

Radicom Research, Inc.

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www.radi.com**2.5Gbps USB/LAN module – LUHM325 series****USB/LAN Interfaces**

Radicom Research Inc. LUHM325 Low-power USB 3.0 to 10/100/1000M/2.5G Gigabit Ethernet adapter is a high performance and highly integrated device which enables a small form factor, and simple plug-and-play 2.5 Gigabit Ethernet network connection capability for desktops, notebook PC's, Ultra-Mobile PC's, docking stations, game consoles, digital-home appliances, and any embedded system using a standard USB port.

The LUHM325 is equipped with a powerful pipeline RISC engine to handle protocols and control functions of 2.0 and 3.0 USB super/high/full Speed modes and 10/100/1000M/2.5G Gigabit Ethernet LAN as well as advanced power management features and Wake-on-LAN are implemented to make the LUHM325 become the best fit for all kinds of LAN accessibility applications.

LUHM325M: module type

LUHM325NE-B: USB to LAN converter with USB3.0 Micro B and RJ45 Jacks.

LUHM325NE-C: USB to LAN converter with USB Type C and RJ45 Jacks.

LUHM325E-B: LUHM325NE-B in Plastic Enclosure

LUHM325E-C: LUHM325NE-C in Plastic Enclosure

LUHM325E-B-T: USB to LAN converter built-in USB3.0 A type pig tail

LUHM325EVK-B: LUHM325 Evaluation kit, with USB3.0 Micro B and RJ45 Jacks.

LUHM325EVK-C: LUHM325 Evaluation kit, with USB3.0 Type C and RJ45 Jacks.

Features:

- Single chip USB 3.0 to 2.5 Gigabit Ethernet controller
- USB Device Interface
 - Integrates on-chip USB 3.0 PHY transceiver and controller to compliant to USB Spec 2.0 and 3.0.
 - Supports USB super/high/full speed modes.
 - Supports LPM (Link Power Management), U1/U2/U3 at super speed, and L1/L2 at High Speed
 - Supports CDC-NCM. CDC-ECM
- Gigabit Ethernet Controller
 - Integrates 10/100/1000M/2.5Gbps Transceiver
 - Supports 2.5G and LG Lite mode
 - IEEE 802.3, 802.3u, 802.3ab compatible
 - Supports pair swap/polarity/skew correction
 - Support cross over detection and auto correction
- Support Wake-on-LAN Function and RealWoW!

**LUHM325M****LUHM325NE(-B/-C)****LUHM325EVK(-B-C)****LUHM325E(-B/-C/-B-T)**

- Supports IPv4/IPv6 packet Checksum Offload Engine to reduce CPU loading, including IPv4 IP/TCP/UDP/ICMP/IGMP & IPv6 TCP/UDP/ICMPv6 checksum check & generation
- Advanced Power Management Features
- Auto detection with Extended Next Page capability (XNP)
- Compatible with NBASE-T Alliance PHY Specification
- Supports IEEE 802.1Q VLAN tagging
- Thermal management
- Support jumbo frame to 16k bytes
- Supports IEEE802.1P layer 2 Priority Encoding
- Supports power down/link down power saving
- Supports IEEE802.3az (Energy Efficient Ethernet)
- Integrated Power-on reset circuit.
- Supports IEC60601 2xMOOP and 2xMOPP
- FCC .IC .CE for medical Certification

Applications:

- UMPC, MID, Netbook, Ultra-slim NB
- USB-to-LAN Dongle, USB to Fiber Ethernet Dongle
- USB/ Ethernet Home Plug AV Adapter
- Docking Station, Port Replicator, Cradle
- UWB Docking Station, WiMAX-to-USB Modem, 3.5G Mobile Router
- Game Console
- Digital-home Application, Set-Top Box, PVR, PMP, IPTV
- Networked Digital Photo Frame, Digital Media Player
- Networked Printer, POS, Test Instruments