

ExtremeUSB_LEX&REX

Product Specification



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Introduction

ExtremeUSB 2.0 Extend card was developed to enable USB 2.0 connections to be extended beyond the desktop, breaking through 5m cable length limitation. ExtremeUSB enables a plug and play solution that does not require any new software drives for operation. The ExtremeUSB 2.0 is suitable for media communications, industrial control, security, medical and remote desktop applications.

ExtremeUSB 2.0 Core 2100 Features

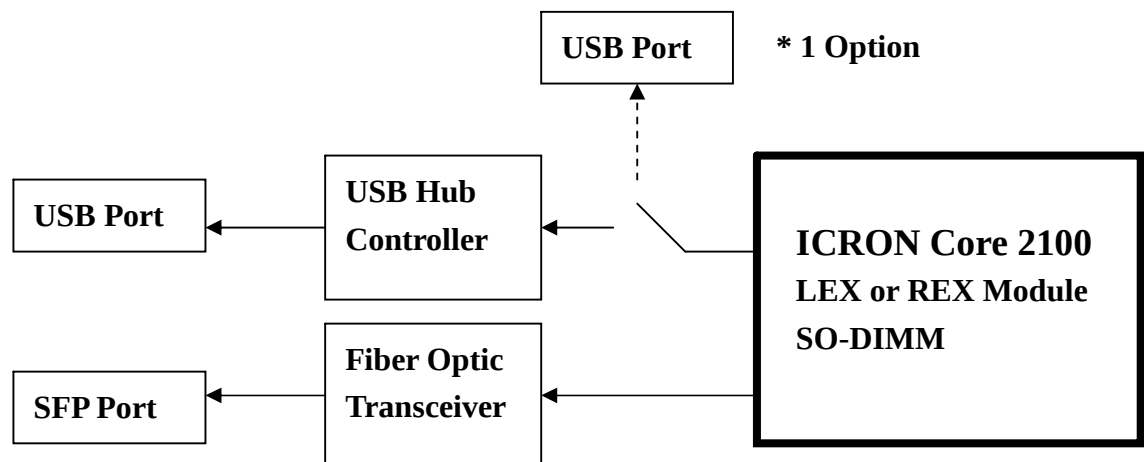
- Enables embedded ExtremeUSB solutions. Core modules include FPGA core and USB transceiver.
- Low cost, compact, standard 200 pin SO-DIMM form factor and connector interface to motherboard.
- Flexible extension link interface supports, such as GMII, TBI and so on.
- Integrated USB2.0 transceiver for direct connection to host and hub.
- Firmware upgradeable through standard SPI interface.
- Power: DC +5V, 3.3V, 2.5V, 1.2V

ExtremeUSB Features

- Supports USB 2.0 high-speed and USB 1.1 devices.
- Operates with USB 2.0 high speed host controllers and USB 1.1 classic hosts.
- True plug and play. No new driver installation required.
- Supports all operating systems including Windows, MAC OS and Linux.
- ExtremeUSB could be powered via PCI edge connector or DC-JACK.

ExtremeUSB Block Diagram

The ExtremeUSB 2.0 Core 2100 modules enable the user to design own transmission solution. The modules are designed to offer standard GMII or TBI interfaces for link extension. For fiber optic or serial applications, the TBI interface can be enabled, and connected to SERDES transceiver devices to drive standard fiber optic modules.



*1.For PC side internal USB used.

ExtremeUSB 2.0 Core 2100 Modules

The Core 2100 modules provide the key ExtremeUSB functionality to enable a variety of OEM embedded USB bridging applications over various wired media. The standard system block diagram is shown in Figure 1.

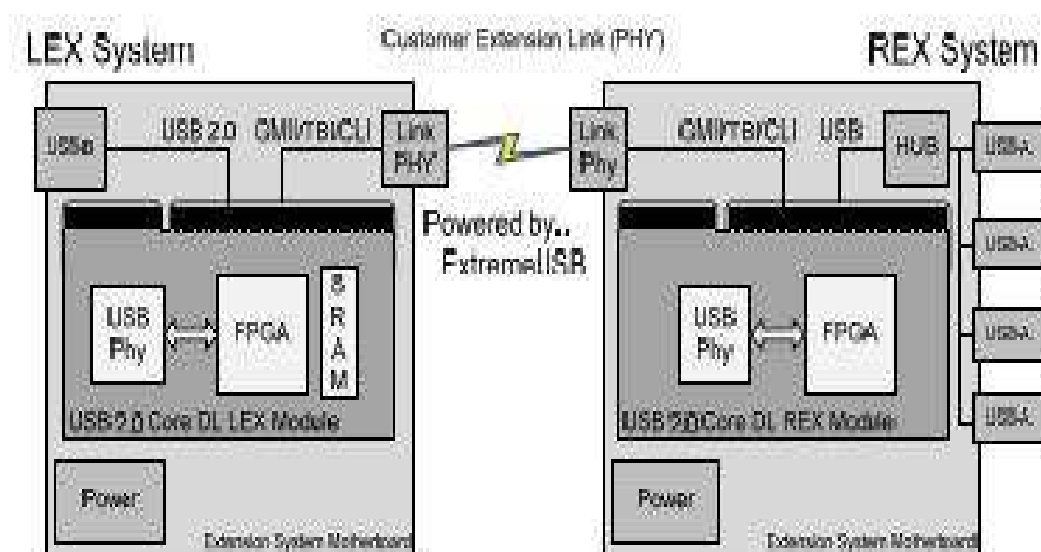


Figure 1. ExtremeUSB 2.0 Core 2100 Topology

Power Supply Requirements

Table 1 provides current supply requirements for each power rail on the Core2100 modules and ExtremeUSB_LEX and ExtremeUSB_REX board power consumption.

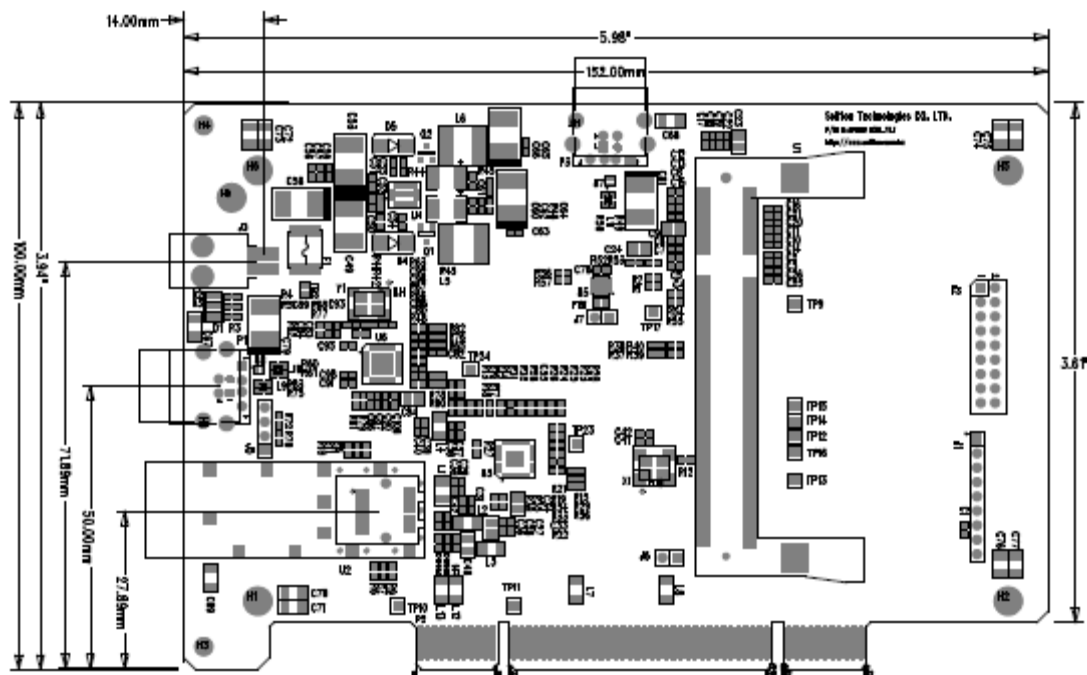
Table 1. ExtremeUSB2.0 Core 2100 and ExtremeUSB Board Power Supply

Supply	Description
P5_USB	10mA
3.3V	500mA
2.5V	100mA
1.2V	500mA
ExUSB_LEX(REX) Board	DC +5V, Max 2A.

Physical Specification

Table 2. ExtremeUSB Physical Dimensions

Parameter	LEX	REX
Length	152 mm	152 mm
Width	100 mm	100 mm



References

- 90-00527-A03 ExtremeUSB 2.0 Core 2100 Design Guide.pdf
- 90-00536-A04 ExtremeUSB 2.0 Core 2100 Product Specification.pdf
- Isolated USB Application Note 90-00551-A02.pdf

Technical Support

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