

# LT86104UX --- Product Brief

# HD-DVI2.0 1-In 4-Out Splitter

### 1. Features

- HD-DVI 1.4/2.0 specifications compliant
- Support 4Kx2K extended resolution formats up to 6.0Gbps data rate
- Adaptive equalization and de-emphasis to compensate long cable losses
- Integrated EDID shadow RAM and embedded EDID
- 5V-tolerant DDC interfaces
- 1 HD-DVI input port, up to 4 HD-DVI output ports
- Unlimited cascading for more output ports or signal repeating
- Jitter cleaning PLL for better performance
- No external crystal is needed
- 1.35V and 3.3V power supply

### 2. General Description

The Lontium LT86104UX HD-DVI2.0 Splitter features a

1:4 splitter compliant to HD-DVI2.0/1.4 specification, max 6Gbps high speed data rate, adaptive equalization RX input and pre-emphasized TX output to support long cable application, no XTAL on board to save BOM cost.

LT86104UX HD-DVI2.0 Splitter automatically detect the cable loss, and adaptively optimize the equalization setting. The CDR cleans the input data jitter, make it suitable for long cable and cascade application. It supports RX termination resistor calibration to further improve signal integrity.

LT86104UX support DDC/ACDC (Auxiliary and Control Data Channel) compliant to HD-DVI2.0/1.4 specification. This package is QFN128 14mm x14mm. It operates from -40°C to +85°C.

### 3. Applications

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

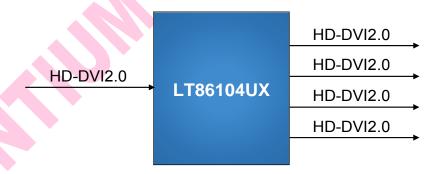


Figure 3.1 Application Diagram

## 4. Ordering Information

**Table 4.1 Ordering Information** 

Part Number	Product Status	Operating Temperature Range	Package	Packing Method	MPQ
LT86104UX_U5	MP	-40°C to +85°C	QFN128 (14*14)	Tray	1190pcs
MP: Mass Production.					



#### LT86104UX U5 ADVANCE INFORMATION – CONFIDENTIAL AND PROPRIETARY

Copyright © 2016-2024 Lontium Semiconductor Corporation, All rights reserved.

#### **Lontium Semiconductor Proprietary & Confidential**

This document and the information it contains belong to Lontium Semiconductor. Any review, use, dissemination, distribution or copying of this document or its information outside the scope of a signed agreement with Lontium is strictly prohibited.

LONTIUM DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THOSE OF NONINFRINGEMENT, MERCHANTABILITY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMERS EXPRESSLY ASSUME THEIR OWN RISH IN RELYING ON THIS DOCUMENT.

LONTIUM PRODUCTS ARE NOT DESIGNED OR INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS WHERE A MALFUNCTION OF A LONTIUM DEVICE COULD RESULT IN A PERSONAL INJURY OR LOSS OF LIFE.

Lontium assumes no responsibility for any errors in this document, and makes no commitment to update the information contained herein. Lontium reserves the right to change or discontinue this document and the products it describes at any time, without notice. Other than as set forth in a separate, signed, written agreement, Lontium grants the user of this document no right, title or interest in the document, the information it contains or the intellectual property in embodies.

#### **Trademarks**

Lontium<sup>™</sup> 龙迅<sup>™</sup> and ClearEdge<sup>™</sup> is a registered trademark of Lontium Semiconductor. All other brand names, product names, trademarks, and registered trademarks contained herein are the property of their respective owners.

Visit our corporate web page at: www.lontiumsemi.com

Technical support: support@lontium.com

Sales: sales@lontium.com