -23dB and is compliant to the latest USB 3.1 specifications. ANX7490 is protocol aware for better link power management and power savings. ANX7490 can be in various types of applications such as notebook/desktop PCs, server, and accessories/docks with various USB connectors such as Type-A, Type-B, or even USB Type-C<sup>™</sup> (USB-C<sup>™</sup>).

## Features

- Built-in re-timer
  - Integrated re-timer for USB 3.1 1-port (Tx/Rx) up to 10Gbps
  - Loss compensation to recover up to 23dB channel loss
- Protocol awareness for better link power management (LPM) and savings
- Reference clock for re-timer
  - Utilizes a 24MHz reference XTAL or 1.05V singleended clock source
- Serial and debug interfaces
  - I<sup>2</sup>C Slave interface, up to 1MHz, for re-timer configuration
  - DCI debug interface support

- Industry standard compatibility
  - USB 3.1 specification, Appendix E
  - Intel USB 3.1 Repeater and Active Switch specification
- Low-power design
  - Analog power supply at 1.8V
  - Dedicated supply power pin for I/O power at 1.8V
- Package
  - BGA-42, 3.5mm x 4.0mm, 0.5mm ball-pitch
  - QFN-40, 5mm x 5 mm, 0.4mm pin-pitch
- Commercial temperature range of 0C to 70C

## **Applications**

Notebooks, desktops, server, and accessories/docks





## **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
ANX7496	8.1G DisplayPort 4-lanes Re-timer

Copyright ©2018 Analogix Semiconductor, Inc. 3211 Scott Blvd., Suite 100 Santa Clara, CA 95054, USA +1 (408) 988-8848 http://www.analogix.com/

©2018 Analogix Semiconductor, Inc. All Rights reserved.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY EXPRESS REPRESENTATIONS OF WARRANTIES. IN ADDITION, ANALOGIX SEMICONDUCTOR INC. DISCLAIMS ALL IMPLIED REPRESENTATIONS AND WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTURAL PROPERTY RIGHTS.

This document contains proprietary information of Analogix Semiconductor, Inc. or under license from third parties. No part of this document may be reproduced in any form or by any means or transferred to any third party without the prior written consent of Analogix Semiconductor, Inc.

The information contained in this document is not designed or intended for use in on-line control of aircraft, aircraft navigation or aircraft communications; or in the design, construction, operation or maintenance of any nuclear facility. Analogix disclaims any express or implied warranty of fitness for such uses.

Analogix Semiconductor, Inc., the Analogix Logo, and WideEye<sup>™</sup> SerDes, CoolHD<sup>™</sup>, and Slim**Port®** are trademarks of Analogix Semiconductor, Inc., in the United States and other countries.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. DisplayPort and the DisplayPort logo are trademarks or registered trademarks of the Video Electronics Standards Association, VESA<sup>®</sup>. USB and the USB logo are trademarks or registered trademarks of USB Implementers Forum, Inc., creators of USB technology.

All other trademarks and registered trademarks are the property of their respective owners.