



Integrated Device Technology

VLX1000 PanelPort™ LinkXtend™

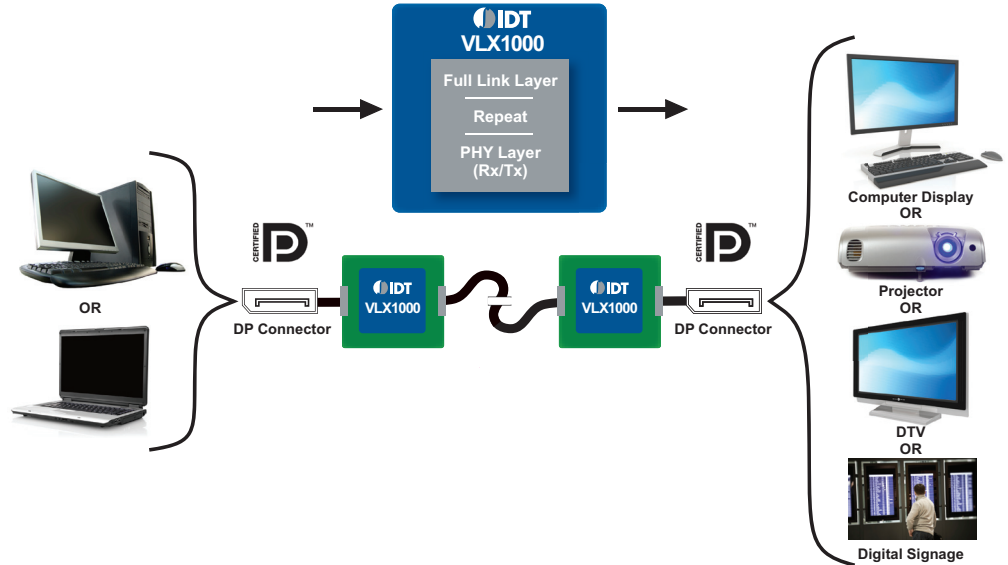
POWER MANAGEMENT | ANALOG & RF | INTERFACE & CONNECTIVITY | CLOCKS & TIMING | MEMORY & LOGIC | TOUCH & USER INTERFACE | VIDEO & DISPLAY | AUDIO

BENEFITS AND FEATURES OF IDT LINKXTEND

- Clean, accurate signal from PC to monitor or source to sink device
 - Complete PHY layer and full protocol link layer repeat with jitter clean up
 - Provides 2.7 GHz x 4 lanes, total 10.8 Gbps bandwidth that supports maximum 2560 x 1600 pixel resolution
- Extended cable links
 - Multiple LinkXtend adapters can be connected serially to provide signal to distant receivers
- Design flexibility
 - Implement on the PC motherboard or in a separate dongle
 - Full interoperability and flexibility
- Full Hollywood content security support
 - Transmits secured data from down to upstream
- Improves ecosystem for DisplayPort-enabled applications
 - Ideal solution that doesn't just amplify the noise to improve eye, but instead it resets the jitter budget
 - Low power enables "Green" system designs
- No AC adapter required for dongles
 - Bus power capability through the use of the DisplayPort standard
- Full protocol Link Layer repeat
 - Renews and reconditions the signal
 - Cleans noise and jitter
 - Provides full PHY, Link and Protocol layer enablement

APPLICATIONS FOR VLX1000 PANELPORT LINKXTEND

- Telecommunications
- Enterprise
- Industrial PC
- Cable adapters
- Home entertainment system
- In-flight entertainment system
- Digital signage



PanelPort™ technology enables the link extender chip to provide “true signal quality” end-to-end, when transmitting display signals over long distances and inefficient board layouts.

Description

The IDT PanelPort™ LinkXtend™ is a DisplayPort™-based solution that provides not only amplification and re-drive, but also signal cleaning, signal reconditioning and signal renewing in extended cable links for PC and mobile computers to remote monitors. The device is the first solution to provide jitter clean up and full link layer repeat functionality in a single chip. The single four-lane input/single four-lane output device can be connected serially to provide extended cable length, offering an affordable solution for challenging enterprise environments. The IDT PanelPort LinkXtend can also be implemented on a PC board to repair long trace routing signal degradation or inefficient board routing.

Available in an 81-pin BGA, this flexible and feature-rich device extends the DisplayPort-based applications to include telecommunications, industrial and cable adapter markets. In these environments, a major concern is the transmission of signals over long distances without repeating or amplifying noise to the signal. The PanelPort LinkXtend reconditions and reestablishes the signal while resetting the jitter budget to provide end-signal quality equal to the source.

Discover what IDT know-how can do for you:

www.IDT.com/go/LinkXtend

DISCLAIMER Integrated Device Technology, Inc. (IDT) and its subsidiaries reserve the right to modify the products and/or specifications described herein at any time and at IDT's sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of IDT's products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of IDT or any third parties. IDT's products are not intended for use in life support systems or similar devices where the failure or malfunction of an IDT product can be reasonably expected to significantly affect the health or safety of users. Anyone using an IDT product in such a manner does so at their own risk, absent an express, written agreement by IDT.

Integrated Device Technology, IDT and the IDT logo are registered trademarks of IDT. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of IDT or their respective third party owners. © Copyright 2010. All rights reserved.

PB_VLX1000_REV60511