Integrated Device Technology

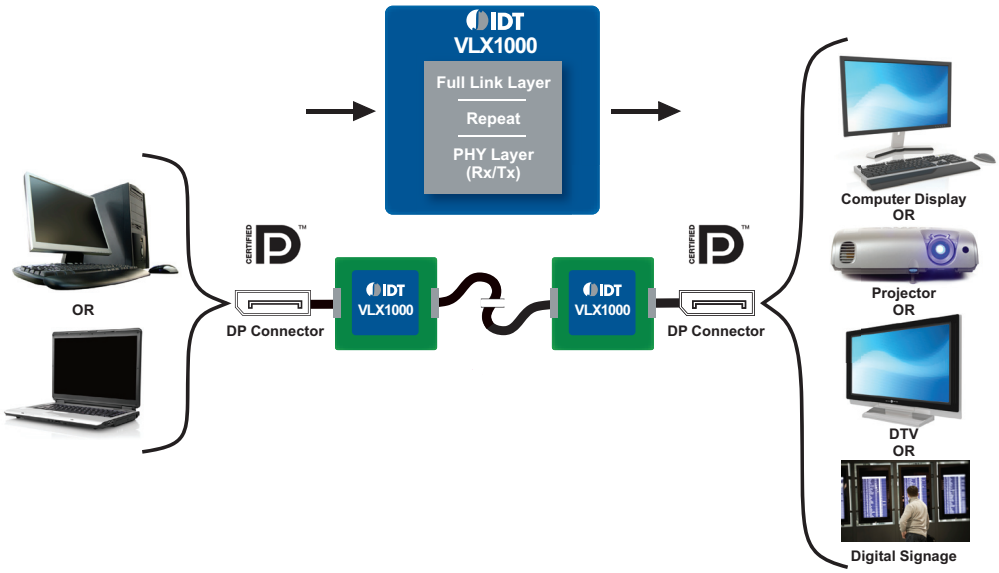
VLX1000 PanelPort™ LinkXtend™

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

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