

LREC3210PF

—USB3.0 Gigabit Fiber NIC

Description

LREC3210 is a USB3.0 fiber optical adapter developed by Shenzhen Lianrui electronic Company. It is independently researched and developed by Lianrui R&D team and is widely applied in high-end application occasion by the high-end customer cluster. LREC3210 is completely different from the mini NIC with plastic shell in nature. It is unique in current market due to aluminium shell to ensure the high performance of USB3.0 fiber NIC with specific appearance design. It can be either upright or horizontal as you like. The elegant appearance can enhance the glorious outlook in the office. Besides, aluminium shell has the good thermal dissipation overcoming the shortage of the plastic shell to ensure the reliability and working stability, it offers well-deserved reputation of "classic" in the market

LREC3210PF can solve the problems arising from the traditional integrated computer that fiber access can be realized only by fiber transceiver (transfer from light signal to electronic signal). LR-link offers optimal design in adopting small pluggable slot that can be compatible all SFP gigabit module through exchanging SFP modules to maximize the usage needs for various networking environments. By testing, under USB3.0, transmission rate will reach to the maximization of gigabit speed 1000Mbit/S so as to accord with the huge data transmission requirements.

LREC3210PF based Realtek RTL8153-CG 1000M Ethernet controller combines an IEEE 802.3u compliant Media Access Controller (MAC), USB 3.0 bus controller, and embedded memory. With state-of-the-art DSP technology and mixed-mode signal technology, the LREC3210PF offers high-speed transmission over CAT 5 UTP cable or CAT 3 UTP (10Mbps only) cable. Functions such as Crossover Detection and Auto-Correction, polarity correction, adaptive equalization, cross-talk cancellation, echo cancellation, timing recovery, and error correction are implemented to provide robust transmission and reception capabilities.

The LREC3210PF features USB 3.0 to provide higher bandwidth and improved protocols for data exchange between the host and the device. USB 3.0 also offers more advanced power management features for energy saving.

The LREC3210PF Advanced Configuration Power management Interface (ACPI)—power management for modern operating systems that are capable of Operating System-directed Power Management (OSPM)—is supported to achieve the most efficient power management possible. In addition to the ACPI feature, remote wake-up (including AMD Magic Packet and Microsoft Wake-Up Frame) is supported in both ACPI and APM (Advanced Power Management) environments.

The LREC3210PF supports Microsoft Wake Packet Detection (WPD) to provide Wake-Up Frame information to the OS, e.g., PatternID, OriginalPacketSize, SavedPacketSize, SavedPacketOffset, etc. WPD helps prevent unwanted/unauthorized wake-up of a sleeping computer.

The LREC3210PF supports Protocol offload. It offloads



It offloads some of the most common protocols to NIC hardware in order to prevent spurious wake-up and further reduce power consumption. The LREC3210PF can offload ARP (IPv4) and NS (IPv6) protocols while in the D3 power saving state.

The LREC3210PF supports the ECMA (European Computer Manufacturers Association) proxy for sleeping hosts standard.

The LREC3210PF supports IEEE 802.3az-2010, also known as Energy Efficient Ethernet (EEE). IEEE 802.3az-2010 operates with the IEEE 802.3 Media Access Control (MAC) Sublayer to support operation in Low Power Idle mode. When the Ethernet network is in low link utilization, EEE allows systems on both sides of the link to save power.

The LREC3210PF is fully compliant with Microsoft NDIS5, NDIS6 (IPv4, IPv6, TCP, UDP) Checksum features, and supports IEEE 802 IP Layer 2 priority encoding and IEEE 802.1Q Virtual bridged Local Area Network (VLAN). The above features contribute to lowering CPU utilization, especially benefiting performance when in operation on a network server.

The LREC3210PF is suitable for multiple market segments and emerging applications, such as desktop, mobile, workstation, server, communications platforms, docking station, and embedded applications.

- Fiber Port supports 1000Mbase-SX/LX standard;
- Supports USB 3.0, 2.0, and 1.1
- Supports LPM (Link Power Management)
- Supports pair swap/polarity/skew correction
- Crossover Detection & Auto-Correction
- Supports Wake-On-LAN and 'RealWoW!' (Wake-On-WAN) Technology (see note 1);
- Supports power down/link down power saving;
- Transmit/Receive on-chip buffer support;
- Supports hardware CRC (Cyclic Redundancy Check) function;

- Microsoft NDIS5, NDIS6 Checksum Offload (IPv4, IPv6, TCP, UDP) and Segmentation Task-offload (Large send v1 and Large send v2) support;
- Supports jumbo frame to 9K bytes;

Supports Full Duplex flow control (IEEE 802.3x);
Fully compliant with IEEE 802.3 and IEEE 802.3u;
Supports IEEE 802.1P Layer 2 Priority Encoding;
Supports IEEE 802.1Q VLAN tagging;
Supports IEEE 802.3az-2010 (EEE);

Operating System

windows xp 32bit/64bit
windows vista 32bit/64bit
windows 7 32bit/64bit
windows 8 and 8.1 32bit/64bit
linux

Order Information

M/N	Description
LREC3210PF	USB3.0 1000Base-SX Fiber NIC (SC Connector,850nm, 0.5Km)

PS: The above details is just for reference,if there is any change,no inform will have.

Companion Products

Fiber NIC

- LR-LINK PCI 100FX Desktop Adapter
- LR-LINK PCIe 100FX Desktop Adapter
- LR-LINK PCI 1000BASE-SX/LX Desktop Adapte
- LR-LINK PCIe 1000BASE-SX/LX Desktop Adapter
- LR-LINK PCIe 1000BASE-SX/LX Server Adapter
- LR-LINK PCIe 10GBASE-SR/LR Server Adapter
- LR-LINK PCIe 25GBASE-SR/LR Server Adapter
- LR-LINK PCIe 40GBASE-SR/LR Server Adapter
- LR-LINK PCIe 100GBASE-SR/LR Server Adapter

Copper NIC

- LR-LINK PCI 10/100Mbps Desktop Adapter
- LR-LINK PCIe 10/100Mbps Desktop Adapter
- LR-LINK PCI 10/100/1000Mbps Desktop Adapter
- LR-LINK PCIe 10/100/1000Mbps Desktop Adapter
- LR-LINK PCIe 10/100/1000Mbps Server Adapter
- LR-LINK PCIe 100/1Gbps/10Gbps Server Adapter

Download Drivers

To get the drivers, please visit us at <http://www.lr-link.com/ProductDriver/index1.shtml>

Product Quick Guide

To know the network card basic knowledge to choose the suitable NIC you need, please visit us at: <http://www.lr-link.com/product.html>

Customer Support

LR-LINK customer Support Services offers a broad selection of programs including phone support and warranty service. For more information, contact us at Service and availability. <http://www.lr-link.com/service.shtml>

LianRui Electronic Co.LTD

A professional supplier of high-quality NIC:PCI,PCI-X,PCI-Express;SC,ST,LC,SFP,SFP+,QSFP+;100M,1G,10G,25G,40G,100G;single,dual,quad ports. all series fiber and copper NIC with nearly 150 specifications which can meet demands of various applications, continuously creates value for customers and partners as well as OEM/ODM services provided.

Declaration

Shenzhen Lianrui Electronics Co., Ltd is an efficient Ethernet adapter design company with independent research and development, using Intel,Broadcom, Mellanox, Marvell, VIA, Realtek and other manufacturers Ethernet controller, developed by our company's independent R & D design team,manufacturedby our company workshop, and then sell.

Our products specifications come from modifying the chip manufacturer's specifications released. Product features, technical parameters, technology right, intellectualproperty rights and brand names etc.mentioned in specifications are just referenced only. There is no infringement meaning.If there is any important and sensitive content related, please contact our Lianrui company, we'll delete them, thank you.

SHENZHEN LIANRUI ELECTRONICS CO.,LTD

ADD:C4 Bldg., Xintang Industry Zone, Baishixia Fuyong Town, Bao'an District Shenzhen China 518103
Tel:86-755-33671531 Fax: 86-755-29082065
Product sales: lrlink@lr-link.com
Technical Support: support@lr-link.com
OEM & ODM service: info@lr-link.com
WEB: www.lr-link.com

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