ECHELON

IzoT[™] U60 FT Network Interface Module

USB interface to LonTalk®/IP-FT and LonWorks®-FT free topology twisted pair networks



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IzoT U60 Key Features

- Provides a USB 2.0 to LonTalk/IP-FT or LonWorks-FT interface for any controller or device
- Compatible with hosts implementing the IzoT Device Stack EX or IzoT Device Stack DX
- Source code is available as a free download for a Linux-compatible driver
- Compact 72mm x 29mm (2.8" x 1.1") board-level form-factor with 2.54mm (0.1") center pin headers for simple integration
- · Pin-header USB interface to the host
- Pin-header network connector
- On-board transmit and receive indicators; signals provided for driving host indicators
- On-board service indicator; signal provides for driving a host Service indicator
- Powered by a 3.3VDC input

USB Network Interface

Add a LonTalk/IP-FT or LonWorks-FT interface to your controller. The IzoT U60 FT Network Interface Module is a compact 72mm x 29mm (2.8" x 1.1") board-level module with USB interface that can be easily integrated into any controller or device.

The U60 FT module is compatible with the LonTalk Device Stack DX and LonTalk Device Stack EX which provide source code for LonTalk/IP and native LonWorks compatible protocol stacks.

On-board Tx and Rx LEDs provide an indication of FT packet transmission and reception. The Tx and Rx signals are provided on the U60 connector so that the host controller can provide transmit and receive indicators.

An on-board Service LED provides an indication of the status of the U60 module. The Service signal is provided on the U60 connector so that the host controller can provide a network Service indicator.

Three 2.54mm (0.1") center pin-header connectors are provided by the FT network, USB, power input, transmit/receive signals, and service signal. Pin assignments are listed in the following tables.

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• JP1 Pin Assignment	
• Pin Number	• Signal Name
• 1	• Do Not Connect
• 2	• USB -
• 3	• USB +
• 4	Ground

• JP3 Pin Assignment	
• Pin Number	• Signal Name
• 1	• +3.3V In
• 2	• Tx LED Out
• 3	• Rx LED Out
• 4	Service
• 5	Ground
• 6	• Reset

JPX5 Pin Assignment	
• Pin Number	• Signal Name
• 1	• FT Network B
• 2	• FT Network A
• 3	• Do Not Connect
• 4	• Do Not Connect

Host Interface

The interface to the host is provided via the USB interface. The host selects whether the interface is a Layer 2 or Layer 5 interface. Source code for a Linux-compatible driver is available as a free download.



Specifications

Hardware Platform

Dimensions

72mm x 29mm x 13mm (2.8" x 1.1" x 0.5")

Processor

Echelon FT 6050 Smart Transceiver

Processor System Clock

80 MHz

Connectors

LonTalk/IP-FT and LONWORKS-FT (ISO/ IEC 14908-2) network pin header

USB 2.0 pin header

Service, Tx/RX signal, and +3.3V input pin header

Indicators

Service LED

FT Tx/Rx LEDs

Operating Input Voltage

3.3VDC

Operating Input Current

110mA maximum

Temperature

-10°C to +70°C (operating and nonoperating)

Humidity

10% to 95% RH @ 50°C

EMC

FCC Part 15 Class A compliant

EN55022 Class A and EN55024 compliant

CISPR 22 Class A compliant

Software Platform

Interface

LonTalk/IP or LonWorks-FT with a Layer 2 or Layer 5 interface

Driver

Linux source code for a U60 network driver is available as a free download

Ordering Information

Model 65440R U60 FT Network Interface Module



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