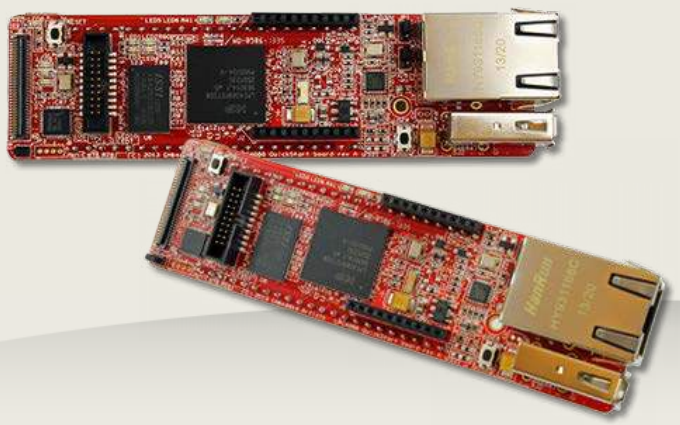


Art. EA-QSB-016

[High Resolution Photos]

LPC4088 QUICKSTART BOARD

Embedded Artists' **LPC4088 QuickStart Board** is an easy to use ARM Cortex-M4 rapid prototyping board in a standard through hole DIP package (44-pin), targeted at high-performance as well as low-power applications. Communication interfaces, large on-board memories and LCD controller enables graphical user inteface applications.

The **LPC4088 QuickStart Board** is not just a piece of hardware - it's much, much more:

- The module hardware, which is a professional quality hardware developed for integration and simplicity-of-use.
- The mbed Software Development Kit (SDK), which is an open source C/C++ microcontroller software platform designed for a suitable level of hardware abstraction to simplify microcontroller programming.
- The mbed Compiler is a powerful online IDE that is tightly integrated with the mbed SDK and Developer's Website (**mbed.org**, see below).
- The mbed Hardware Development Kit (HDK), which is an interface design that provides simple USB drag-n-drop programming and CMSIS-DAP debug interface for the LPC4088 microcontroller.
- The **mbed.org** community, with extensive documentation in the form of handbooks, cookbooks, project pages, **User Forums** for getting help and advice from other mbed users, etc.
- ***Take advantage of Embedded Artists' competence to minimize your work and risk!***

Volume Pricing from Quantity 1

The module is priced with integration in mind. Enjoy a price that is normally associated with much higher volumes from the first module you buy!

Pinning

Below is the pinning diagram (click for a larger picture), in typiclal mbed style.

Introduction Video

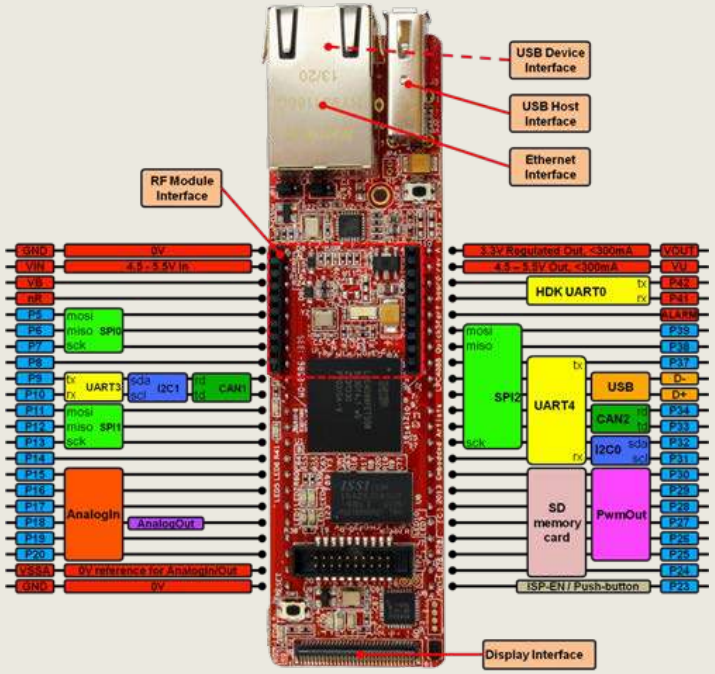
mbed

The **LPC4088 QuickStart Board** is **mbed Enabled**- meaning that the board take full advantage of the mbed platform!

The **LPC4088 QuickStart Board** is the most advanced mbed enabled board to date - it is the most integrated, has most memory, has graphical possibilties and highest speed!

Some mbed information:

- **mbed.org** website - this is the official mbed community website. It contains a lot of documentation with many different topics and angles on the information.



- **Explore mbed** - a four segment presentation of the mbed platform: Explore - Getting Started - Prototype - Production
- **mbed Developers website** - an introduction to the mbed Developers website.
- **Handbook** - gives an overview of the platform with all features.
- **Cookbook** - a wiki for publishing user-controbuted libraries and resources.

Documentation

All **documentation** about the board has been put on the **mbed.org** site.

SPECIFICATION

LPC4088 QuickStart Board

Processor	NXP's Cortex-M4 LPC4088 microcontroller in BGA package, running at up to 120 MHz
Program Flash	8 MB QSPI + 512 KB on-chip
Data Memory	32 MB SDRAM (x32 bit databus for high handwidth access) + 96 KB on-chip SRAM + 4 KB on-chip E2PROM
Clock Crystals	12.000 MHz main and 32.768 kHz RTC crystals
Interfaces / Connectors	• 2x22 pin edge pins • 10/100Mbps Ethernet (RJ45) • USB-A (USB Host interface) • USB-micro B (USB Device interface) • USB-micro B (mbed HDG debug interface) • 20 position SDW/Trace connector (ARM standard debug connector) • 61 pos 0.3 mm pitch FPC connector for display expansion • 20 pos XBee compatible connector for RF module add-on
Dimensions	101 x 28 mm (104 x 28 mm with connectors)
Power	• 4.5 - 5.5V input on pin 2, or • via micro-B USB HDK connector, or • via trace connector (+5V)
Other	• Proper ESD protection on communication interfaces • CMSIS-DAP Interface On-board (debug interface functions) • Supported by the mbed SDK and online tools • Supported by professional tools and middleware • Industrial temperature specified (-40 to +85 degrees Celsius) • ISO 9001:2008 produced • Production and shipping compensated for carbon dioxide emission