



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



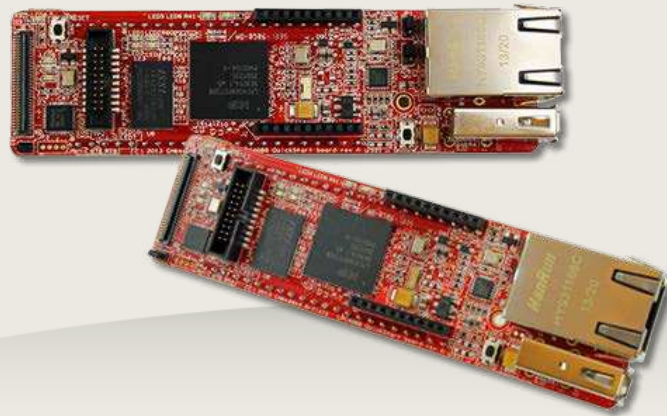
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Art. EA-QSB-016

[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 interface 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](http://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](http://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!**

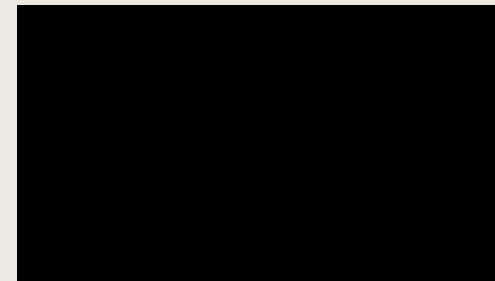
### Volume Pricing from Quantity 1

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 typical mbed style.

### Introduction Video



### mbed

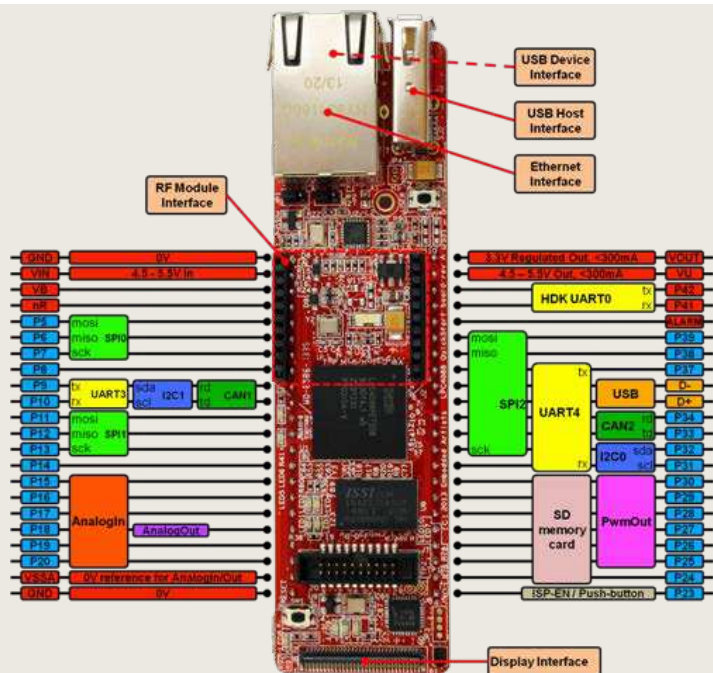
The **LPC4088 QuickStart Board** is **mbed Enabled**- meaning that the board take full advantage of the mbed platform!



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

Some mbed information:

- [mbed.org](http://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-contributed libraries and resources.

## Documentation

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

## SPECIFICATION

### LPC4088 QuickStart Board

<i>Processor</i>	NXP's Cortex-M4 LPC4088 microcontroller in BGA package, running at up to 120 MHz
<i>Program Flash</i>	8 MB QSPI + 512 KB on-chip
<i>Data Memory</i>	32 MB SDRAM (x32 bit databus for high bandwidth access) + 96 KB on-chip SRAM + 4 KB on-chip E2PROM
<i>Clock Crystals</i>	12.000 MHz main and 32.768 kHz RTC crystals
<i>Interfaces / Connectors</i>	<ul style="list-style-type: none"> <li>• 2x22 pin edge pins</li> <li>• 10/100Mbps Ethernet (RJ45)</li> <li>• USB-A (USB Host interface)</li> <li>• USB-micro B (USB Device interface)</li> <li>• USB-micro B (mbed HDG debug interface)</li> <li>• 20 position SDW/Trace connector (ARM standard debug connector)</li> <li>• 61 pos 0.3 mm pitch FPC connector for display expansion</li> <li>• 20 pos XBee compatible connector for RF module add-on</li> </ul>
<i>Dimensions</i>	101 x 28 mm (104 x 28 mm with connectors)
<i>Power</i>	<ul style="list-style-type: none"> <li>• 4.5 - 5.5V input on pin 2, or</li> <li>• via micro-B USB HDK connector, or</li> <li>• via trace connector (+5V)</li> </ul>
<i>Other</i>	<ul style="list-style-type: none"> <li>• Proper ESD protection on communication interfaces</li> <li>• CMSIS-DAP Interface On-board (debug interface functions)</li> <li>• Supported by the mbed SDK and online tools</li> <li>• Supported by professional tools and middleware</li> <li>• Industrial temperature specified (-40 to +85 degrees Celsius)</li> <li>• ISO 9001:2008 produced</li> <li>• Production and shipping compensated for carbon dioxide emission</li> </ul>