



Luminary Micro - EKT- LM3S6965 - Evaluation Board

Product Overview:

The Stellaris® LM3S6965 Ethernet Evaluation Kit is a compact and versatile evaluation platform for the Stellaris LM3S6965 ARM® Cortex™-M3-based microcontroller. The evaluation kit uses the LM3S6965 microcontroller's fully integrated 10/100 Ethernet controller to demonstrate an embedded web server.

The LM3S6965 evaluation board can be used as an evaluation platform or as a low-cost in-circuit debug interface (ICDI). In debug interface mode, the on-board microcontroller is bypassed, allowing connection of the debug signals to an external target. The kit is also compatible with high-performance external JTAG debuggers.



This evaluation kit enables quick evaluation, prototype development, and creation of application-specific designs for Ethernet networks. The kit also includes extensive source-code examples, allowing you to start building C-code applications quickly.

Kit Contents:

The evaluation kit contains everything needed to develop and run applications for Stellaris microcontrollers including:

- LM3S6965 evaluation board (EVB)
- Retracting Ethernet cable, USB cable, and 20-pin JTAG/SWD cable
- CD containing:
 - Complete documentation
 - Evaluation version of the software tools
 - Quick start guide and source code
 - StellarisWare® Peripheral Driver Library and example source code
 - An evaluation version of one of the following:
 - Keil™ Real View® Microcontroller Development Kit (MDK-ARM)
 - IAR Embedded Workbench
 - Code Sourcery GCC development tools
 - Code Red Technologies Code Suite development tools

Key Features:

The evaluation kit includes the following features:

- Stellaris LM3S6965 microcontroller with fully-integrated 10/100 embedded Ethernet controller
- Simple setup: USB cable provides serial communication, debugging, and power
- OLED graphics display
- User LED, navigation switches, and select pushbuttons
- Magnetic speaker
- LM3S6965 I/O available on labeled break-out pads
- Standard ARM® 20-pin JTAG debug connector with input and output modes
- USB interface for debugging and power supply
- MicroSD card slot

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
EKT-LM3S6965	Luminary Micro	1712253	45P3417

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
LM3S6965-IQC50-A2	Luminary Micro	Stellaris™ LM3S6965 Microcontroller Industrial Temperature 100-pin LQFP	1494151	45P3687
FT2232D/TR	FTDI	Dual USB UART/FIFO I.C.	1615843	14N9294
FAN5331SX	Fairchild Semiconductor	High Efficiency Serial LED Driver and OLED Supply with 20V Integrated Switch	1262717	60J0504
LC4032V-75TN48C	Lattice Semiconductor	3.3V/2.5V/1.8V In-System Programmable SuperFAST High Density PLDs	1291817	24M3321

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
EKK-LM3S6965	Luminary Micro	Stellaris LM3S6965 Ethernet Evaluation Kit for Keil™ Real View® MDK-ARM (16 KB code-size limited)	LM3S6965	1494128	45P3411
EKI-LM3S6965	Luminary Micro	Stellaris LM3S6965 Ethernet Evaluation Kit for IAR Systems Embedded Workbench® (32 KB code size limited)	LM3S6965	1712247	45P3405
EKC-LM3S6965	Luminary Micro	Stellaris LM3S6965 Ethernet Evaluation Kit for CodeSourcery G++ GNU (30-day limited)	LM3S6965	1494126	45P3399

Document List:

Datasheets:

Part Number	Description	Size
LM3S6965	LM3S6965 Microcontroller Datasheet	-
FT2232D/TR	Dual USB UART/FIFO I.C.	0.99MB
FAN5331SX	High Efficiency Serial LED Driver and OLED Supply with 20V Integrated Switch	584KB
LC4032V-75TN48C	3.3V/2.5V/1.8V In-System Programmable SuperFAST High Density PLDs	364KB

Application Notes:

File Name	Size
Programming the On-Chip Flash Memory in a Stellaris Microcontroller	-
ADC Oversampling Techniques	-
Clocking options for Stellaris Family Microcontrollers	-
Using a Stellaris Microcontroller as an I/O Processor	-

Adding 32KB of Serial SRAM to a Stellaris Microcontroller	-
Evaluating PeerSec Networks' MatrixSSL on a Stellaris Microcontroller	-
Using the Stellaris Microcontroller Analog-to-Digital Converter	-
Upgrading to Luminary Micro's Stellaris Microcontrollers from Microchip's PIC Microcontrollers	-
Migrating to the New Members of the Stellaris® Family of Microcontrollers	-
Implementing RS-232 Flow Control on a Stellaris® Microcontroller	-
Using Schematic Part Libraries and PCB Footprint Libraries for Stellaris® Microcontrollers	-
Flash Protection for Stellaris® Microcontrollers	-
Using the Stellaris® Ethernet Controller with Micro IP (uIP)	-
Using the Stellaris® Ethernet Controller with Lightweight IP (lwIP)	-
Optimizing Code Performance and Size for Stellaris Microcontrollers	-
Serial-to-Ethernet Converter for Stellaris Microcontrollers	-
Using Stellaris Microcontrollers Internal Memory to Emulate EEPROM	-
Software UART for Stellaris® Microcontrollers	-
Using the IEC 60730 Standard for Safe and Reliable Operation of Stellaris® Microcontrollers	-

Hardware & Software:

File Name	Size
LM3S6965 Evaluation Kit Readme First	-
Stellaris® LM3S2965 Evaluation Board and LM3S6965 Evaluation Board User's Manual Documentation Addendum	-
LM3S6965 Evaluation Kit for Code Red Technologies CD	-
GUI and command line flash programmer	-
EK-LM3S6965 Firmware Development Package for Revision A boards	-
EK-LM3S6965 RevC Firmware Development Package	-

