



# LPC 17xx Family

Factors to consider:

1. IDE MCU Xpresso support for LPC 1768;
2. Sample code/project with support of GPP and SPI for LPC 1768;
3. LPC 1768 has longevity (not approaching the end of life) and has board in stock;
4. LPC 1768 and LPC 1769 have both same Cortex M3 Core

## LPC 1768 As an Alternative to LPC 1769



### OM11043

Arm Mbed LPC1768 Board.  
Kit Contains  
Arm Mbed LPC1768 Board  
USB connector cable  
Setup Guide

<https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1700-cortex-m3/arm-mbed-lpc1768-board:OM11043>

\$56.35 USD  
For a quantity of 1  
Availability: In stock  
Inventory: 4  
Shipping: Normally ships 1-2 business days

## Processors and Microcontrollers

### LPC1700 Cortex-M3

[LPC1763FBD100](#): 256 KB Flash, 64 KB SRAM, No CAN LQFP100 Package  
[LPC1764FBD100](#): 128 KB Flash, 32 KB SRAM, Ethernet, USB, LQFP100 Package  
[LPC1765FBD100](#): 256 KB Flash, 64 KB SRAM, USB, LQFP100 Package  
[LPC1765FET100](#): 256 KB Flash, 64 KB SRAM, USB, TFBGA100 Package  
[LPC1766FBD100](#): 256 KB Flash, 64 KB SRAM, Ethernet, USB, LQFP100 Package  
[LPC1767FBD100](#): 512 KB Flash, 64 KB SRAM, Ethernet, No CAN LQFP100 Package  
[LPC1768FBD100](#): 512 KB Flash, 64 KB SRAM, Ethernet, USB, LQFP100 Package  
[LPC1768FET100](#): 512 KB Flash, 64 KB SRAM, Ethernet, USB, TFBGA100 Package  
[LPC1769FBD100](#): 512 KB Flash, 64 KB SRAM, Ethernet, USB, LQFP100 Package

<https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1700-cortex-m3/arm-mbed-lpc1768-board:OM11043>

## File Download



### LPCOpen 2.10 Docs for LPC17xx and LPC40xx

CHM Rev 2.10 Mar 13, 2014 4.3 MB LPCOPEN-2-10-DOCS-17XX-40XX-CHM

<https://www.nxp.com/webapp/sps/download/preDownload.jsp?render=true>

[CHM File Extension - What is a .chm file and how do I open it?https://fileinfo.com> extension > chm](#)

Jul 25, 2022 — A CHM file contains help documentation compiled and saved in a compressed HTML format. It may include text, images, and hyperlinks.Format: Binary

### LPCOpen Libraries and Examples

<https://www.nxp.com/design/microcontrollers-developer-resources/lpcopen-libraries-and-examples:LPC-OPEN-LIBRARIES>

LPCOPEN-SOFTWARE-FOR-LPC17XX



# LPC 1114 Entry Level 32 Bits ARM

Scalable Entry Level 32-bit Microcontroller (MCU)  
based on Arm® Cortex®-M0 Cores



## General Purpose MCU Portfolio

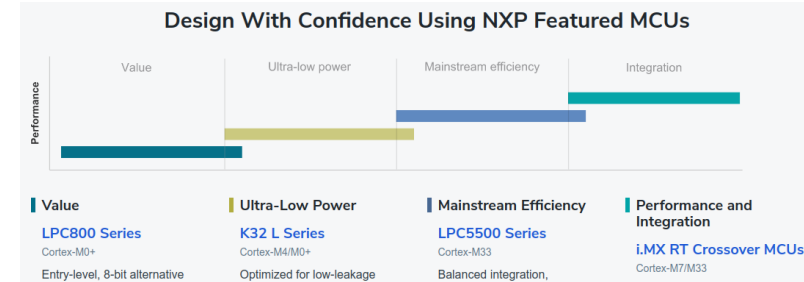
<https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus:GENERAL-PURPOSE-MCUS>

### Analog peripherals

- 10-bit ADC with input multiplexing among 8 pins

### Serial interfaces

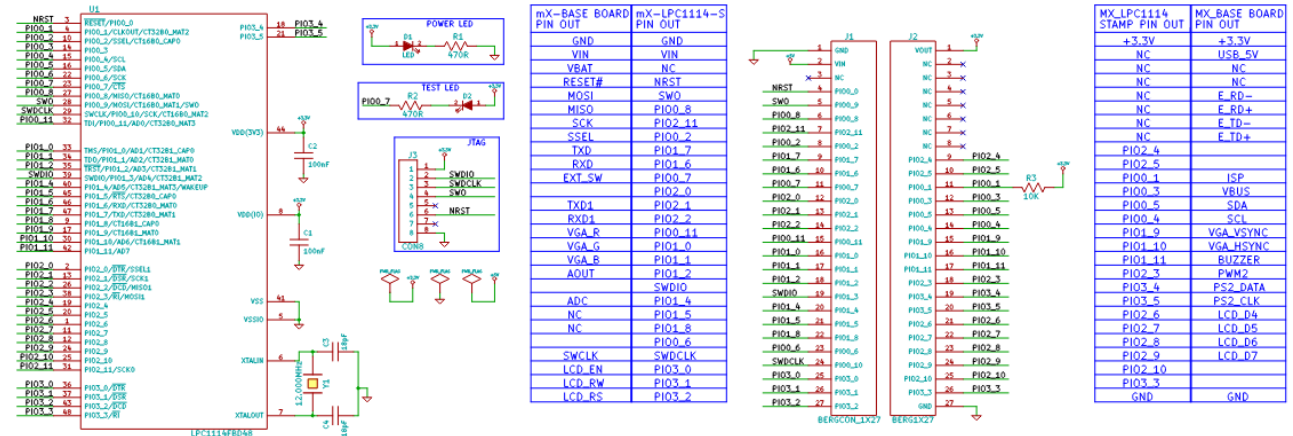
- UART with fractional baud rate generation, internal FIFO, and RS-485 support
- Two SPI controllers with SSP features and with FIFO and multi-protocol capabilities
- I<sup>2</sup>C-bus interface supporting full I2C-bus specification and Fast-mode Plus with a data multiple address recognition and monitor mode



[https://microcontrollershop.com/product\\_info.php?products\\_id=4104&gclid=Cj0KCQjwjbyYBhCdARIsAArC6LImM7MXoVaZ7Srik6p82dX8HEolXCG5aOfZQULrUWVhbV-BPu1C7UaArwTEALw\\_wcB](https://microcontrollershop.com/product_info.php?products_id=4104&gclid=Cj0KCQjwjbyYBhCdARIsAArC6LImM7MXoVaZ7Srik6p82dX8HEolXCG5aOfZQULrUWVhbV-BPu1C7UaArwTEALw_wcB)

## LPC1114 (ARM Cortex-M0) Board Resources

- [User Manual](#) (assumes you're using the mbed-Xpresso Baseboard)
- [Schematics](#)
- [Sample Code](#)



# LPC 11C24

## Cortex®-M0 MCU 32-Bit

[https://www.digikey.com/en/products/detail/nxp-usa-inc./OM13093UL/7646594?utm\\_adgroup=Development%20Boards%2C%20Kits%2C%20Programmers&utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=Shopping\\_Supplier\\_NXP%20USA%20Inc\\_0568\\_Co-op&utm\\_term=&utm\\_content=Development%20Boards%2C%20Kits%2C%20Programmers&gclid=CjwKCAjwsMGYBhAEEiwAGUXJaQd8h1EqYmHV74JsJZkMJpoF7oZTw9Mhw84KL-ncMIRRV2eIBx053BoCbsQAvD\\_BwE](https://www.digikey.com/en/products/detail/nxp-usa-inc./OM13093UL/7646594?utm_adgroup=Development%20Boards%2C%20Kits%2C%20Programmers&utm_source=google&utm_medium=cpc&utm_campaign=Shopping_Supplier_NXP%20USA%20Inc_0568_Co-op&utm_term=&utm_content=Development%20Boards%2C%20Kits%2C%20Programmers&gclid=CjwKCAjwsMGYBhAEEiwAGUXJaQd8h1EqYmHV74JsJZkMJpoF7oZTw9Mhw84KL-ncMIRRV2eIBx053BoCbsQAvD_BwE)



## OM13093UL

Digi-Key Part Number

568-14402-ND

Manufacturer

[NXP USA Inc.](#)

Manufacturer Product Number

OM13093UL

Description

LPCXPRESSO LPC11C24 EVAL BRD

Manufacturer Standard Lead Time

6 Weeks

Detailed Description

LPC11C24 LPCXpresso™ series ARM® Cortex®-M0

MCU 32-Bit Embedded Evaluation Board

47 in stock,  
\$25

### Comparison:

					SPI	PWM	I2C	Eth
1114	ARM Cortex M0	50 MHz	16/32 kB Flash	8 kB SRAM	1	No	1	No
11C24	ARM Cortex M0	50 MHz	16/32 kB Flash	8 kB SRAM	1	No	1	No
1768	ARM Cortex M3	100 MHz	512 kB Flash	64 kB SRAM	3	6	3	1
1769	ARM Cortex M3	120 MHz	256/512 kB Flash	32/64 kB SRAM	3	6	3	1

### Datasheets:

[LPC11Cx2/Cx4 32-bit ARM Cortex-M0 microcontroller - NXP](https://www.nxp.com/docs/data-sheet/LPC11C24.pdf)[https://www.nxp.com> docs > data-sheet > LPC11..](https://www.nxp.com/docs/data-sheet/LPC11C24.pdf)

PDFJan 4, 2016 — LPC11Cx2/Cx4. 32-bit ARM Cortex-M0 microcontroller; 16/32 kB flash, 8 kB. SRAM; C\_CAN. Rev. 3.2

### Specs:

LPC 1768 spec: [https://www.digikey.com/en/product-highlight/n/nxp-semi/mbed-lpc1768-development-board?utm\\_adgroup=Programmers](https://www.digikey.com/en/product-highlight/n/nxp-semi/mbed-lpc1768-development-board?utm_adgroup=Programmers%20Dev&utm_source=google&utm_medium=cpc&utm_campaign=Dynamic%20Search_EN_Product&utm_term=&utm_content=Programmers%20Dev&gclid=CjwKCAjwsMGYBhAEEiwAGUXJabcASha-s4wn1-4buVNrcACORXUv2A5mQZcQ2stSb_ntU-zw0s73IBoCCnQQAvD_BwE)

%20Dev&utm\_source=google&utm\_medium=cpc&utm\_campaign=Dynamic

%20Search\_EN\_Product&utm\_term=&utm\_content=Programmers

%20Dev&gclid=CjwKCAjwsMGYBhAEEiwAGUXJabcASha-s4wn1-4buVNrcACORXUv2A5mQZcQ2stSb\_ntU-zw0s73IBoCCnQQAvD\_BwE

LPC 1769 spec:

<https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1700-cortex-m3/lpcxpresso-board-for-lpc1769:OM13000>

LPC 11xx spec:

<https://www.nxp.com/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontrollers-mcus:LPC11XXLV>