

### LT8311X2 --- Product Brief

# **USB 2.0 High Speed Signal Conditioner**

#### 1. Features

- Compatible with USB 2.0, OTG 2.0 and BC 1.2
- Support for HS, FS, LS signaling
- Auto detection and compensation of USB 2.0 HS signal
- Selectable HS signal compensation gain via external pull down resistor
- FS/LS signal bypass
- 3.3V single power supply
- Does not break DP/DM trace
- QFN-12 1.6mm x 1.6mm package

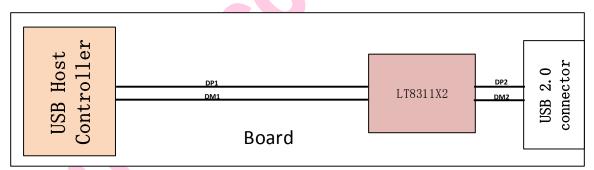
### 2. General Description

The LT8311X2 is a USB 2.0 high speed signal conditioner,

used to compensate high speed signal attenuation caused by ISI. Programmed compensation gain selected via external pull down resistor permits fine tuning device performance to optimize high speed signals. This help to pass USB 2.0 high speed electrical compliance tests at the connector. The LT8311X2 does not break DP/DM trace, this permits risk free system design of a complete USB channel.

### 3. Applications

- PC, Laptop Mother Boards
- Cell Phones
- Backplane
- Cable Extenders
- Televisions



**Figure 3.1 Application Diagram** 

## 4. Ordering Information

**Table 4.1 Ordering Information** 

Product Name	Part Number	Operating Temperature Range	Package	Packing Method	MPQ
LT8311X2	LT8311X2_U3	-40°C to +85°C	QFN12 (1.6*1.6)	Tape and Reel	3000pcs



#### LT8311X2\_U3 ADVANCE INFORMATION - CONFIDENTIAL AND PROPRIETARY

Copyright © 2019-2021 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™ 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