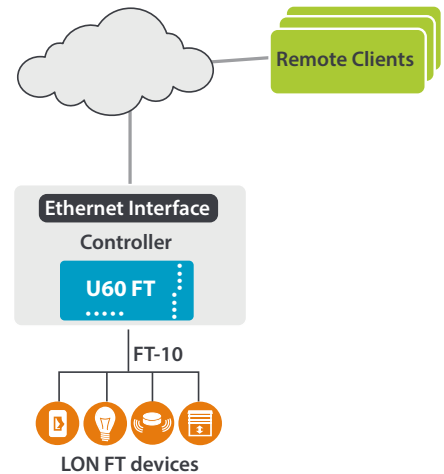
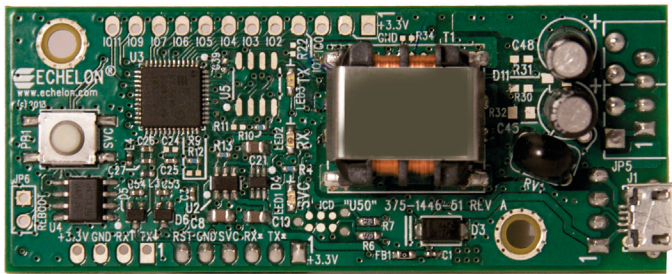


U60 LON[®] FT USB Module



U60 module connects LON devices via USB

Product Description

The U60 FT USB network interface module enables a controller or computer to communicate with LON and IzoT™ networks via USB.

The compact boards include network and USB pin headers for simple integration into any controller or device.

The U60 is an interface to LON/IP-FT and LON-FT and is compatible with OpenLDV 5 and with hosts implementing the LON/IP stack which provides source code for LON/IP and LON compatible protocol stacks.

The interface facilitates communication to everyday devices like pumps, motors, valves, sensors, actuators and lights for process control, building automation, energy management, transportation systems control and telecommunications equipment management.

Tx and Rx signals provide an indication of LON packet transmission and reception and a service signal communicates device status to the host via the USB interface enabling the host controller to provide status indicators. Optional on-board Tx, Rx and service LED indicators are available.

Features and Benefits

- USB interface for LON FT networks for any edge server, gateway, controller, or device, including SmartServer™ IoT
- Compatible with IzoT Net Server, OpenLNS® Server, LNS® Server and OpenLDV applications
- Works with IzoT Net and LNS compatible applications such as the IzoT Commissioning Tool and LonMaker Integration Tool
- Compatible with SmartServer IoT
- Compact 72mm x29mm (2.8" x 1.1") board-level form factor with 2.54mm center pin headers for simple integration
- Powered by 3.3VDC input
- Source code available as download for a Linux-compatible driver

PRODUCT SPECIFICATIONS

Hardware and electrical specifications

Processor:	Dialog FT 6050 Smart Transceiver
LON connector:	Network pin header
USB 2.0 pin header:	Certified USB 2.0 compatible, compatible with USB 1.1 and high-speed USB systems, peripherals and cables
Indicators (Model 65430R only):	LON Tx/Rx LEDs, Service LED
Input voltage:	3.3VDC
Input current	110mA maximum USB power
Temperature range:	-40°C to +70°C
Humidity:	10-90% RH @ 50°C
Dimensions:	72mm x 29mm x 13mm (2.8" x 1.1" x 0.5")

Software Platform

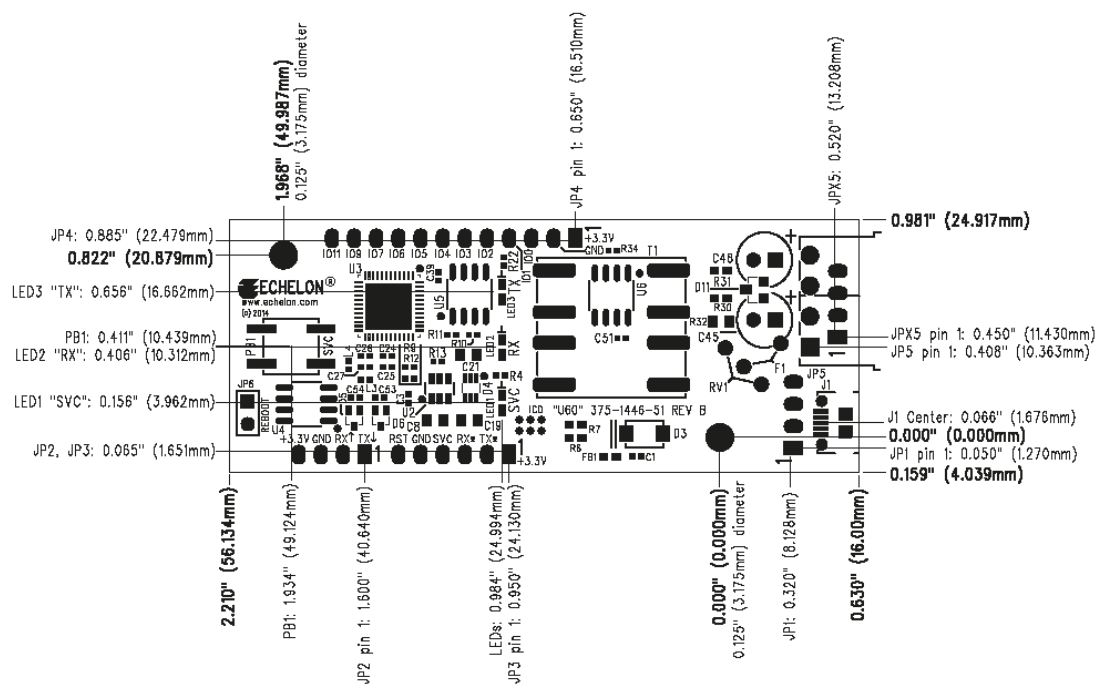
Interface:	LON/IP-FT and LON-FT (TP/FT-10) with a Layer 2 or Layer 5 interface
Drivers (free downloads from website):	<ul style="list-style-type: none"> Linux source code for a U60 network driver OpenLDV 5, or newer, driver for Windows
Safety, compliance and warranty	
Agency approvals:	MET 60950, TUV EN 60950, CE, C-Tick
EMC:	FCC Part 15 Class A, EN55022 Class A, EN55024, CISPR 24 Class A
Warranty:	1 year limited warranty

BOARD LAYOUT

JP1 Pin Assignment	
Pin #	Function
1	Do not connect
2	USB -
3	USB +
4	Ground

JP3 Pin Assignment	
Pin #	Function
1	+3.3VDC in
2	Tx LED out
3	Rx LED out
4	Service
5	Ground
6	Reset

JP5 Pin Assignment	
Pin #	Function
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.

Model #	Product Name	Product Description
65430R	U60 FT Network Interface Module with LEDs	Board-level USB interface to LON/IP FT and LON FT free topology twisted pair networks with Tx, Rx and service indicators
65440R	U60 FT Network Interface Module	Board-level USB interface to LON/IP FT and LON FT free topology twisted pair networks

IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers skilled in the art designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only for development of an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising out of your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Rev.1.0 Mar 2020)

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:
www.renesas.com/contact/

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.