

LT87101UX --- Product Brief

Dual-Port DP2.1 10Gbps Redriver

1. Features

- Support DP/eDP 1.62Gbps to 10Gbps Data Rate
- Support 1 forward port and 1 backward port
- Data lane polarity swappable
- Support CTLE up to 27 dB@10Gbps
- Programmable de-emphasis up to 8 dB
- Up to 1.2V output swing
- Programmable through I2C/SMBus interface
- Selectable 2.5-V or 3.3-V supply voltage
- Support up to 400KHz I2C/SMBus slave

2. General Description

LT87101UX is a dual-port redriver with signal conditioning suitable for DP2.1 applications with data rates up to 10 Gbps. The continuous time linear equalizer (CTLE) of the

receiver provides adjustable boost to compensate up to 27 dB insertion-loss at 5 GHz. The transmitter features a programmable amplitude voltage level up to 1200 mVpp and de-emphasis up to 8 dB.

In order to save power consumption, LT87101UX can work well from 1.8V to 2.5V power supply in external LDO mode.

LT87101UX is fabricated in advanced CMOS process and implemented in 10mm x 5.5mm QFN54 package.

3. Applications

- Active Cables
- Backplane Extension
- Tablets
- Notebooks
- Docking

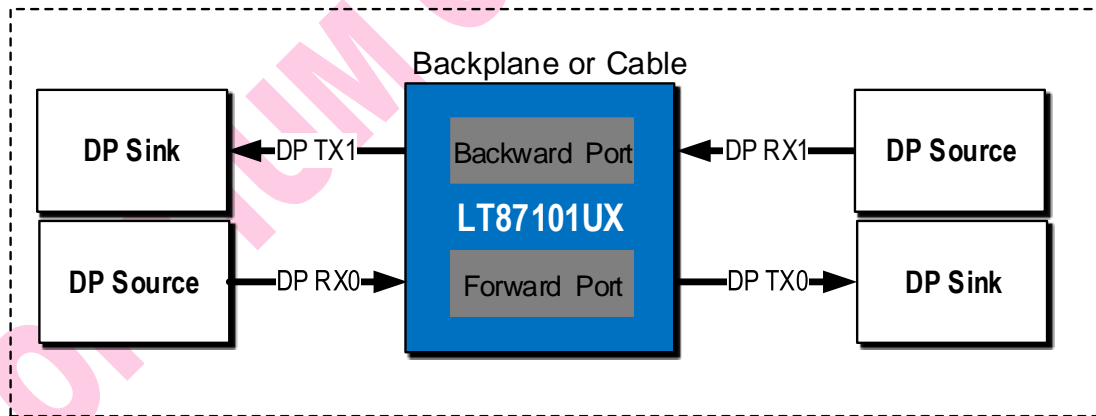


Figure 3.1 Typical Application Diagram

4. Ordering Information

Table 4.1 Ordering Information

Product Name	Part Number	Product Status	Package	Bonding Wire	Grade	Operating Temperature Range	Stack Die Option	Packing Method	MPQ
LT87101UX	LT87101UX_U2Q08CEN	Preview	QFN54 (10*5.5)Saw	Cu	E	-40°C to +85°C	N	Tray	1560pcs

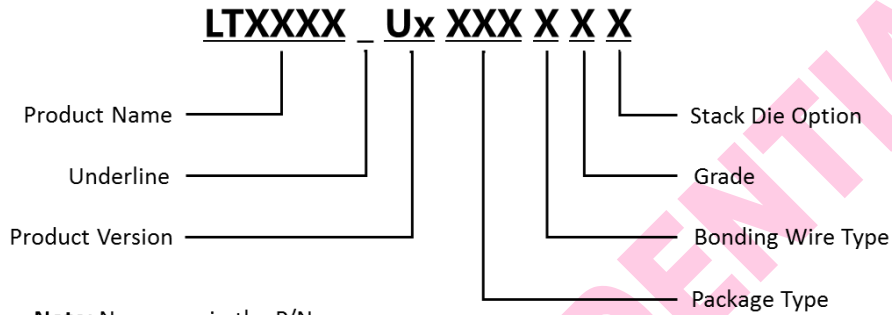


Figure 4.1 Part Number Naming Rules

Copyright © 2025 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 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 in embodies.

Trademarks

Lontium™ 龙迅™ and ClearEdge™ 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