



LT86104NX - HDMI/DVI 1:4 Splitter

1. General Description

The LT86104NX is Lontium's 3rd generation 4-port HDMI/DVI splitter which can repeat one HDMI/DVI signal to 4 HDMI/DVI signal sets, supporting up to 4 different HDMI/DVI receiving/display terminals. Based on ClearedEdge™ technology, it supports up to 3.4Gbps data rate per channel, compliant with the HDMI 1.4/DVI 1.0 specifications.

The device incorporates a pair of ODTs, an adaptive equalizer and a CDR circuit on each data channel of receiver side, and a de-emphasis driver with optional back terminations on each data channel of transmitter side. The clock channel feeds a high-performance PLL that regenerates a low jitter output clock for data recovery.

Fabricated in an advanced CMOS process, the LT86104NX is provided in a 128-lead LQFP package and is specified over the 0° C to +70° C temperature range.

2. Features

- HDMI 1.4/DVI 1.0 specifications compliant
- Support 3D video formats and 4Kx2K extended resolution formats up to 3.4Gbps data rate
- Adaptive equalization and de-emphasis to compensate long cable losses
- ODTs and calibration
- 5V-tolerant DDC interfaces
- 1 HDMI/DVI input port, up to 4 HDMI/DVI output ports
- Unlimited cascading for more output ports or signal repeating
- 128-pin LQFP package

3. APPLICATIONS

- Multiple display/TV support
- HDMI/DVI signal splitting/repeating