

# LT86104UX --- Product Brief

## Features

- HDMI 1.4/2.0 specifications compliant
- Support 3D video formats and 4Kx2K extended resolution formats up to 6.0Gbps data rate
- Adaptive equalization and de-emphasis to compensate long cable losses
- ODTs and calibration
- Integrated EDID shadow RAM and embedded EDID
- 5V-tolerant DDC interfaces
- 1 HDMI input port, up to 4 HDMI output ports
- Unlimited cascading for more output ports or signal repeating
- Jitter cleaning PLL for better performance
- DC/AC coupled signal input/output
- No external crystal is needed
- No 1.2V power supply

## Description

Lontium LT86104UX HDMI2.0 Splitter features a 1:4 splitter compliant to HDMI2.0/1.4 specification, max 6Gbps high speed data rate, adaptive equalization RX input and pre-emphasized TX output to support long cable application, no XTAL and 1.2V power supply on board to save BOM cost, internal TX lane swap for flexible PCB routing .

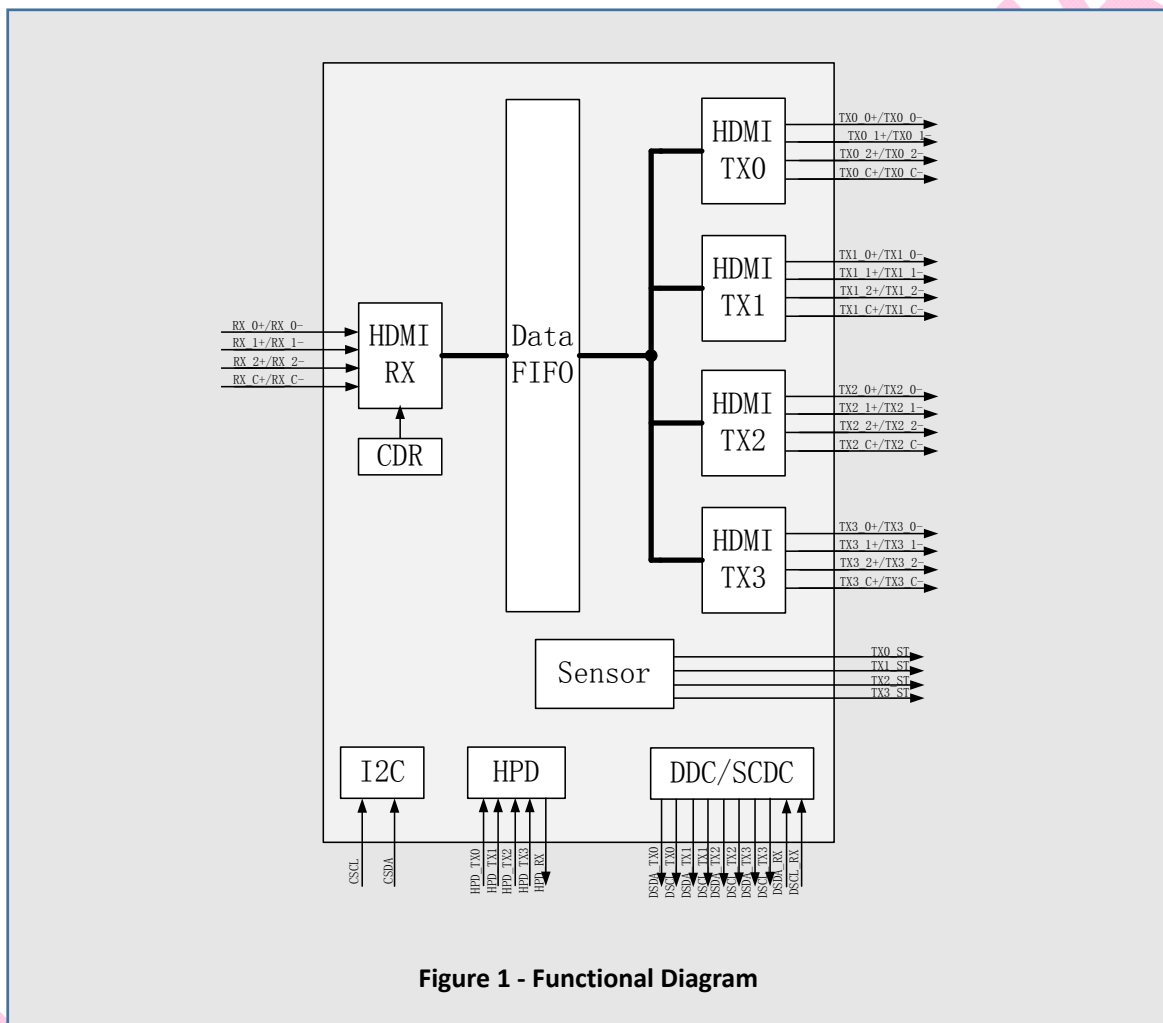
LT86104UX HDMI2.0 Splitter automatically detect the cable loss, and adaptively optimize the equalization setting . The CDR cleans the input data jitter, make it suitable for long cable and cascade application. It support RX termination resistor calibration to further improve signal integrity.

LT86104UX support DDC/SCDC compliant to HDMI2.0/1.4 specification .This package is BGA 10mmx10mm. It operate from -40°C to +85°C.

## Application

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

## Functional Diagram



## Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT86104UX	-40° C to +85° C	10mm x 10mm BGA144	Tape and Reel

## **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 RISK 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 it embodies.

### **Trademarks**

Lontium™ and ClearedEdge™ 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](http://www.lontiumsemi.com)

Technical support: [support@lontium.com](mailto:support@lontium.com)

Sales: [sales@lontium.com](mailto:sales@lontium.com)