

LPC2138 100M Ethernet QuickStart Board

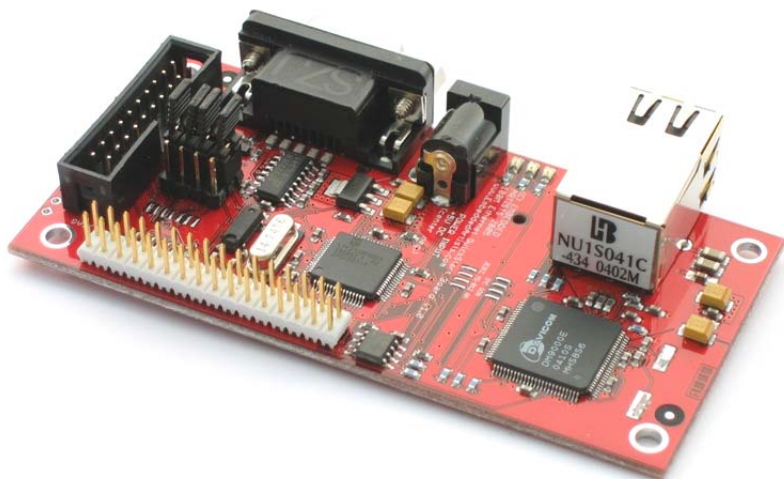


The Art of Embedded Systems Development – made Easy™

Features

Embedded Artists' *LPC2138 100/10M Ethernet QuickStart Board* lets you get up-and-running quickly with Philips ARM7TDMI LPC2138 microcontroller and 100/10M Ethernet communication. The small form factor board offers many unique features that ease your development.

- Philips ARM7TDMI LPC2138 microcontroller with 512 KByte program Flash and 32 KByte SRAM
- Proven DM9000E 100/10 Mbps Ethernet MAC
- Spare I/O pins are available on connectors
- 14.7456 MHz crystal for maximum execution speed and standard serial bit rates
 - Phase-locked loop (PLL) multiplies frequency with four; 4 x 14.7456 MHz = 58.9825 MHz
- 32.768kHz RTC crystal
- ESD/EMI protected RS232 channel with DSUB-9 connector
- RS422/RS485 interface
- 2 Kbit I²C E²PROM for non-volatile storage of parameters such as MAC address, IP-address, subnet mask, and default gateway
- Onboard low-dropout voltage and reset generation.
 - Generates +3.3V from a +5V supply
 - +3.3V available for external circuits, up to 300 mA
 - Power supply: 4.5-6 VDC
- Simple and automatic program download (ISP) via RS232 channel
 - Circuit that automatically controls the bootloader from RS232 channel
- Easy to connect to JTAG signals
- Dimensions: 50 x 100 mm
 - Four layer PCB (FR-4 material) for best noise immunity



Advantages

Embedded Artists' *LPC2138 100/10M Ethernet QuickStart Board* is not just another prototyping board. The many unique features and the extensive support package provided gives you a head start before your competitors.

- **Get up-and-running quickly**
 - Start developing on day 1
 - IAR Embedded Workbench KickStart Compiler included (32 Kbyte limited)
 - Development environment included (compiler, linker, make, editor, etc.) – based on GCC
 - Many sample applications included
 - Extensive documentation
- **Real-time operating system (RTOS) included**
- **Board support package (BSP) included**
- **Minimize design problems by using pre-designed hardware boards**
- **Simple and automatic program download (ISP)**

Low Cost

The *LPC2138 100/10M Ethernet QuickStart Board* is very low cost and can be used for prototyping/development as well as for OEM production. Modifications for OEM production can easily be done for volume customers. Contact Embedded Artists for further information about design and production services. You will likely be surprised at our competitive prices!

Bulk boards (10 or 100 board packages) can be delivered without pin row and/or connectors soldered for easy integration with original equipment.

Other QuickStart Boards / Kits

Visit Embedded Artists' homepage, www.EmbeddedArtists.com, for information about other *QuickStart* boards / kits or contact your local distributor.

Business Idea

Embedded Artists' business idea is to provide our customers with the tools, services, and experience that are needed when developing complex functions in resource-constrained embedded systems. We have long experience in developing business possibilities related to industrial embedded systems – all the way from an idea to a profitable product!

Our solutions build on our unique *InfraBed™* technology, which create flexible and easy-to-maintain software solutions.

Our competence helps you to create new business opportunities!

Customer Values

– The Embedded Artists' Advantage Solutions

Embedded Artists is a competent partner with:

- Experience with business development– from idea to profitable product!
- Long industrial experience
- Long experience with wireless communication
- Long experience with "Internet-enabling" resource-constrained embedded systems
- Long experience with integration to central systems, M2M communication, and creating user interfaces

Production and Design Services

- Prototype (and low-volume) production in Europe
- Volume production in China

Configurable Infrastructure Software

- RTOS, TCP/IP, PPP, Web Server, File Systems, etc.
- Lower cost
- Shorter development time
- Increased quality
- "Packetized Expert Knowledge"

QuickStart Hardware Platforms

- Low cost, and even lower cost OEM prices
- Shorter development time
- Less initial problems, up-and-running immediately

Somewhere to turn to...

We have gathered lots of knowledge related to embedded systems during all the different projects we have worked with. We would like to share this knowledge:

- **Hundreds of links**, related to development of embedded systems, are presented on our homepage (look under the *Knowledge* section).
- A large number of **book reviews** also exist on our homepage. Only books that we really recommend and that are related to embedded systems development are presented.
- **Reference documentation** and **white papers** that thoroughly describe and explain different infrastructure functions (RTOS, TCP/IP, etc.).

More Information

Contact us if you would like to get more information or if you want to discuss how we can help you in YOUR specific situation.

- Write an e-mail: info@EmbeddedArtists.com
- Visit our homepage: www.EmbeddedArtists.com



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2005-07-22 v1.1