◆D PERICOM®

SIGNAL INTEGRITY SOLUTIONS

PI3HDX1204D
HDMI 2.0 6Gbps Linear ReDriver

Description

Pericom Semiconductor's PI3HDX1204D is suitable for HDMI 2.0 6Gbps ReDriver or DP++ 1.2/1.3 Active Level Shifter with the ultra-low Additive Random and Deterministic jitters.
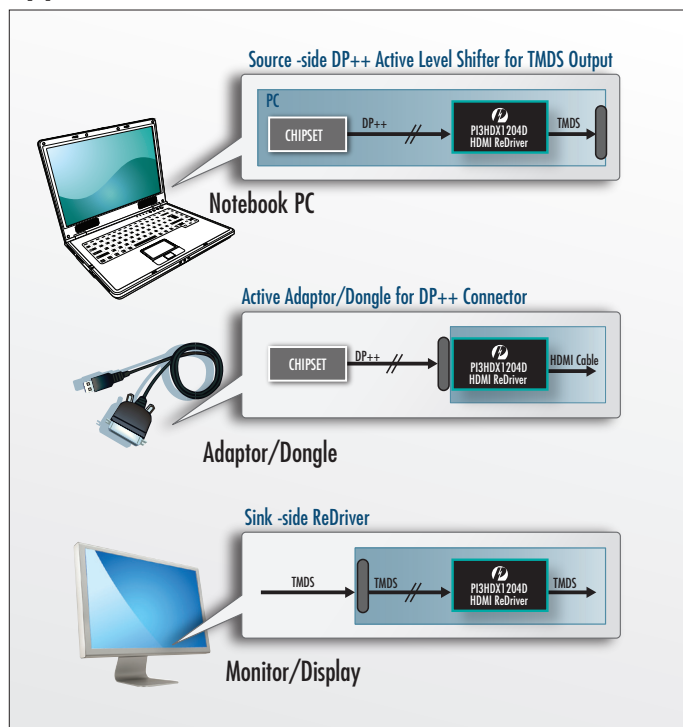
Linear equalization provides the system design flexibility and simplicity in the component placements and signal output setting in the transmission line. For active cable and adaptor applications, it does not require any special adaptor ID bits for sink capability reporting to source device.

The pin strapping or I²C programmable configuration registers can optimize signal quality over a variety of physical mediums by reducing Intersymbol interference (ISI) jitters.

In EEPROM mode, the programmable device registers can be automatically loaded during the system power-up to eliminate the need of external microprocessor or software driver.

Main applications are personal computers, PC monitors, display devices, docking and related media players.

Application

Source -side DP++ Active Level Shifter for TMDS Output

Notebook PC

Active Adaptor/Dongle for DP++ Connector

Adaptor/Dongle

Sink -side ReDriver

Monitor/Display

Features

→ HDMI 2.0 compliant TMDS Linear ReDriver with 2x less add-in jitters
  o Ultra-low Additive Jitter: DJ 6ps @ 6.0 Gb/s
→ DP++ 1.2/1.3 AC-coupled input to HDMI 2.0 TMDS Active Level Shifter
→ Linear ReDriver increases Link Rate Margin together with Systems LFE/DFE (Decision Feedback Routing Equalizers) feedback loop
→ Independent channel input equalization, output swing and flat gain control setting
→ Pin strap or I²C programmable configuration
→ Flexible 4-bit I²C address bit selectable
→ Power supply voltage: 3.3V±0.3V
→ Package (Pb-Free & Green):
  o 42-pin TQFN (3.5 x 9mm)
  o 32-pin TQFN (3 x 6mm)

Ordering Information

Part Number	Package Description
PI3HDX1204DZHEX	42-pin TQFN (ZH, 3.5x9mm), Pb-free, Tape/Reel, Package code: ZH 42
PI3HDX1204DZLEX	32-pin TQFN (ZL, 3x6mm), Pb-free, Tape/Reel, Package code:ZL 32

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