

Partner Products Cross Reference for LPC MCUs

Select from the best in support

All of NXP's ARM microcontroller products are supported by a well established – and rapidly growing – network of third-party tool suppliers. Customers have direct access to a wide set of options, from evaluation boards and emulators to compilers, debuggers, RTOSs, software stacks, and more. This document provides an overview of the exceptional tool support offering that is available for our ARM Cortex-M microcontrollers.

For further information about NXP microcontrollers please visit www.nxp.com/microcontrollers
and for more information on our partners and consultants see <http://www.nxp.com/techzones/microcontrollers-techzone/tools-ecosystem.html>

Note: Clicking on URLs in this document may not function correctly in all cases due to formatting reasons, but URLs provided are correct. Please copy the URL into your browser address to access the relevant partner website pages.

Updated November 5th, 2014

Product Type Evaluation boards

Evaluation boards and Starter Kits are an inexpensive way to experience the features of the NXP microcontroller devices and the software development tools and sample applications surrounding them. Some kits contain a JTAG unit for software debugging and device programming as well as free evaluation versions of integrated development environments IDEs, helping you to start developing your application quickly and easily. Single-Board Computers (SBCs), also called System-On-Modules (SOMs), allow you to reduce time-to-market and costs in all stages of embedded design from evaluation and prototyping to development and OEM deployment.

		Partner																				
ARM	Keil MCB1100 Keil MCB1300 Keil MCB1500 Keil MCB1700 Keil MCB1800 Keil MCB4300																					http://www.keil.com/boards2/keil/mcb11c14/ http://www.keil.com/boards2/keil/mcb1313 http://www.keil.com/boards2/keil/mcb1500 http://www.keil.com/boards2/keil/mcb1700 http://www.keil.com/boards2/keil/mcb1800/ http://www.keil.com/boards2/keil/mcb4300
CooCox	CoLinkEx with LPC11C14 EVB																					http://www.coocox.org/CoLinkExGuide/Buy_CoLinkEx.htm
Embedded Artists	Developer's Kits OEM Boards Quickstart boards Android Open Accessory Application Kit Low-power Application Kit LPCxpresso Board (V2/V3) LPCxpresso Board LabTool	OEM board with development baseboard Boards for OEM designs and development Small boards with many features to begin development																				http://www.embeddedartists.com/products/kits/ http://www.embeddedartists.com/products/oem http://www.embeddedartists.com/products/boards http://www.embeddedartists.com/products/app/aoa_kit.php http://www.embeddedartists.com/products/app/lowpower_oryx http://www.embeddedartists.com/products/lpcxpresso http://www.embeddedartists.com/products/app/labtool.php
Future Designs, Inc.	uEZGUI-1788-43WQR uEZGUI-4088-43WQN uEZGUI-43-H01 uEZGUI-1788-43WQR-BA uEZGUI-4088-43WQN-BA uEZGUI-1788-56VI uEZGUI-1788-56VI-BA DK-57VTS-LPC1788 uEZGUI-1788-70 uEZGUI-1788-70WVT-BA uEZGUI-1788-70WVT uEZGUI-1788-70WVM SOMDIMM-LPC1788	External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB External SPIFI Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, PMOD External NOR Flash, SDRAM, onboard speaker, Ethernet, dual USB, RS232/RS485 External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, External SPIFI Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, PMOD External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, large GPIO expansion, Ethernet, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option External NOR Flash, SDRAM, onboard speaker, 70 pin expansion, TCP/IP Stack, dual USB, Wi-Fi option OEM-ready board																				http://www.teamfdi.com/development-tools-kits/products/6/uEZGUI-1788-43WQR http://www.teamfdi.com/development-tools-kits/products/6/uEZGUI-4088-43WQN http://www.teamfdi.com/development-tools-kits/products/6/uEZGUI-43-H01 http://www.teamfdi.com/development-tools-kits/products/1/uEZGUI-1788-43WQR-BA http://www.teamfdi.com/development-tools-kits/products/1/uEZGUI-4088-43WQN-BA http://www.teamfdi.com/development-tools-kits/products/6/uEZGUI-1788-56VI http://www.teamfdi.com/development-tools-kits/products/1/uEZGUI-1788-56VI-BA http://www.teamfdi.com/development-tools-kits/products/3/DK-57VTS-LPC1788 http://www.teamfdi.com/development-tools-kits/products/1/uEZGUI-1788-70WVM-BA http://www.teamfdi.com/development-tools-kits/products/1/uEZGUI-1788-70WVT-BA http://www.teamfdi.com/development-tools-kits/products/6/uEZGUI-1788-70WVT http://www.teamfdi.com/development-tools-kits/products/5/SOMDIMM-LPC1788
Hitex	NXP Evaluation Board																					http://ehitex.com/evaluation-boards/nxp
IAR Systems	IAR KickStart Kit																					http://www.iar.com/kits/
NGX Technologies	LPC-Xplorer boards LPC-Xplorer++ boards Xplorer++ Baseboard BlueBoard-LPC1768 COMBO BlueBoard-LPC mbed-Xpresso Baseboard mX-LPC boards	Baseboard for Xplorer++ boards Baseboard for mX-LPC11XX stamps																				http://shop.ngxtechnologies.com/product_info.php?cPath=21_37&products_id=104 http://shop.ngxtechnologies.com/product_info.php?products_id=129 http://shop.ngxtechnologies.com/product_info.php?cPath=21_37&products_id=137 http://shop.ngxtechnologies.com/product_info.php?cPath=21_33&products_id=97 http://shop.ngxtechnologies.com/product_info.php?cPath=21_33&products_id=65 http://shop.ngxtechnologies.com/product_info.php?cPath=21_34&products_id=96 http://shop.ngxtechnologies.com/product_info.php?cPath=21_34&products_id=103
NXP	LPCxpresso Board LPCxpresso Board (V2) LPCxpresso Board (V3)																					http://www.lpcware.com/lpcxpressoboards http://www.lpcware.com/lpcxpressoboards http://www.lpcware.com/lpcxpressoboards



Product Type Probes

Debug probes our specialist partners can provide access to all the advanced debug capabilities of the Cortex-M family. Many also offer sophisticated flash programming capabilities, instruction and/or data trace and specialized low-level debugging utilities. Supported host interfaces from various partners include USB, Ethernet and wireless.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC11101x	LPC11102x	LPC11103x	LPC111E1x	LPC111Ax	LPC111Dxx	LPC111Cx	LPC111E6x	LPC111U6x	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/6x	LPC177x/8x	LPC18xx	LPC40xx	LPC435x	LPC433x	URL
ARM	Keil ULINKpro Keil ULINK2	Streaming Instruction Trace	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.keil.com/ulinkpro/ http://www.keil.com/ulink2/
CooCox	Colink CoLinkEx			Y						Y				Y	Y		Y							http://www.coocox.org/Colink.htm http://www.coocox.org/Colinkex.htm
Embedded Artists	LPC-Link2		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.embeddedartists.com/products/lpcxpresso/lplink2.php
IAR Systems	I-jet JTAGjet-Trace	supports all Cortex-M cores for Cortex-M	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.iar.com/ijet/ http://www.iar.com/Products/Hardware-Debug-probes/JTAGjet-Trace-for-Cortex-M/
iSYSTEM	iTag Family iONE-BT iC5000	Cortex-M Debug & Trace Wireless Debug Probe Universal on-chip analyzer		Y								Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.isystem.com/products/hardware/cortex-debugger/itag http://www.isystem.com/products/hardware/cortex-debugger/ione-bt-wireless-debugger http://www.isystem.com/products/hardware/ic5000
Lauterbach GmbH	PowerDebug USB3.0 PowerDebug Ethernet CombiProbe	Debug tool Debug tool Debug cable and trace tool	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.lauterbach.com/bdmusb3.html http://www.lauterbach.com/bdmeth2.html http://www.lauterbach.com/cobstm.html
NXP	LPC-Link2		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.lpcware.com/lpcxpressoboards
Rowley	CrossConnect for ARM		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.rowley.co.uk/arm/CrossConnect.htm
Segger	J-Link BASE J-Link PLUS J-Link ULTRA+ J-Link PRO J-Trace for Cortex-M	1MB/s download. IAR, KEIL, Rowley, GDB, support 1MB/s download. Unlimited flash bkpts. IAR, KEIL, Rowley, GDB, support 3 MB/s download. Unlimited flash bkpts. IAR, KEIL, Rowley, GDB, support. Includes J-flash. Ethernet, Unlimited Flash Breakpoints, 3.0 MB/s download, IAR, KEIL, Rowley, GDB support. Includes J-Flash All J-Link functionality, USB2.0, 100MHz trace clk	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://segger.com/jlink_base.html http://segger.com/j-link-plus.html http://segger.com/jlink-ultra-plus.html http://segger.com/jlink-pro.html http://segger.com/j-trace-for-cortex-m.html



Product Type OS

Operating Systems use specialized scheduling algorithms in order to provide the software developer with the tools necessary to produce deterministic behavior in the final system. An RTOS can enable developers to architect a design that is more resource and power efficient, and more readily extended or customized.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC1114	LPC1114X	LPC1114U2x	LPC1114U3x	LPC1114E1x	LPC1114AXx	LPC1114DXx	LPC1114CXx	LPC1114E6x	LPC1114U6x	LPC1214x	LPC1214DX	LPC1314x	LPC1514x	LPC1714/6x	LPC1714/8x	LPC1814x	LPC4014x	LPC4314x	LPC4314X	URL
ARM	RTX		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.keil.com/rl-arm/kernel.asp
CooCox	CoOS		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.coocox.org/CoOS.htm
Express Logic	ThreadX		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.rtos.com/products/threadx/
FreeRTOS	FreeRTOS		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.FreeRTOS.org
HCC Embedded	eTaskSync Verifiable Scheduler		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/etasksync/etasksync-overview
Micrium	uCOS-II & III RTOS Example code	Supported by IAR, GNU & ARM Compilers. >4kB RAM recommended. Examples of uCOS-II, III	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://micrium.com/rtos/ucosii/overview/ http://micrium.com/downloadcenter/download-results/?searchterm=hm-nxp&supported=true
Segger	embOS	High reliability RTOS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://segger.com/embos.html



Product Type Networking

Networking products listed here include not only TCP/IP, but also other commonly required networking layers (e.g. FTP, HTTP, DHCP, ...), plus cloud service support functions. Some of our partners offer other products that can be easily ported to LPC microcontrollers, so please contact them to further explore their product portfolios. Security protocols are also available to complement products shown here; please refer to the Security section of this document for more information.

Partner	Product name	Notes (optional)	LPC800	LPC1100X	LPC1114X	LPC11142X	LPC11143X	LPC11144X	LPC11145X	LPC11146X	LPC11147X	LPC11148X	LPC11149X	LPC11150X	LPC11151X	LPC11152X	LPC11153X	LPC11154X	LPC11155X	LPC11156X	LPC11157X/8	LPC11158X	LPC11159X	LPC11160X	LPC11161X	LPC11162X	URL
ARM	Keil MDK-Professional Middleware																					Y					http://www.keil.com/rl-arm/rl-tcpnet.asp
Cypherbridge Systems	Cloud Device Kit	Encrypted File System, CDK Device Client, Cloud Data Center. Scalable data synchronize and replicate																				Y	Y	Y	Y	Y	http://cypherbridge.com/ProductsServices.php#Cloud_Device_Kit
	uFTP	Embedded FTP and FTPS Library																				Y	Y	Y	Y	Y	http://cypherbridge.com
	uSCP	Embedded Secure Copy Library																				Y	Y	Y	Y	Y	http://cypherbridge.com
FreeRTOS	embTCP	Low cost IPv4 library																				Y	Y				http://www.FreeRTOS.org/embTCP
	embDUAL	Low cost IPv4/IPv6 library																				Y	Y				http://www.freertos.org/embTCP
	embFTP	Low cost FTP library																				Y	Y				http://www.freertos.org/embTCP
	embTELNET	Low cost Telnet library																				Y	Y				http://www.freertos.org/embTCP
	embHTTP	Low cost HTTP library																				Y	Y				http://www.freertos.org/embTCP
	FreeRTOS+Nabto	Peer to peer IoT solution																				Y	Y	Y	Y	Y	http://www.FreeRTOS.org/nabto
FreeRTOS+UDP	Tiny thread aware and sockets based UDP stack																				Y	Y	Y	Y	Y	http://www.FreeRTOS.org/udp	
HCC Embedded	MISRA Compliant IPv4	MISRA compliant TCP/IP stack TCP/IPv4/UDP/ARP/ICMP/IGMP/DNS client/DHCP client/FTP & TFTP servers																				Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tcpip-stack
	MISRA Compliant IPv6	Also available as dual IPv4/v6																				Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tcpip-stack
	HTTP Server																					Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tcpip-stack
	PPP Module																					Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tcpip-stack
	SMTP Module																					Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tcpip-stack
Hitex	MDK / DS-5																					Y	Y	Y	Y	Y	http://www.hitex.com/index.php?id=1222
	MicroNet / Misra-TCP/IP																					Y	Y	Y	Y	Y	http://www.hitex.com/index.php?id=components-tcpip
Mentor Embedded	Nucleus Networking IPv4 and IPv6																					Y	Y	Y	Y	Y	http://www.mentor.com/embedded-software/nucleus/networking
Micrium	uC/TCP/IP																					Y	Y	Y	Y	Y	http://micrium.com/rtos/uctcpip/overview/
	uC/TCP/IP																					Y	Y	Y	Y	Y	http://micrium.com/rtos/uctcpip/overview/
	Example code	Examples of uCOS-II, III and TCP/IP																				Y	Y	Y	Y	Y	http://micrium.com/downloadcenter/download-results/?searchterm=hm-nxp&supported=true
NXP	LPCOpen	LWIP																				Y	Y	Y	Y	Y	http://www.lpcware.com/lpcopen
Rowley	TCP/IP Network Library																					Y	Y				http://www.rowley.co.uk/ctl_network_library_overview.htm
Segger	embOS/IP	high-performance library in ANSI C for any CPU.																				Y	Y	Y	Y	Y	http://segger.com/embos-ip.html



Product Type Security

Security is an ever increasing aspect of embedded systems design. Products listed here include complement networking products, and also include secure booting and update solutions.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC1114X	LPC1114Z	LPC1114K	LPC1114E1K	LPC1114AXX	LPC1114DXX	LPC1114CXX	LPC1114E6K	LPC1114U6K	LPC1124X	LPC1124D	LPC1134X	LPC1154X	LPC1174/8K	LPC1174/8K	LPC1184X	LPC1140X	LPC11435X	LPC11433K	URL
Cypherbridge Systems	uSSL SDK uSSH SDK uLoad SDK Family uVPN SDK uCrypt	SSL/TLS, server/client, X509 SSH server/client Secure boot loader, Device Firmware Manager, Install Defender VPN IPSec, IKEv1, IKEv2 Embedded encryption and hash library																						http://cypherbridge.com/ProductsServices.php#ussl http://cypherbridge.com/ProductsServices.php#usshembed http://cypherbridge.com/ProductsServices.php#uoload http://cypherbridge.com/ProductsServices.php#vpn http://cypherbridge.com
HCC Embedded	SSL/TLS Verifiable AES Bootloader Encryption	Available with full MISRA compliance report, DOORS Specification & UML design. Enables use of encrypted binary images.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/tcpip/misra-compliant-tls http://www.hcc-embedded.com/products/bootloaders/bootloaders-overview
Hitex	μSSL, μSSH, μVPN																	Y	Y	Y	Y	Y	Y	http://www.hitex.com/index.php?id=components-security
wolfSSL Inc	CyaSSL wolfCrypt	Open Source / GPL Open Source / GPL																Y	Y	Y	Y	Y	Y	http://wolfssl.com/yaSSL/download/downloadForm.php http://wolfssl.com/yaSSL/download/downloadForm.php



Product Type USB stacks

Please note that this table only includes devices with an on-chip USB Device, Host, and/or OTG peripheral.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC111U1x	LPC111U2x	LPC111U3x	LPC111E1x	LPC111Axx	LPC111Dxx	LPC111Cxx	LPC111E6x	LPC111U6x	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/6x	LPC177x/8x	LPC18xx	LPC40xx	LPC435x	LPC433x	URL
ARM	Keil MDK-Professional Middleware																							http://www.keil.com/rl-arm/rl-usbhost.asp
HCC Embedded	USB Device, Host & OTG USB Class Drivers	Full implementation supporting all speeds, end point types and extensive range of class drivers.			Y	Y	Y					Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/usb/embedded-usb http://www.hcc-embedded.com/products/usb/embedded-usb
Hitex	EUSBH / EUSBD																	Y	Y	Y	Y	Y	Y	http://www.hitex.com/index.php?id=components-usb
Mentor Embedded	Nucleus USB Host/Device/OTG 2.0/3.0																			Y	Y	Y	Y	http://www.mentor.com/embedded-software/nucleus/usb
Micrium	uC/USB-Device-V4 uC/USB-Host-V3 uC/USB-Device-V4 uC/USB-Host-V3	Check for LPC175/6x, LPC13xx and LPC15xx support. Uses OHCI driver Uses EHCI driver														Y	Y	Y	Y	Y	Y	Y	Y	http://micrium.com/rtos/ucusbdevice/overview/ http://micrium.com/rtos/ucusbhost/overview/ http://micrium.com/rtos/ucusbdevice/overview/ http://micrium.com/rtos/ucusbhost/overview/
NXP	LPCOpen				Y	Y	Y					Y						Y	Y	Y	Y	Y	Y	http://www.lpcware.com/lpcopen



Product 1 CAN

The CAN bus is widely used in vehicles to connect engine control unit and transmission, or (on a different bus) to connect the door locks, climate control, seat control, etc.

Today the CAN bus is also used as a fieldbus in general automation environments, primarily due to the low cost of integrated CAN controllers.

Several NXP microcontrollers are equipped with on-chip CAN modules. The drivers listed below will help you get your Controller Area Network up and running quickly.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC11U1x	LPC11U2x	LPC11U3x	LPC11E1x	LPC11Ax	LPC11Dxx	LPC11Cx	LPC11E6x	LPC11U6x	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/6x	LPC177x/8x	LPC18xx	LPC40xx	LPC435x	LPC433x	LPC435x	URL
ARM	Keil MDK-Professional Middleware																	Y	Y						http://www.keil.com/rl-arm/rl-can.asp
NXP	LPCOpen	LPCOpen									Y														http://www.lpcware.com/lpcopen

Product Type Graphics & GUI

Liquid Crystal Displays (LCDs), especially those with color and touchscreen capabilities, make embedded systems much easier to use. As a result, they have become commonplace across the consumer, medical, industrial, recreational, communication, and automotive sectors. Most of the software tools and libraries listed below are designed to provide graphical user interfaces (GUIs) for any application that operates with a graphical LCD. Many of the software libraries listed here also run on LPC devices that don't have an on-chip LCD graphics controller (by using an external LCD controller). Please also refer to the Software Development section for specialist GUI design tools, available from some of the partners shown below.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC1101X	LPC1102x	LPC1103x	LPC11E1x	LPC11Ax	LPC11Dxx	LPC11Cx	LPC11E6x	LPC11U6x	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/6x	LPC177x/8x	LPC18xx	LPC40xx	LPC435x	LPC433x	URL	
ARM	Keil MDK-Professional Middleware																Y			Y					http://www.keil.com/rl-arm/gui.asp
Express Logic	GUIX																				Y				http://www.rtos.com/products/gui/
NXP	emWin (LPCOpen)	SEGGER object libraries																		Y	Y	Y	Y	Y	http://www.lpcware.com/content/project/emwin-graphics-library
	SWIM (LPCOpen)	Simplified graphics. ~10-20kB program size.																		Y	Y	Y	Y	Y	http://www.lpcware.com/lpcopen
Mjølner Informatics	TouchGFX																			Y	Y	Y	Y	Y	http://mjolner.dk/oursolutions/touchgfx/



Product Type File system

File systems let you store and organize files, along with the data they contain, so it's easier to find and access what you need. Embedded file systems typically use data storage devices such as SD/MMC cards, USB Mass Storage devices, or NAND / NOR Flash memories.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC1111x	LPC1112x	LPC1113x	LPC1114x	LPC1114xx	LPC1114xxx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	LPC1114xx	URL
ARM	Keil MDK-Professional Middleware																					http://www.keil.com/r1-arm/r1-flash.asp
Express Logic	FileX		Y	Y							Y											http://www.rtos.com/products/filex/
FreeRTOS	FreeRTOS+FAT SL	DOS compatible FAT file system with tiny footprint																				http://www.FreeRTOS.org/fat_sl
HCC Embedded	Smart-meter File System (SMFS)	Dedicated flash storage system	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/smart-meter
	FAT File System	Reliable FAT file system for all types of storage media		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/fat-file-systems
	SafeFAT fail-safe FAT file system	Truly fail-safe FAT file system		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/fat-file-systems
	THIN - low resource FAT file system	FAT file system with low resource requirements		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/fat-file-systems
	SafeFLASH NAND/NOR/DF	Fail-safe flash file system for all types of embedded flash devices.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/flash-file-systems
	TINY - low resource flash file system	Flash file system with low resource requirements.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/flash-file-systems
	SafeFTL Flash Translation Layer	Advanced Flash Translation Layer for truly fail-safe systems		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.hcc-embedded.com/products/file-systems/flash-file-systems
Hitex	FAT / SafeFAT		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	www.hitex.com/index.php?id=319
NXP	LPCLPCOpen	ChanFAT		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.lpcware.com/lpcopen
Rowley	Mass Storage Library																					http://www.rowley.co.uk/ctl_mass_storage_library_overview.htm
Segger	emFile	Fail-safe NAND and NOR drivers, Journaling, SD-Card interface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://segger.com/emfile.html



Product Type Programmer

Efficient and fast Flash programming in the production flow is a critical part of cost-effective manufacturing. Our partners offer a range of scalable, leading edge programming solutions to optimize this flow. Please note that this table only includes specialist production programmers. Various JTAG debuggers and emulators can also be used to program the on-chip Flash of our LPC devices.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC111U1X	LPC111U2X	LPC111U3X	LPC111E1X	LPC111Axx	LPC111Dxx	LPC111Cxx	LPC111E6X	LPC111U6X	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/8x	LPC177x/8x	LPC18xx	LP C40xx	LP C435x	LP C433x	URL	
CooCox	CoFlash		Y	Y						Y			Y		Y		Y							http://www.coocox.org/CoFlash_Programmer.htm	
ELNEC s.r.o.	BeeProg2	Universal programmer	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/universal-programmers/beeprog2/	
	BeeProg2C	Universal programmer	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/universal-programmers/beeprog2c/	
	BeeProg2AP	For automated programmers and ATE	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/production-programmers/beeprog2ap/	
	BeeHive204	Universal 4x 48-pin-drive concurrent production programmer	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/production-programmers/beehive204/
	BeeHive204AP	Universal 4x48-pin-drive concurrent multiprogramming system	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/production-programmers/beehive204ap/
	BeeHive204AP-AU	Universal 4x48-pin-drive concurrent multiprogramming system with ZIF socket openers	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/production-programmers/beehive204ap/
BeeHive208S	Universal 8x 48-pin-drive Stand-Alone concurrent production programmer	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.elnec.com/products/production-programmers/beehive208s/	
Embedded Systems Academy	Flash Magic Production System	Flash Magic for production. Customization services available.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.flashmagictool.com/productionsystem.html	
Segger	Flasher ARM	Stand-alone JTAG/SWD programmer, can also be used as a J-Link	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://segger.com/flasher-arm.html	
	Flasher Portable	Battery powered, portable, Stand-alone JTAG/SWD programmer	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://segger.com/flasher-portable.html	
Xeltek	Xeltek SuperPro 6100	High speed Universal IC programmer			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y					http://www.xeltek.com/SuperPro-6100-Universal-IC-Chip-Device-Programmer	
	Xeltek SuperPro 6104GP	Universal Production/ Gang Programmer			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y					http://www.xeltek.com/SuperPro-6104-Universal-Production-Gang-Device-Programmer/	
	Xeltek Superpro 7000	Universal Production/ Gang Programmer			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y					http://www.xeltek.com/Universal-Programmers/SuperPro-7000/	



Product Type Driver libraries

The free BSPs, drivers and libraries from NXP listed below provide a great starting point for your application development. Various NXP partners offer drivers optimized for their RTOS implementations, customized driver packages, and full reference designs.

Partner	Product name	Notes (optional)	LPC800	LPC1100XL	LPC11U11x	LPC11U2x	LPC11U3x	LPC11E1x	LPC11Ax	LPC11Dxx	LPC11Cxx	LPC11E6x	LPC11U6X	LPC12xx	LPC12Dx	LPC13xx	LPC15xx	LPC175x/6x	LPC177x/8x	LPC18xx	LPC40xx	LPC435x	LPC433x	URL
Future Designs, Inc.	uEZ	Complete application software and libraries for uEZ kits																	Y		Y			http://sourceforge.net/projects/uez/
Mentor Embedded	UART/SPI/SPIFI/Ethernet/USB/SDIO/NOR/NAND																				Y	Y	Y	http://www.mentor.com/embedded-software/nucleus/bus
NXP	LPCOpen		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	http://www.lpcware.com/lpcopen

