

Connect it! - Ethernet R-IN

Solution Kit for R-IN32M3-EC Device

Renesas
R-IN

The R-IN solution kit is an all-in-the-box package for fast evaluation and rapid prototyping of multiple industrial Ethernet protocols. It comes with several pre-qualified software stacks from EtherCAT, PROFINET, EtherNet/IP and Modbus TCP and includes hardware, software and integrated development environment necessary for safe, quick and easy evaluation and development.

Product Features

The Connect It! solution kit is based on the IAR Kickstart Kit. It features a small R-IN32M3-EC board for evaluation of the industrial Ethernet interfaces, an evaluation version of IARs embedded workbench for ARM (30-days trial or code size limited version), an I-jet Lite ARM Cortex-M3 JTAG debugger, as well as sample software including evaluation versions of several industrial Ethernet protocols.

The evaluation board carries a R-IN32M3-EC device, a serial flash memory as boot media, switches and LEDs for application IO-data control, two 100 Mbps Ethernet ports and a serial-to-USB connection for an external terminal emulation. Power supply is available by the dedicated power plug or by the USB connector.

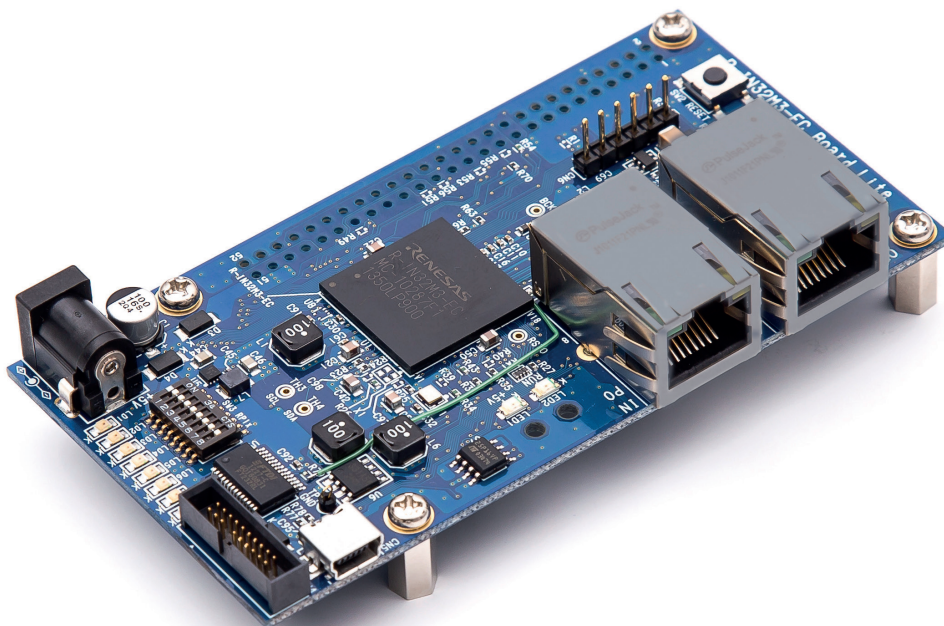
Like other Renesas Solution Kits the Connect it! – Ethernet R-IN comes with a large software bundle of protocol stacks. The highly integrated R-IN solution provides exceptional real-time response and Ethernet processing capabilities at best-in-class low power performance.

EtherCAT®

PROFI[®]
NET

EtherNet/IP™

Modbus



Content of the Solution Kit

- Evaluation board (R-IN32M3-EC Board Lite)
- IAR EWARM Evaluation CD
- I-jet Lite debugger
- Comprehensive software package
- Free TCP/IP stack
- BSP and Sample projects
- Documentation and tutorial video
- Access to evaluation versions of major industrial Ethernet stacks from our partner network

Board Features

- R-IN32M3-EC Cortex-M3 device
- 16 MB Serial Flash M25P16
- 8 x user LEDs
- 8 x User switches
- Reset button
- Trace connector 20-pin 0.05"
- 2 x Ethernet (RJ45) connectors
- USB mini B connector for USB-Serial converter
- 52-pin interface compliant with Beckhoff's EL9800 Base Board
- Power up through I-jet Lite (pin 11/13 Trace connector), USB-mini B connector or with external power supply
- RoHS/CE compliant

I-jet Lite Debug Probe

- MCU support: ARM7/9/11, Cortex-M/A/R devices
- JTAG/SWD /SWO debugging support
- Flash and memory download into supported evaluation boards
- Up to 5 V target interface voltage
- MIPI-20 cable, USB-micro cable and ARM-20 adaptor included
- Fully integrated with IAR Embedded Workbench (v6.70 or later)
- RoHS/CE compliant

Available Software

- Samplsoft software package containing
 - » Drivers for all interfaces
 - » Middleware for serial and parallel flash access
 - » HW-RTOS start-up and library for µltron RTOS
 - » Different project examples (EtherCAT, OS/OS-less and other)
- PROFINET evaluation stack and application from TMG/Molex
- EtherNet/IP evaluation stack and application from TMG/Molex
- Flash tool
- TCP/IP evaluation stack*
- CC-Link and CC-Link IE stack
- Modbus TCP stack*

*Free of charge but requires licence agreement.

Further software can be downloaded from the Renesas web site <http://www.renesas.eu/r-in>

Before purchasing or using any Renesas Electronics products listed herein, please refer to the latest product manual and/or data sheet in advance.

