Stellaris® Serial-to-Ethernet Module and Reference Design Kit

The tiny-footprint Stellaris® Serial-to-Ethernet Module (MDL-S2E) offers a complete, ready-to-implement solution designed to add Ethernet connectivity to any serial device. The most common application for the MDL-S2E is for augmenting legacy products that contain a serial port for a configuration or control interface. Simply installing a Stellaris® Serial-to-Ethernet Module into the legacy serial device provides instant networking capability with no major board redesign or software changes, a tiny form-factor for unobtrusive implementation, and cable lengths much longer than what is available for simple serial connections.

Features

The MDL-S2E is the first serial-to-Ethernet converter available with a highly integrated ARM® Cortex™-M3 microcontroller with 50 MHz of performance and ample single-cycle, on-chip Flash and SRAM memory for efficient network traffic handling. The MDL-S2E is ready out-of-the-box for immediate integration in a system, and software source files are included for complete customization.

The MDL-S2E ships as a ready-for-production module with the following features:

- Stellaris® LM3S6432 ARM® Cortex™-M3 microcontroller in a 10 x 10 mm BGA package for reduced board size
- 10/100 Mbit Ethernet port
  - Auto MDI/MDIX cross-over correction
  - Traffic and link indicators
- Two serial ports, configured as DCE, include RTS/CTS for flow control
  - RS-232 level available with UART0 with communication up to 230,400 baud
  - CMOS/TTL levels available with UART1 with communication up to 1 Mbaud
- Program firmware updates over Ethernet
- Module software
  - IP configuration with static IP address or DHCP
  - Raw and Telnet protocol support for access to serial port
  - Telnet client for Ethernet-based serial port extender
  - Web server for module configuration
  - Universal Plug and Play (UPnP) for device discovery
- Windows utility software
  - S2ECONF configuration application
- Module supports 5 V and 3.3 V supplies
- Flexible mounting options

Kit Contents

The Stellaris® Serial-to-Ethernet Module is offered as a stand-alone, ready-for-production module (MDL-S2E) and also as a reference design kit (RDK-S2E). The RDK ships with everything needed to quickly evaluate and easily customize the MDL-S2E for your specific application, including:

- Stellaris® Serial-to-Ethernet Module (MDL-S2E)
- RS-232 adaptor board
- Retractable Ethernet cable
- DB9 serial cable
- USB cable for module power
- JTAG/SWD adapter to standard 20-pin header
- Quickstart Guide, User's Manual, Software Reference Manual, Board Data Sheet, source code, BOM, schematics, and Gerber files on CD

Ordering Information

Product Number	Description
MDL-S2E	Stellaris® Serial-to-Ethernet Module for Single-Unit Packaging
MDL-S2E-B	Stellaris® Serial-to-Ethernet Module for Volume Packaging
RDK-S2E	Stellaris® Serial-to-Ethernet Reference Design Kit

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