

# NXP Microcontrollers Selection Guide

NXP LPC family of microcontrollers is changing the landscape for embedded applications. Featuring award-winning innovations in connectivity, flexibility, level of Integration, packaging, performance, power consumption, security, ease-of-use, and more, NXP's LPC family provides developers a scalable continuum of 32-bit ARM based microcontrollers with both software and hardware reusability and portability. NXP's microcontrollers include the latest 32-bit Cortex-M0, Cortex-M3, and Cortex-M4 based product cores and deliver high performance, low power consumption, and many peripheral options. Surrounded by a rapidly growing eco-system of tools, community and support, LPC product are designed to help you easily transition from concept to production.

## LPC Go

NXP's LPC Go microcontrollers feature unprecedented performance, simplicity, and low-power. These products, based on 32-bit ARM cores, are the most cost effective series compared to 8/16-bit solutions and provide a dramatic reduction in code size for every application. LPC Go products can reduce your system cost and power consumption and are easy to use providing faster time-to-market. This category includes Cortex-M0, Cortex-M3 and ARM7 based microcontrollers.

Type	Memory			Timers			Serial Interfaces				Analog		I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features			
	Flash (kB)	RAM (kB)	EEPROM (kB)	Standard	Timers <sup>a</sup>	State config timer	PWM channels <sup>b</sup>	Ethernet	USB	UART	I2C	CAN	SPI/I2S	SSP/SPI	I2S	ADC channels/ resolution	DAC (10-bit) channels	Comparator	LCD controller	SD/MMC				
<b>LPC800 devices</b>																								
LPC810	4	1	4**	1	4*		2	1	1							1		6		30	1.8 - 3.6	F	DIP8	On-chip APIs (USART, I2C, power profile), 1k Byte Flash sector, 64 page erase/program, Switch Matrix, GPIO-Single cycle I/O access, pattern matching engine , I/O 5V tolerant
LPC811	8	2	4**	1	4*		2	1	1							1		14		30	1.8 - 3.6	F	TSSOP16	On-chip APIs (USART, I2C, power profile), 1k Byte Flash sector, 64 page erase/program, Switch Matrix, GPIO-Single cycle I/O access, pattern matching engine , I/O 5V tolerant
LPC812	16	4	4**	1	4*		3	1	2							1		14		30	1.8 - 3.6	F	TSSOP16	On-chip APIs (USART, I2C, power profile), 1k Byte Flash sector, 64 page erase/program, Switch Matrix, GPIO-Single cycle I/O access, pattern matching engine , I/O 5V tolerant
LPC812	16	4	4**	1	4*		2	1	1							1		18		30	1.8 - 3.6	F	SO20	On-chip APIs (USART, I2C, power profile), 1k Byte Flash sector, 64 page erase/program, Switch Matrix, GPIO-Single cycle I/O access, pattern matching engine , I/O 5V tolerant
LPC812	16	4	4**	1	4*		3	1	2							1		18		30	1.8 - 3.6	F	TSSOP20	On-chip APIs (USART, I2C, power profile), 1k Byte Flash sector, 64 page erase/program, Switch Matrix, GPIO-Single cycle I/O access, pattern matching engine , I/O 5V tolerant
<b>LPC1100XL devices</b>																								
LPC1102	32	8	5		9**		1		1		5/10 b					11			50	3.3	F	WLCSP16	2.17 x 2.32 x 0.6 mm miniature package size	
LPC1104	32	8	5		9**		1		1		5/10 b					13			50	3.3	F	WLCSP16	2.17 x 2.32 x 0.6 mm miniature package size	
LPC1115	64	8	5		11**		1	1	2		8/10 b					42			50	3.3	F	LQFP48	64K Flash version of the LPC1114	
LPC1114	32	4-8	5		11**		1	1	1-2		8/10 b					28/42			50	3.3	F	TSSOP28, DIP28, HVQFN33, LQFP48	On-chip power profile, I/O 5V tolerant; Both 7 mm x 7 mm and 5 mm x 5 mm HVQFN33 available	
LPC1113	24	4-8	5		11**		1	1	1-2		8/10 b					28/42			50	3.3	F	HVQFN33, LQFP48	On-chip power profile, I/O 5V tolerant	
LPC1112	16	2-4	5		11**		1	1	1		8/10 b					28			50	3.3	F	TSSOP20, TSSOP28, HVQFN24/33	On-chip power profile, I/O 5V tolerant; Both 7 mm x 7 mm and 5 mm x 5 mm HVQFN33 available	
LPC1111	8	2-4	5		11**		1	1	1		8/10 b					28			50	3.3	F	TSSOP20, HVQFN33	On-chip power profile, I/O 5V tolerant	
LPC1110	4	1	5		11**		1	1	1		5/10 b					16			50	3.3	F	SO20	On-chip power profile, I/O 5V tolerant	

\*SCT peripheral can be configured as additional timers and/or PWM channels    \*\*MRT (Multi rate timer), Self wake-up timer, SCT can be configured as additonal timer

+ Includes Watchdog timer. \*\* Using timers.

Temp. range options

F= -40 to +85 C    J= -40 to +105 C



## LPC Go Cont'd

Type	Memory			Timers			Serial Interfaces				Analog						Package	Comment/Special features									
	Flash (kB)	RAM (kB)	EEPROM (kB)	Standard Timers*	State config timer	PWMs** channels++	Ethernet	USB	UART	I²C	CAN	SPI/I²S	SSP/SPI	I²S	ADC (10-bit) channels	Comparator	LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options		
<b>LPC1100LV devices</b>																											
LPC1112LV	16	2/4		5		11**		1	1		1		1		6/8 b				20/27		50	1.8	F	HVQFN24/33	Available dual 1.8V and 3.3V VDD for HVQFN33 package		
LPC1114LV	32	4/8		5		11**		1	1		1		1		6/8 b				20/27		50	1.8	F	HVQFN24/33	Available dual 1.8V and 3.3V VDD for HVQFN33 package		
<b>LPC11E00 devices</b>																											
LPC11E14	32	10	4	5		11**		1	1		2		2		8/10 b				28/40/54		50	3.3	F	LQFP64, LQFP48, HVQFN33	ROM Drivers- Power Profiles, 32-b Divide Libraries, EEPROM		
LPC11E13	24	8	2	5		11**		1	1		2		2		8/10 b				40		50	3.3	F	LQFP48	ROM Drivers- Power Profiles, 32-b Divide Libraries, EEPROM		
LPC11E12	16	6	1	5		11**		1	1		2		2		8/10 b				40		50	3.3	F	LQFP48	ROM Drivers- Power Profiles, 32-b Divide Libraries, EEPROM		
LPC11E11	8	4	512b	5		11**		1	1		2		2		8/10 b				28		50	3.3	F	HVQFN33	ROM Drivers- Power Profiles, 32-b Divide Libraries, EEPROM		
<b>LPC1200 Devices</b>																											
LPC1227	128	8		6		13**		2	1		1		1		8/10 b				39/55		1	30	3.3	F	LQFP48, LQFP64	Additional DMA, CRC, 2x comparators, RS-485	
LPC1226	96	8		6		13**		2	1		1		1		8/10 b				39/55		1	30	3.3	F	LQFP48, LQFP64	Additional DMA, CRC, 2x comparators, RS-485	
LPC1225	64/80	8		6		13**		2	1		1		1		8/10 b				39/55		1	30	3.3	F	LQFP48, LQFP64	Additional DMA, CRC, 2x comparators, RS-485	
LPC1224	32/48	4		6		13**		2	1		1		1		8/10 b				39/55		1	30	3.3	F	LQFP48, LQFP64	Additional DMA, CRC, 2x comparators, RS-485	
<b>LPC1300 devices</b>																											
LPC1317	64	10	4	5		11**		1	1		2		2		8/12 b				28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	USART, Smart Card Interface, EEPROM Drivers and Power Profiles in ROM		
LPC1316	48	8	4	5		11**		1	1		2		2		8/12 b				28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	USART, Smart Card Interface, EEPROM Drivers and Power Profiles in ROM		
LPC1315	32	8	2	5		11**		1	1		2		2		8/12 b				28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	USART, Smart Card Interface, EEPROM Drivers and Power Profiles in ROM		
LPC1313	32	8		5		11**		1	1		1		1		8/10 b				28-42		72	3.3	F	LQFP48, HVQFN33	Low-cost, low-power Cortex-M3 device		
LPC1311	8	2		5		11**		1	1		1		1		8/10 b				28		72	3.3	F	HVQFN33	8K Flash / 2K RAM version of LPC1313		
<b>LPC2100</b>																											
LPC2106/01	128	64		5		6		2	1		1		1					32		•	60	1.8	3.3	F	LQFP48	64K RAM, 128K Flash	
LPC2105/01	128	32		5		6		2	1		1		1					32		•	60	1.8	3.3	F	LQFP48	32K RAM version of LPC2106/01	
LPC2104/01	128	16		5		6		2	1		1		1					32		•	60	1.8	3.3	F	LQFP48	16K RAM version of LPC2106/01	
LPC2103	32	8		6		14**		2	2		2		2		8/12 b				32		•	70	1.8	3.3	F	LQFP48, HVQFN48	Lowest cost, lowest power, ADC
LPC2102	16	4		6		14**		2	2		2		2		8/10 b				32		•	70	1.8	3.3	F	LQFP48, HVQFN48	16K Flash, 4K RAM version of LPC2103
LPC2101	8	2		6		14**		2	2		2		2		8/10 b				32		•	70	1.8	3.3	F	LQFP48	8K Flash, 2K RAM version of LPC2103

\* Includes Watchdog timer. \*\* Using timers.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC Connect

NXP's LPC Connect microcontrollers add point-to-point connectivity to LPC Go products. Adding a USB or CAN interface to your system has never been easier. LPC Connect products combine these plug-and-play interfaces with software integrated drivers in on-chip ROM. Get to market faster with these easy-to-use connected microcontrollers. This category includes Cortex-M0, Cortex-M3 and ARM7 based microcontrollers.

Type	Memory			Timers		Serial Interfaces					Analog		I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features		
	Flash (kB)	RAM (kB)	EEPROM (kB)	Standard Timers*	PWM channels*	Ethernet	USB	UART	I <sub>C</sub>	CAN	SPI/I <sub>2</sub> S	SPI/SPI	DAC (10-bit) channels	LCD controller	SD/MMC								
<b>LPC11U10 devices</b>																							
LPC11U14	32	6	5	11**		1	1	1			2		8/10 b			26/40		50	3.3	F	HVQFN33, LQFP48, TFBGA48	32K Flash version of LPC11U12	
LPC11U13	24	6	5	11**		1	1	1			2		8/10 b			40		50	3.3	F	LQFP48	24K Flash version of LPC11U12	
LPC11U12	16	6	5	11**		1	1	1			2		8/10 b			26/40		50	3.3	F	LQFP48, HVQFN33	Low cost, low-power Cortex-M0 device with USB, on-chip power profiles	
<b>LPC11U20 devices</b>																							
LPC11U24	32	10	4	5	11**		1	1			2		8/10 b			26/40/54		50	3.3	F	LQFP64, LQFP48, HVQFN33	ROM Drivers- USB drivers (HID, MSC, CDC), Power Profiles, 32-b Divide Libraries	
LPC11U24	32	8	2	5	11**		1	1			2		8/10 b			26/40		50	3.3	F	HVQFN33 (5x5), TFBGA48, LQFP48	ROM Drivers- USB drivers (HID, MSC, CDC), Power Profiles, 32-b Divide Libraries	
LPC11U23	24	8	1	5	11**		1	1			2		8/10 b			40		50	3.3	F	LQFP48	ROM Drivers- USB drivers (HID, MSC, CDC), Power Profiles, 32-b Divide Libraries	
<b>LPC11U30 devices</b>																							
LPC11U37	128	10/12	4	5	11**		1	1	1		2		8/10 b			40/54		50	3.3	F	LQFP48/64	On-chip power profile, I/O 5V tolerant, 256 Byte Flash sector	
LPC11U36	96	10/12	4	5	11**		1	1	1		2		8/10 b			40/54		50	3.3	F	LQFP48/64	On-chip power profile, I/O 5V tolerant, 256 Byte Flash sector	
LPC11U35	64	10/12	4	5	11**		1	1	1		2		8/10 b			40/54		50	3.3	F	HVQFN33, LQFP48/64, TFBGA48	On-chip power profile, I/O 5V tolerant, 256 Byte Flash sector, both 7mm x 7mm and 5mm x 5mm HVQFN33 available	
LPC11U34	40/48	8/10	4	5	11**		1	1	1		2		8/10 b			26/40		50	3.3	F	HVQFN33, LQFP48	On-chip power profile, I/O 5V tolerant, 256 Byte Flash sector	
<b>LPC11C00 devices</b>																							
LPC11C24	32	8	5	11**		1	1	1			2		8/10 b			36		50	3.3	F	LQFP48	32K Flash version of LPC11C22	
LPC11C22	16	8	5	11**		1	1	1			2		8/10 b			36		50	3.3	F	LQFP48	Cortex-M0 MCU with on-chip CAN drivers and integrated CAN transceiver	
LPC11C14	32	8	5	11**		1	1	1			2		8/10 b			42		50	3.3	F	LQFP48	32K Flash version of LPC11C12	
LPC11C12	16	8	5	11**		1	1	1			2		8/10 b			42		50	3.3	F	LQFP48	Cortex-M0 MCU with on-chip CAN drivers	
<b>LPC11Axx devices</b>																							
LPC11A14	32	8	4	5	11**		1	1			2		10-b/8	1		28/42		50	3.3	F	HVQFN33, LQFP48	Comparator, VREF, UVLO protection	
LPC11A13	24	6	2	5	11**		1	1			2		10-b/8	1		28		50	3.3	F	HVQFN33	Comparator, VREF, UVLO protection	
LPC11A12	16	4	1	5	11**		1	1			2		10-b/8	1		28/42		50	3.3	F	HVQFN33, LQFP48	Comparator, VREF, UVLO protection	
LPC11A11	8	2	512b	5	11**		1	1			2		10-b/8	1		28		50	3.3	F	HVQFN33	Comparator, VREF, UVLO protection	
LPC11A04	32	8	4	5	11**		1	1			1		10-b/8	1		18		50	3.3	F	WLCS2P0	Miniature package size, Comparator, VREF, UVLO protection	
LPC11A02	16	4	2	5	11**		1	1			1		10-b/8	1		18		50	3.3	F	WLCS2P0	Comparator, VREF, UVLO protection	
<b>LPC134x devices</b>																							
LPC1347	64	12	4	5	11**		1	1	1		2		8/12 b			28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	FS USB Device, USB & EEPROM drivers and Power Profiles in ROM, USART, Smart Card Interface	
LPC1346	48	10	4	5	11**		1	1	1		2		8/12 b			28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	FS USB Device, USB & EEPROM drivers and Power Profiles in ROM, USART, Smart Card Interface	
LPC1345	32	10	4	5	11**		1	1	1		2		8/12 b			28-51		72	3.3	F	LQFP64, LQFP48, HVQFN33	FS USB Device, USB & EEPROM drivers and Power Profiles in ROM, USART, Smart Card Interface	
LPC1343	32	8	5	11**		1	1	1			1		8/10 b			28-42		72	3.3	F	LQFP48, HVQFN33	Low-cost, low-power Cortex-M3 device with FS USB device interface and pre-loaded USB drivers	
LPC1342	16	4	2	5	11**		1	1	1		1		8/10 b			28		72	3.3	F	HVQFN33	16K Flash / 4K RAM version of LPC1343	
<b>LPC213x devices</b>																							
LPC2138/01	512	32	5	6		2	2				2		2x8	1		47		•	60	3.3	F	LQFP64, HVQFN64	Dual 8-ch. 10-bit ADC, BOD, POR, 32-kHz XTAL input, VBAT, fast I/O
LPC2136/01	256	32	5	6		2	2				2		2x8	1		47		•	60	3.3	F	LQFP64	256K Flash version of LPC2138/01
LPC2134/01	128	16	5	6		2	2				2		2x8	1		47		•	60	3.3	F	LQFP64	128K Flash, 16K RAM version of LPC2138/01
LPC2132/01	64	16	5	6		2	2				2		8	1		47		•	60	3.3	F	LQFP64, HVQFN64	64K Flash, 16K RAM version of LPC2138/01, single ADC
LPC2131/01	32	8	5	6		2	2				2		8			47		•	60	3.3	F	LQFP64	32K Flash, 8K RAM version of LPC2138/01, single ADC, no DAC

\* SCT peripheral can be configured as additional timers and/or PWM channels.

\*\* Using timers.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC Connect Cont'd

Type	Memory			Timers		Serial Interfaces					Analog		Temp. range options	Package	Comment/Special features										
	Flash (KB)	RAM (KB)	EEPROM (KB)	Standard	Timers*	PWM channels*	Ethernet	USB	UART	I²C	CAN	SPI/I²S	SSP/SPI	I²S	ADC channel(s)/resolution	DAC (10-bit) channels	LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	
LPC214x devices																									
LPC2148	512	40		5	6		1	2	2		2			8+6/10 b	1			45		•	60	3.3	F	LQFP64	LPC2138 plus USB 2.0 FS device
LPC2146	256	40		5	6		1	2	2		2			8+6/10 b	1			45		•	60	3.3	F	LQFP64	LPC2136 plus USB 2.0 FS device
LPC2144	128	16		5	6		1	2	2		2			8+6/10 b	1			45		•	60	3.3	F	LQFP64	LPC2134 plus USB 2.0 FS device
LPC2142	64	16		5	6		1	2	2		2			6/10 b	1			45		•	60	3.3	F	LQFP64	LPC2132 plus USB 2.0 FS device
LPC2141	32	8		5	6		1	2	2		2			6/10 b				45		•	60	3.3	F	LQFP64	LPC2131 plus USB 2.0 FS device

\* SCT peripheral can be configured as additional timers and/or PWM channels.

\*\* Using timers.

## LPC ConnectPlus

NXP's LPC ConnectPlus microcontrollers offer a broad range of interfaces and the bandwidth for running these multiple communication protocols simultaneously. Connect to USB plus CAN plus Ethernet plus LCD and more. LPC ConnectPlus products are offered in a wide range of packages, memories and peripherals and feature pin-compatibility between cores. This category includes Cortex-M3, Cortex-M4 and ARM7 based microcontrollers.

Type	Memory			Timers		Serial Interfaces					Analog		LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features		
	Flash (KB)	RAM (KB)	EEPROM (KB)	Standard Timers*	PWM channels*	State Config. Timer	USB	UART**	I <sup>2</sup> C**	CAN	SPI/I <sup>2</sup> S	SSP/SP/I <sup>2</sup> S**	I <sup>2</sup> S**	ADC channels/ resolution	DAC (10-bit) channels										
<b>LPC17xx devices</b>																									
LPC1788	512	96	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	109-165	8-32	1	120	3.3	F	LQFP208, TFBGA208, TFBGA180, LQFP144	USB host/OTG/device, QEI, 8/16/32-bit External Memory Controller (depends on package)	
LPC1787	5125	96	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	165	32	1	120	3.3	F	LQFP208	USB host/OTG/device, QEI	
LPC1786	256	80	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	165	32	1	120	3.3	F	LQFP208	USB host/OTG/device, QEI	
LPC1785	256	80	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	165	32	1	120	3.3	F	LQFP208	USB Host/OTG/device	
LPC1778	512	96	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	109-165	8-32	1	120	3.3	F	LQFP208, TFBGA208, TFBGA180, LQFP144	USB host/OTG/device, QEI, 8/16/32-bit External Memory Controller (depends on package)	
LPC1777	512	96	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	165	32	1	120	3.3	F	LQFP208	USB host/OTG/device, QEI	
LPC1776	256	80	4	5	6	1	1	5	3	2	3	1	8/12 b	1	1	1	141-165	16-32	1	120	3.3	F	LQFP208, TFBGA180	USB host/OTG/device, QEI	
LPC1774	128	40	2	5	6	1	1	4	3	2	3	1	8/12 b	1			109-165	8-32	1	120	3.3	F	LQFP208, LQFP144	USB Device Only, 8/32-bit External Memory Controller (depends on package)	
LPC1773	128	40	2	5	6	1	1	4	3	2	1	3	1	8/12 b	1			109-165		1	120	3.3	F	LQFP144	USB Device Only
LPC1769	512	64	6	6	1	1	4	3	2	2	1	8/12 b	1				70		1	120	3.3	F	LQFP100	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1768	512	64	6	6	1	1	4	3	2	2	1	8/12 b	1				70		1	100	3.3	F	LQFP100, TFBGA100	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1767	512	64	6	6	1	4	3			2	1	8/12 b	1				70		1	100	3.3	F	LQFP100	QEI, Motor Control PWM	
LPC1766	256	64	6	6	1	1	4	3	2	2	1	8/12 b	1				70		1	100	3.3	F	LQFP100	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1765	256	64	6	6	1	4	3	2		2	1	8/12 b	1				70		1	100	3.3	F	LQFP100, TFBGA100	FS USB Host/OTG/Device, QEI, Motor Control PWM	
<b>LPC17xx devices</b>																									
LPC1764	128	32	6	6	1	1	4	3	2	2	8/12 b					70		1	100	3.3	F	LQFP100	FS USB Host/OTG/Device, QEI, Motor Control PWM		
LPC1763	256	64	6	6		4	3			2	1	8/12 b	1				70		1	100	3.3	F	LQFP100	QEI, Motor Control PWM	
LPC1759	512	64	6	6	1	4	3	2		2	1	6/12 b	1				52		1	120	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1758	512	64	6	6	1	1	4	3	2	2	1	6/12 b	1				52		1	100	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1756	256	32	6	6	1	4	3	2		2	1	6/12 b	1				52		1	100	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM	
LPC1754	128	32	6	6	1	4	3	1		2	6/12 b	1				52		1	100	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM		
LPC1752	64	16	6	6	1	4	3	1		2	6/12 b					52		1	100	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM		
LPC1751	32	8	6	6	1	4	3	1		2	6/12 b					52		1	100	3.3	F	LQFP80	FS USB Host/OTG/Device, QEI, Motor Control PWM		

\* SCT peripheral can be configured as additional timers and/or PWM channels. \*\* SGPIO peripheral can be configured as additional I<sup>2</sup>S, I<sup>2</sup>C, UART and/or SSP channels.

Temp. range options

F= -40 to +85 C J= -40 to +105 C

## LPC ConnectPlus Cont'd

Type	M0 Coprocessor Floating Pt Unit	Memory		Timers		Serial Interfaces						Analog		LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features	
		Flash (kB)	RAM (kB)	EEPROM (kB)	Standard Timers*	PWM channels*	State Config. Timer	Ethernet	USB	UART**	I <sup>2</sup> C**	CAN	SPI/I	SSP/SPI**	I <sup>2</sup> S**	ADC channels/ resolution	DAC (10-bit) channels								
<b>LPC23xx devices</b>																									
LPC2388		512	98	6	6	1	1	4	3	2		3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	LPC2378 with 98K SRAM and USB host/OTG/device
LPC2387		512	98	6	6	1	1	4	3	2		3	1	6	1		•	70		•	72	3.3	F	LQFP100	LPC2368 with 98K SRAM and USB host/OTG/device
LPC2378		512	58	6	6	1	1	4	3	2		3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	On-chip 4 MHz RC-Osc, GP DMA, RTC w/ 2K batt. RAM USB 2.0 FS device w/ PHY, DMA and 4K RAM; UART 3 w/ IrDA; MiniBus (8-bit)
LPC2377		512	58	6	6	1		4	3			3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	LPC2378 without USB or CAN
LPC2368		512	58	6	6	1	1	4	3	2		3	1	6/10 b	1		•	70		•	72	3.3	F	LQFP100, TFBGA100	100-pin version of LPC2378 with USB device, no external bus
LPC2367		512	58	6	6	1		4	3			3	1	6/10 b	1		•	70		•	72	3.3	F	LQFP100	LPC2368 without USB or CAN
LPC2366		256	58	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	256K Flash version of LPC2368 with USB device, no SD/MMC
LPC2365		256	58	6	6	1		4	3			3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	LPC2366 without USB or CAN
LPC2364		128	34	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F,H	LQFP100, TFBGA100	128K Flash / 34K RAM version of LPC2368 with USB device, no SD/MMC
LPC2362		128	58	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	LPC2364 with USB host/OTG/device and more RAM
LPC2361		64	34	6	6		1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	64K Flash, USB host/OTG/device and CAN controller
LPC2388		512	98	6	6	1	1	4	3	2		3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	LPC2378 with 98K SRAM and USB host/OTG/device
LPC2387		512	98	6	6	1	1	4	3	2		3	1	6/10 b	1		•	70		•	72	3.3	F	LQFP100	LPC2368 with 98K SRAM and USB host/OTG/device
LPC2378		512	58	6	6	1	1	4	3	2		3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	On-chip 4 MHz RC-Osc, GP DMA, RTC w/ 2K batt. RAM USB 2.0 FS device w/ PHY, DMA and 4K RAM; UART 3 w/ IrDA; MiniBus (8-bit)
LPC2377		512	58	6	6	1		4	3			3	1	8/10 b	1		•	104	•	•	72	3.3	F	LQFP144	LPC2378 without USB or CAN
<b>LPC23xx devices</b>																									
LPC2368		512	58	6	6	1	1	4	3	2		3	1	6/10 b	1		•	70		•	72	3.3	F	LQFP100, TFBGA100	100-pin version of LPC2378 with USB device, no external bus
LPC2367		512	58	6	6	1		4	3			3	1	6/10 b	1		•	70		•	72	3.3	F	LQFP100	LPC2368 without USB or CAN
LPC2366		256	58	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	256K Flash version of LPC2368 with USB device, no SD/MMC
LPC2365		256	58	6	6	1		4	3			3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	LPC2366 without USB or CAN
LPC2364		128	34	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F,H	LQFP100, TFBGA100	128K Flash / 34K RAM version of LPC2368 with USB device, no SD/MMC
LPC2362		128	58	6	6	1	1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	LPC2364 with USB host/OTG/device and more RAM
LPC2361		64	34	6	6		1	4	3	2		3	1	6/10 b	1			70		•	72	3.3	F	LQFP100	64K Flash, USB host/OTG/device and CAN controller

\* SCT peripheral can be configured as additional timers and/or PWM channels. \*\* SGPIO peripheral can be configured as additional I<sup>2</sup>S, I<sup>2</sup>C, UART and/or SSP channels.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC ConnectPlus cont'd

Type	M0 Coprocessor	Floating Pt. Unit	Memory		Timers		Serial Interfaces						Analog		LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features	
	Flash (kB)	RAM (kB)	EEPROM (kB)	Standard Timers*	PWM channels*	State Config. Timer	Ethernet	USB	UART**	I <sup>2</sup> C**	CAN	SPI/I <sup>2</sup> S	SSP/SPI**	I <sup>2</sup> S**	ADC channels/ resolution	DAC (10-bit) channels										
<b>LPC24xx devices</b>																										
LPC2478		512	98	6	12	1	2	4	3	2	2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	LPFP208, TFBGA208	LPC2468 with XGA LCD controller, USB device/host/OTG		
LPC2470			98	6	12	1	2	4	3	2	2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	LPFP208, TFBGA208	LPC2468 with XGA LCD controller, USB device/host/OTG		
LPC2468		512	98	6	12	1	2	4	3	2	2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	LPFP208, TFBGA208	On-chip 4-MHz RC-Osc, GP DMA, RTC w/ 2K batt. RAM 2 PWM blocks; USB 2.0 FS host/OTG/device, DMA and 4K RAM; UART 3 w/ IrDA; 32-bit ext. bus		
LPC2460			98	6	12	1	2	4	3	2	2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	LPFP208, TFBGA208	Flashless LPC2468		
LPC2458		512	98	6	12	1	2	4	3	2	2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	TFBGA180	LPC2468 with 16-bit external memory interface, USB device/host/OTG		
LPC2420			82	6	12		2	4	3		2	1	8/10 b	1	•	•	160	•	•	72	3.3	F	LPFP208, TFBGA208	Flashless USB device/host/OTG controller, USB device/host/OTG		
<b>LPC4000 Series</b>																										
LPC4088	1	512	96	4	5	6	1	1	5	3	2	1	3	1	8/12 b	1	1	1	109-165	8-32	1	120	3.3	F	LQFP208, TFBGA208, TFBGA180, LQFP144	USB host/OTG/device, QEI, 8/16/32-bit External Memory Controller (depends on package), 2 analog comparators
LPC4078	1	512	96	4	5	6	1	1	5	3	2	1	3	1	8/12 b	1	1	1	53-165	8-32	1	120	3.3	F	LQFP208, TFBGA208, TFBGA180, LQFP144, LQFP80	USB host/OTG/device, QEI, 8/16/32-bit External Memory Controller (depends on package), 2 analog comparators
LPC4076	1	256	80	4	5	6	1	1	5	3	2	1	3	1	8/12 b	1	1	109-140	8-16	1	120	3.3	F	TFBGA180, LQFP144	USB host/OTG/device, QEI, 8/16-bit External Memory Controller (depends on package), 2 analog comparators	
LPC4074		128	40	2	5	6		1	4	3	2	1	3	1	8/12 b	1		53-109	8	1	120	3.3	F	LQFP144, LQFP80	USB device, 8-bit External Memory Controller	
LPC4072		64	32	2	5	6		1	4	3	2	1	3	1	8/12 b	1		53	8	1	120	3.3	F	TFBGA80, LQFP80	USB device, 8-bit External Memory Controller	

\* SCT peripheral can be configured as additional timers and/or PWM channels. \*\* SGPIO peripheral can be configured as additional I<sup>2</sup>S, I<sup>2</sup>C, UART and/or SSP channels.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC ConnectTurbo

NXP's LPC ConnectTurbo microcontrollers include the Industry's fastest Cortex-M Microcontrollers. This turbo performance is combined with advanced peripherals for solving complex design challenges. LPC ConnectTurbo innovations include Hi-speed USB with integrated Hi-speed PHY, NXP's unique SPI Flash Interface (SPIFI), State Configurable Timer (SCT), Serial GPIO and an industry first dual-core Cortex-M4/M0. All this integration reduces system cost and enables unprecedented embedded performance. This category includes Cortex-M3, Cortex-M4 and ARM9 based microcontrollers.

Type	M0 Coprocessor	Memory			Timers		Serial Interfaces							Analog		ADC channels/ resolution	DAC (10-bit) chan- nels	LCD controller	SD/MMC	I/O pins	External bus interface	RTC	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features	
		Floating Pt Unit	Flash (KB)	RAM (KB)	EEROM (KB)	Standard Timers*	PWM channels*	State Config. Timer	Ethernet	USB	UART**	I <sup>2</sup> C**	CAN	SPIFI	SSP/SPI**	I <sup>2</sup> S**	SGPIO												
<b>LPC1800 devices</b>																													
LPC1857		1024	136	16	5	6	1	1	2	4	2	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F and J	LQFP208, LBGA256/ TFBGA180	Dual-bank Flash, 1024x768 Color LCD Controller, On-chip HS PHY, SPIFI, SCT, RTC, QEI.
LPC1853		512	136	16	5	6	1	1	2	4	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F and J	LQFP208, LBGA256/ TFBGA180	Dual-bank Flash, 1024x768 Color LCD Controller, On-chip HS PHY, SPIFI, SCT, RTC, QEI. **	
LPC1850		200		5	6	1	1	2	4	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F	LQFP208, LBGA256/ TFBGA180	1024x768 Color LCD Controller, On-chip HS PHY, SPIFI, SCT, RTC, QEI. Available Q4 2011**		
LPC1837		1024	136	16	5	6	1	1	2	4	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F and J	LQFP144, LBGA256/ TF-BGA180/100	Dual-bank Flash, On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1833		512	136	16	5	6	1	1	2	4	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F and J	LQFP144, LBGA256/ TF-BGA180/100	Dual-bank Flash, On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1830		200		5	6	1	1	2	4	2	2	1	3	2		8/10 b (x2)	1	1	1	146	16-32	1	180	3.3	F	LQFP144, LBGA256/ TF-BGA180/100	On-chip HS PHY, SPIFI, SCT, RTC, QEI. Available Q4 2011		
LPC1827		1024	136	16	5	6	1		1	4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1825		768	136	16	5	6	1		1	4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1823		512	104	16	5	6	1		1	4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1822		512	104	16	5	6	1		1	4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	On-chip HS PHY, SPIFI, SCT, RTC, QEI.	
LPC1820		168		5	6	1		1	4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	F	LQFP144, TFBGA100	On-chip HS PHY, SPIFI, SCT, RTC, QEI. Available Q4 2011		
LPC1817		1024	136	16	5	6	1		4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, SPIFI, SCT, RTC, QEI.		
LPC1815		768	136	16	5	6	1		4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, SPIFI, SCT, RTC, QEI.		
LPC1813		512	104	16	5	6	1		4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	Dual-bank Flash, SPIFI, SCT, RTC, QEI.		
LPC1812		512	104	16	5	6	1		4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	J	LQFP144, TFBGA100	SPIFI, SCT, RTC, QEI.		
LPC1810		136		5	6	1		4	2	2	1	3	2		8/10 b (x2)	1	1	1	up to 64	8-16	1	180	3.3	F	LQFP144, TFBGA100	SPIFI, SCT, RTC, QEI. Available Q4 2011			
<b>LPC4300 Series</b>																													
LPC4357	1	1	1024	136	16	5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F and J	LQFP208, LBGA256/ TFBGA180	Dual-bank Flash, 1024x768 Color LCD Controller, HS USB PHY, QEI.
LPC4353	1	1	512	136	16	5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F and J	LQFP208, LBGA256/ TFBGA180	Cortex-M4/M0, FPU, Dual-bank Flash, 1024x768 Color LCD Controller, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4350	1	1	264		5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F	LQFP208, LBGA256/ TFBGA180	Cortex-M4/M0, FPU, 1024x768 Color LCD Controller, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI. Available Q4 2011	
LPC4337	1	1	1024	136	16	5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F and J	LQFP144, LBGA256/ TFBGA180/100	Cortex-M4/M0, FPU, Dual-bank Flash, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4333	1	1	512	136	16	5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F and J	LQFP144, LBGA256/ TFBGA180/100	Cortex-M4/M0, FPU, Dual-bank Flash, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4330	1	1	264		5	6	1	1	2	4	2	2	1	3	2	1	8/10 b (x2)	1	1	1	146	16-32	1	204	3.3	F	LQFP144, LBGA256/ TFBGA180/100	Cortex-M4/M0, FPU, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI. Available Q4 2011	
LPC4327	1	1	1024	136	16	5	6	1		1	4	2	2	1	3	2	1	4-6/10 b (x2)	1	1	1	up to 64	8-16	1	204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4325	1	1	768	136	16	5	6	1		1	4	2	2	1	3	2	1	4-6/10 b (x2)	1	1	1	up to 64	8-16	1	204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4323	1	1	512	104	16	5	6	1		1	4	2	2	1	3	2	1	4-6/10 b (x2)	1	1	1	up to 64	8-16	1	204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.

\* SCT peripheral can be configured as additional timers and/or PWM channels. \*\* SGPIO peripheral can be configured as additional I<sub>2</sub>S, I<sub>2</sub>C, UART and/or SSP channels.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC ConnectTurbo Cont'd

Type	M0 Coprocessor	Floating Pt. Unit	Memory			Timers		Serial Interfaces						Analog		ADC channels/ resolution	DAC (10-bit) channels	LCD controller	SD/MMC	I/O pins	External bus interface	RTC	PLL	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features	
			Flash (KB)	RAM (KB)	EEPROM (KB)	Standard Timers*	PWM channels*	State Config. Timer	Ethernet	USB	UART**	I <sup>2</sup> C**	CAN	SPI	SPI/SPI**	I <sup>2</sup> S**	GPIO													
<b>LPC4300 Series</b>																														
LPC4322	1	1	512	104	16	5	6	1		1	4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI.
LPC4320	1	1	200			5	6	1		1	4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	F	LQFP144, TFBGA100	Cortex-M4/M0, FPU, HS USB PHY, SPIFI, SCT, GPIO, RTC, QEI. Available Q4 2011
LPC4317	1	1	1024	136	16	5	6	1		4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, SPIFI, SCT, GPIO, RTC, QEI.	
LPC4315	1	1	768	136	16	5	6	1		4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, SPIFI, SCT, GPIO, RTC, QEI.	
LPC4313	1	1	512	104	16	5	6	1		4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, Dual-bank Flash, SPIFI, SCT, GPIO, RTC, QEI.	
LPC4312	1	1	512	104	16	5	6	1		4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	J	LQFP144, TFBGA100	Cortex-M4/M0, FPU, SPIFI, SCT, GPIO, RTC, QEI.	
LPC4310	1	1	168			5	6	1		4	2	2	1	3	2	1	4-6/10 b (x2)	1		1	up to 64	8-16	1		204	3.3	F	LQFP144, TFBGA100	Cortex-M4/M0, FPU, SPIFI, SCT, GPIO, RTC, QEI. Available Q4 2011	
<b>LPC 2900</b>																														
LPC2939			768	56	16	7	24		2	4	2	2	2	3			24/10 b			152	•		•	125	1.8	3.3	F	LQFP208	ARM968E-S MCU with USB host/OTG/device, 32K I- & D- TCM, motor control, GP DMA, 16 KB EEPROM	
LPC2930				56	16	7	24		2	4	2	2	2	3			24/10 b			152	•		•	125	1.8	3.3	F	LQFP208	Flashless version of LPC2939	
LPC2929			768	56	16	7	24		1	4	2	2	2	3			24/10 b			104	•		•	125	1.8	3.3	F	LQFP144	LPC2939 with 144 pins and without USB host	
LPC2927			512	56	16	7	24		1	4	2	2	2	3			24/10 b			104	•		•	125	1.8	3.3	F	LQFP144	LPC2929 with 512K Flash, USB device/OTG	
LPC2926			256	56	16	7	24		1	4	2	2	2	3			24/10 b			104			•	125	1.8	3.3	F	LQFP144	LPC2927 with 256K Flash	
LPC2925			512	40	16	7	24		1	4	2	2	2	3			16/10 b			60			•	125	1.8	3.3	F	LQFP100		
LPC2923			256	24	16	7	24		1	4	2	2	2	3			16/10 b			60			•	125	1.8	3.3	F	LQFP100	LPC2925 with 256K Flash	
LPC2921			128	24	16	7	24		1	4	2	2	2	3			16/10 b			60			•	125	1.8	3.3	F	LQFP100	LPC2923 with 128K Flash, USB device	
LPC2919/01			768	56	16	7	24		4	2	2	2	3				16/10 b			108	•		•	125	1.8	3.3	F	LQFP144	ARM968E-S MCU with 2 LIN master controllers, 16K I-TCM, 16K D-TCM	
LPC2917/01			521	56	16	7	24		4	2	2	2	3				16/10 b			108	•		•	125	1.8	3.3	F	LQFP144	LPC2919/01 with 512K Flash	

\* Includes Watchdog timer and real-time clock. \*\* Using timers 0-3.

Temp. range options

F= -40 to +85 C      J= -40 to +105 C

## LPC Command

NXP's LPC Command application processors provide an ideal low-cost platform for running the Linux operating system. Based on the ARM9 core, LPC Command products provide an extensive set of peripherals and are designed for general purpose and specialty embedded applications such as high-speed document printers/scanners, industrial control, and motor control. This category includes ARM9 based microcontrollers.

Type	Memory			Timers		Serial Interfaces			Analog		LCD controller	SD/MMC	I/O pins	External bus interface	PLL	Max freq. (MHz)	CPU Voltage (V)	I/O voltage (V)	Temp. range options	Package	Comment/Special features					
	Flash (kB)	RAM (kB)	EEPROM (kB)	Standard Timers	PWM channels	Ethernet	USB	UART	I²C	CAN	SPI	SSP/SPI	I²S	ADC channels/ resolution	DAC (10-bit) channels											
<b>LPC3100</b>																										
LPC3154		192	4	1		1	1	1						3/10 b		•	•	157	•	•	180	1.2	1.8/2.8/3.3	F	TFBGA208	LPC3152 with a Decryption Engine & Secure Boot
LPC3152		192	4	1		1	1	1						3/10 b		•	•	157	•	•	180	1.2	1.8/2.8/3.3	F	TFBGA208	Stereo CODEC with Class-AB headphone amplifier, power supply unit, battery charger, unique ID, OTP, HS USB 2.0 OTG with on-chip PHY, NAND Flash controller, MMC/SDHC/SDIO/CE-ATA, 6800/8080/serial LCD interface
LPC3143		192	4	1		1	1	2						4/10 b		•	•	97	•	•	270	1.2	1.8/2.8/3.3	F	TFBGA180	LPC3141 with a Decryption Engine & Secure Boot
LPC3141		192	4	1		1	1	2						4/10 b		•	•	97	•	•	270	1.2	1.8/2.8/3.3	F	TFBGA180	HS USB 2.0 OTG with on-chip PHY, NAND Flash controller, MMC/SDHC/SDIO/CE-ATA, 6800/8080/LCD interface, random number generator, unique ID, OTP
LPC3131		192	4	1		1	1	2						4/10 b		•	•	97	•	•	180	1.2	1.8/2.8/3.3	F	TFBGA180	LPC3130 with 192K SRAM, HS USB host/OTG/device
LPC3130		96	4	1		1	1	2						4/10 b		•	•	97	•	•	180	1.2	1.8/2.8/3.3	F	TFBGA180	HS USB 2.0 host/OTG/device with on-chip PHY, NAND Flash controller with 8-bit ECC, MMC/SDHC/SDIO/CE-ATA, 6800/8080/serial LCD interface, random number generator
LPC3180/01		64	4	1		1	7	2						3/10 b		•	•	55	•	•	208	1.2	1.8/2.8/3.0	F	LFBGA320	VFP unit, NAND Flash, SDRAM/DDR, USB 2.0 FS host/OTG device
<b>LPC3200</b>																										
LPC3250		256	8	11	1	1	7	2	2					2/10 b		•	•	87	•	•	266/208	1.35/1.2	1.8/2.8/3.0	F	LFBGA296	VFP unit, NAND Flash, SRAM/SDRAM/DDR, USB 2.0 FS host/OTG/device, 24-bit color LCD controller and touchscreen controller, keypad interface, and 0.9 V low-power mode
LPC3240		256	8	11	1	1	7	2	2					2/10 b		•	•	87	•	•	266/208	1.35/1.2	1.8/2.8/3.0	F	LFBGA296	VFP unit, NAND Flash, SRAM/SDRAM/DDR, USB 2.0 FS host/OTG/device, keypad interface, and 0.9 V low-power mode
LPC3230		256	8	11		1	7	2	2					2/10 b		•	•	87	•	•	266/208	1.35/1.2	1.8/2.8/3.0	F	LFBGA296	VFP unit, NAND Flash, SRAM/SDRAM/DDR, USB 2.0 FS host/OTG/device, 24-bit color LCD controller and touchscreen controller, keypad interface, and 0.9 V low-power mode
LPC3220		128	8	11		1	7	2	2					2/10 b		•	•	87	•	•	266/208	1.35/1.2	1.8/2.8/3.0	F	LFBGA296	VFP unit, NAND Flash, SRAM/SDRAM/DDR, USB 2.0 FS host/OTG/device, keypad interface, and 0.9 V low-power mode

Temp. range options

F= -40 to +85 C      J= -40 to +105 C



**Need devices, support, or development tools?**

For a list of sales offices and distributors near you, please visit [www.nxp.com/profile/sales/index.html](http://www.nxp.com/profile/sales/index.html)

For general support, please visit [www.nxp.com/microcontrollers](http://www.nxp.com/microcontrollers)

For tools, evaluation boards, or development support, please visit [www.nxp.com](http://www.nxp.com)



[www.nxp.com](http://www.nxp.com)

© 2012 NXP Semiconductors N.V.

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: November 2012  
Document order number: 9397 750 17327  
Printed in the Netherlands