

Cyclone-FX: In-Circuit, Stand-Alone Production Programmers

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Overview

The **CYCLONE FX** programmer is P&E's flagship high-speed, in-circuit, stand-alone programmer. It supports many NXP processor families, offers vast onboard storage for programming images, provides target power, supports manual or automated programming, and has an easy-to-use touchscreen interface. Advanced features include serialization, programming count limitations, integration of dynamic data, encryption, target test, and execution of calibration code.

<u>Programming may be launched by a single button press without a PC or automatically from a PC via the automated control SDK. The Cyclone FX may also be used as a debug probe during development. More info is available at pemicro.com/cyclone.</u>

CYCLONE-FX Automated Programmer Test & Debug Interface



Supported Devices

Microcontrollers and Processors

More Processors

16-bit HC12 (Legacy)

68HC812A4: 16-Bit Microcontroller

68HC912B32: 16-Bit Automotive Microcontroller

68HC912BC32: 16-Bit Automotive Microcontroller

68HC912D60A: 16-Bit Automotive Microcontroller

68HC912D60C: 16-Bit Automotive Microcontroller

<u>68HC912DG128A: 16-Bit Automotive Microcontroller</u>

68HC912DG128C: 16-Bit Automotive Microcontroller

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68HC912DT128A: 16-Bit Automotive Microcontroller
 DSP5685x
   DSP56858: Digital Signal Controller
 DSP56F80x
   DSP56F801: Digital Signal Controller
   DSP56F801FA60: Digital Signal Controller
   DSP56F803: Digital Signal Controller
   DSP56F805: Digital Signal Controller
   DSP56F807: Digital Signal Controller
 DSP56F82x
   DSP56F826: Digital Signal Controller
   DSP56F827: Digital Signal Controller
 8-bit HC08
   HC08AB: 8-bit Embedded EEPROM for User Data Storage AB MCUs
   HC08AP: 8-bit EEPROM Emulation AP MCUs
   HC08AS-AZ: 8-bit with CAN AS and AZ MCUs
   HC08EY: 8-bit General Purpose EY MCUs
   HC08G: 8-bit General Purpose G MCUs
   HC08GZ: 8-bit General Purpose with CAN GZ MCUs
   HC08JB-JG-JT-JW: 8-bit General Purpose JB, JG, JT and JW MCUs
   HC08JK-JL: 8-bit General Purpose JK and JL MCUs
   HC08K: 8-bit USB K MCUs
   HC08LJ-LK: 8-bit EEPROM Emulation LJ and LK MCUs
   HC08MR: 8-bit General Purpose MR MCUs
   HC08Q: 8-bit EEPROM Emulation Q MCUs
 MC56F80xx
   MC56F800x: MC56F8006 and MCF56F8002 Digital Signal Controllers
 MC56F82xx
   MC56F827xx: MC56F823xx and MC56F827xx Digital Signal Controllers
 MC56F84XXX
   MC56F84xxx: Digital Signal Controllers
 8-bit RS08
   RS08KA: 8-bit General Purpose Ultra-Low-End Market KA MCUs
   RS08KB: 8-bit RS08KB Family of Microcontrollers (MCUs)
   RS08LA: 8-bit with LCD Driver LA MCUs
   RS08LE: 8-bit with LCD Driver LE MCUs
 8-bit S08 3.6V MCUs
   S08GB: 8-bit General Purpose GB MCUs
   S08GT: 8-bit General Purpose GT MCUs
   S08GW: 8-bit LCD GW MCUs
   S08JE: 8-bit Flexis® USB JE MCUs
   SO8LC: 8-bit LCD for Battery-Powered and Handheld LC MCUs
   S08LH: 8-bit with LCD Driver LH MCUs
   S08LL: 8-bit Segment LCD LL MCUs
   S08MM: 8-bit Flexis® USB MM128/64/32 MCUs
   S08QA: 8-bit QA MCUs
   S08QB: 8-bit QB MCUs
   S08QE: 8-bit Flexis® QE MCUs
   S08QG: 8-bit Small Package QG MCUs
   S08R: 8-bit S08RC, S08RD, S08RE and S08RG MCUs
ARM Processors
 Kinetis KOx Entry-level Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
   K02 100: Kinetis K02-100 MHz, Microcontrollers with Optimized Features based on ARM® Cortex®-M4
 Kinetis® K1x Mainstream Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
   K10 100: Kinetis K10-100 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
   K10_120: Kinetis K10-120 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
   K10 50: Kinetis K10-50 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
   K10 72: Kinetis K10-72 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
   K11 50: Kinetis® K11-50 MHz, Anti-Tamper Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
   K12 50: Kinetis K12-50 MHz, Microcontrollers with Optimized Features based on ARM® Cortex®-M4
 Kinetis® K2x USB Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
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K20 100: Kinetis K20-100 MHz, Full-Speed USB, Mixed-Signal Integration MCUs based on ARM® Cortex®-M4
 K20 120: Kinetis K20-120 MHz, Full-Speed USB, Mixed-Signal Integration MCUs based on ARM® Cortex®-M4
 K20 50: Kinetis K20-50 MHz, Full-Speed USB, Mixed-Signal Integration MCUs based on ARM® Cortex®-M4
 K20 72: Kinetis K20-72 MHz, Full-Speed USB, Mixed-Signal Integration MCUs based on ARM® Cortex®-M4
 K21 120: Kinetis K21-120 MHZ, Full-Speed USB, Anti-Tamper Microcontrollers based on ARM® Cortex®-M4
 K21 50: Kinetis K21-50 MHz, Full-Speed USB, Anti-Tamper Microcontrollers based on ARM® Cortex®-M4
 K22 100: Kinetis K22-100 MHz, Cost Effective, Full-Speed USB Microcontrollers based on ARM® Cortex®-M4
 K22 120: Kinetis K22-120 MHz, Cost Effective, Full-Speed USB Microcontrollers based on ARM® Cortex®-M4
 K22 50: Kinetis K22-50 MHz, Cost Effective, Full-Speed USB Microcontrollers based on ARM® Cortex®-M4
 K24 120: Kinetis K24-120 MHz, Full-Speed USB, 256KB SRAM Microcontrollers based on ARM® Cortex®-M4
 K26 180: Kinetis K26-180 MHz, Dual High-Speed & Full-speed USBs, 2MB Flash MCUs based on ARM® Cortex®-M4
Kinetis® K3x Segment LCD Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K30 100: Kinetis K30-100 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
 K30 72: Kinetis K30-72 MHz, Mixed-Signal Integration Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
Kinetis® K4x USB & Segment LCD Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K40 100: Kinetis K40-100 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
 K40 72: Kinetis K40-72 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
Kinetis® K5x Measurement Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K50 100: Kinetis® K50-100 MHz, USB Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K50 72: Kinetis® K50-72 MHz, USB Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K51 100: Kinetis® K51-100 MHz, Segment LCD, USB Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K51 72: Kinetis® K51-72 MHz, Segment LCD, USB Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K53_100: Kinetis K53-100 MHz, USB, Segment LCD, Ethernet Microcontrollers based on ARM® Cortex®-M4
Kinetis® K6x Ethernet Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K60 100: Kinetis K60-100 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
 K60 120: Kinetis K60-120-150 MHz, Mixed-Signal Integration Microcontrollers based on ARM® Cortex®-M4
 K63 120: Kinetis K63-120 MHz, 256KB SRAM, Anti-Tamper Microcontrollers based on ARM® Cortex®-M4
 K64 120: Kinetis® K64-120 MHz, 256KB SRAM Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K65 180: Kinetis K65-180 MHz, Dual High-& Full-Speed USB, 2MB Flash, Anti-Tamper MCU based on ARM® Cortex®-M4
 K66 180: Kinetis K66-180 MHz, Dual High-Speed & Full-speed USBs, 2MB Flash MCUs based on ARM® Cortex®-M4
Kinetis K7x Graphic LCD Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K70 120: Kinetis K70-120–150 MHz, High-Speed USB, Ethernet, DDR and Anti-Tamper MCUs based on ARM® Cortex®-M4
Kinetis K8x Secure Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
 K80 150: Kinetis K80-150 MHz Advanced security & QuadSPI Micrcontrollers based on ARM® Cortex®-M4
 K81 150: Kinetis K81-150 MHz HW Cryptographic Co-Processor, Anti-Tamper, QuadSPI MCU based on ARM® Cortex®-M4
 K82_150: Kinetis K82-150 MHz HW Cryptographic Co-Processor & QuadSPI Micrcontrollers based on ARM® Cortex®-M4
Kinetis E Series: 5V, Robust Microcontrollers (MCUs) based on ARM® Cortex®-M0+/M4 Core
 KE02: Kinetis KE02-20 MHz, Entry-Level Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Core
 KEO2 40: Kinetis® KEO2-40 MHz, Entry-Level Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Core
 KE04: Kinetis® KE04-48 MHz, Mainstream Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Core
 KE06: Kinetis KE06-48 MHz, Mainstream with CAN 5V Microcontrollers based on ARM® Cortex®-M0+
Kinetis L Series: Ultra-Low Power Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Core
 KL02: Kinetis KL02-48MHz, 2x I2C, Small package, Entry-Level Ultra-Low Power MCU based on ARM® Cortex®-M0+
 KLO3: Kinetis KLO3-48MHz, 1x I2C, Small package, Entry-Level Ultra-Low Power MCU based on ARM® Cortex®-MO+
 KL1x: Kinetis KL1x-48 MHz, Mainstream Small Ultra-Low Power Micrcontrollers based on ARM® Cortex®-M0+
 KL2x: Kinetis KL2x-48 MHz, USB Ultra-Low-Power Microcontrollers based on ARM® Cortex®-M0+
 KL3x: Kinetis KL3x-48 MHz, Segment LCD Ultra-Low-Power Microcontrollers based on ARM® Cortex®-M0+
 KL4x: Kinetis KL4x-48 MHz, USB, Segment LCD, Ultra-Low-Power Microcontrollers based on ARM® Cortex®-M0+
 KL8x: Kinetis KL8x-72/96 MHz Secure Ultra-Low Power Microcontrollers based on ARM® Cortex®-M0+
Kinetis® M Series: Metrology Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Core
 KM1x: Kinetis KM1x-50 MHz, Mainstream Precision Metrology Microcontrollers based on ARM® Cortex®-M0+
 KM3x: Kinetis KM3x-50-75 MHz Precision Metrology with Segment LCD MCUs based on ARM® Cortex®-M0+
KS22 Microcontrollers (MCUs)
 KS22: KS22-120MHz Microcontrollers (MCUs) based on ARM® Cortex®-M4 Core
Kinetis V Series: Real-time Motor Control & Power Conversion MCUs based on ARM® Cortex®-M0+/M4/M7
 KV1x: Kinetis KV1x-75 MHz, Entry-level 3ph FOC / Sensorless Motor Control MCUs based on ARM® Cortex®-M0+
 KV3x: Kinetis KV3x-100–120 MHz, Advanced 3ph FOC / Sensorless Motor Control MCUs based on ARM® Cortex®-M4
 KV4x: Kinetis KV4x-168 MHz, High Performance Motor / Power Conversion MCUs based on ARM® Cortex®-M4
 KV5x: Kinetis KV5x-240 MHz, Motor Control and Power Conversion, Ethernet, MCUs based on ARM® Cortex®-M7
Kinetis W Series: Wireless Connectivity Microcontrollers (MCUs) based on ARM® Cortex®-M0+/M4 Core
 KW0x: Kinetis KW0x-48 MHz, Sub-1 GHz Wireless Radio Microcontrollers based on ARM® Cortex®-M0+
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KW20Z: Kinetis KW20Z-2.4 GHz 802.15.4 Wireless Radio Microcontroller based on ARM® Cortex®-M0+
 KW30Z: Kinetis KW30Z-2.4 GHz Bluetooth Low Energy (BLE 4.1) Microcontroller based on ARM® Cortex®-M0+
 KW40Z: Kinetis® KW40Z-2.4 GHz Dual Mode: BLE and 802.15.4 Wireless Radio Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
Kinetis® Low Power 32-bit Microcontrollers (MCUs) based on ARM® Cortex®-M Cores
 KW21Z: Kinetis KW21Z-2.4 GHz 802.15.4 Wireless Radio Microcontroller based on ARM® Cortex®-M0+
 KW31Z: Kinetis KW31Z-2.4 GHz Bluetooth Low Energy (BLE 4.2) Microcontroller based on ARM® Cortex®-M0+
 KW41Z: Kinetis® KW41Z-2.4 GHz Dual Mode: BLE and 802.15.4 Wireless Radio Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
LPC1100 Series: Scalable Entry-level Microcontrollers (MCUs) based on ARM Cortex-M0+/M0 Cores
 LPC1110FD20: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1111FDH20: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1111FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1111JHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112FD20: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112FDH20: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112FHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112FHN24: 16kB flash, 4kB SRAM, HVQFN24 package
 LPC1112FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112JHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112JHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112LVFHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1112LVFHN24: 16kB flash, 2kB SRAM, ADC, HVQFN24 package
 LPC1113FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1113FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1113JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1113JHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114FDH28: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114FHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114FHN33: 32kB flash, 8kB SRAM, HVQFN32 package
 LPC1114FN28: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114JHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114JHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114LVFHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1114LVFHN24: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1115FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1115FET48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1115JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1115JET48: 64kB flash, 8kB SRAM, TFBGA48 package
 LPC1124JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC1125JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A02UK: 16kB flash, 4kB SRAM, WLCSP package
 LPC11A04UK: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A11FHN33: 8kB flash, 2kB SRAM, HVQFN32 package
 LPC11A12FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A12FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A13FHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A13JHI33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A14FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A14FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11A14JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11C12FBD48: 32kB flash, 8kB SRAM, ADC, LQFP48 package
 LPC11C14FBD48: 32kB flash, 8kB SRAM, LQFP48 package
 LPC11C22FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11C24FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11D14FBD100: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E11FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E12FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E13FBD48: 24kB flash, 8kB SRAM, LQFP48 package
 LPC11E14FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E14FBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
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LPC11E14FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11F35FHI33: delete
 LPC11E36FBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E36FHN33: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E37FBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E37FBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E37HFBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E66JBD48: 32-bit ARM Cortex-M0+ microcontroller; up to 64 kB flash and 12 kB SRAM; 4 kB EEPROM; 12-bit ADC
 LPC11E67JBD100: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E67JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E67JBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E68JBD100: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E68JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11E68JBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11U12FHN33: 16kB flash, 6kB SRAM, HVQFN32 package
 LPC11U14FBD48: 32kB flash, 6kB SRAM, LQFP48 package
 LPC11U24FHN33: 32kB flash, 8kB SRAM, HVQFN32 package
 LPC11U34FBD48: 40kB flash, 8kB SRAM, LQFP48 package
 LPC11U35FHI33: 64kB flash, 12kB SRAM, HVQFN32 package
 LPC11U37FBD48: 128kB flash, 10kB SRAM, LQFP48 package
 LPC11U67JBD64: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
 LPC11U68JBD48: Scalable Entry Level 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+/M0 Cores
LPC1200 Series: Robust and Reliable Microcontrollers (MCUs) based on ARM Cortex-M0 Cores
 LPC1224FBD48: 32kB flash, 4kB SRAM, LQFP48 package
 LPC1224FBD64: 32kB flash, 4kB SRAM, LQFP64 package
 LPC1225FBD48: 64kB flash, 8kB SRAM, LQFP48 package
 LPC1225FBD64: 80kB flash, 8kB SRAM, LQFP64 package
 LPC1226FBD48: 96kB flash, 8kB SRAM, LQFP48 package
 LPC1226FBD64: 96kB flash, 8kB SRAM, LQFP48 package
 LPC1227FBD48: 128kB flash, 8kB SRAM, LQFP48 package
 LPC1227FBD64: 128kB flash, 8kB SRAM, LQFP64 package
 LPC12D27FBD100: Robust and Reliable 32-bit Microcontroller (MCU) based on ARM Cortex-M0 Core
LPC1300 Series: Entry-level Microcontrollers (MCUs) based on ARM® Cortex®-M3 Cores
 LPC1311FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1313FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1313FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1315FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1315FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1316FBD48: 48kB Flash, 8kB SRAM
 LPC1316FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1317FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1317FBD64: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1317FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1342FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1342FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1343FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1343FHN33: 32kB Flash, 8kB SRAM, USB Device
 LPC1345FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1345FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1346FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1346FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1347FBD48: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1347FBD64: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1347FHN33: Entry-level 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
LPC1500 Series: Motion Control Microcontrollers (MCUs) based on ARM® Cortex®-M3 Cores
 LPC1517JBD48: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1517JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1518JBD100: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1518JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1519JBD100: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1519JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
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LPC1547JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1548JBD100: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1548JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1549JBD100: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1549JBD48: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
 LPC1549JBD64: Motion Control 32-bit Microcontroller based on ARM Cortex-M3
LPC1700 Series: Scalable Mainstream Microcontrollers (MCUs) based on ARM® Cortex®-M3 Cores
 LPC1751FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1752FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1754FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1756FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1758FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1759FBD80: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1763FBD100: 256kB flash, 64kB SRAM, no CAN, LQFP100 package
 LPC1764FBD100: 128kB flash, 32kB SRAM, Ethernet, USB, LQFP100 package
 LPC1765FBD100: 256kB flash, 64kB SRAM, USB, LQFP100 package
 LPC1765FET100: 256kB flash, 64kB SRAM, USB, TFBGA100 package
 LPC1766FBD100: 256kB flash, 64kB SRAM, Ethernet, USB, LQFP100 package
 LPC1767FBD100: 512kB flash, 64kB SRAM, Ethernet, no CAN, LQFP100 package
 LPC1768FBD100: 512kB flash, 64kB SRAM, Ethernet, USB, LQFP100 package
 LPC1768FET100: 512kB flash, 64kB SRAM, Ethernet, USB, TFBGA100 package
 LPC1768UK: Scalable Mainstream 32-bit Microcontroller based on ARM Cortex-M3
 LPC1769FBD100: 512kB flash, 64kB SRAM, Ethernet, USB, LQFP100 package
 LPC1774FBD144: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1774FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1776FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1776FET180: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1777FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1778FBD144: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1778FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1778FET180: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1778FET208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1785FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1786FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1787FBD208: 512kB flash, 96kB SRAM, USB, LCD, LQFP208 package
 LPC1788FBD144: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1788FBD208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1788FET180: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1788FET208: Scalable Mainstream 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
LPC1800 Series: High Performance Microcontrollers (MCUs) based on ARM® Cortex®-M3 Cores
 LPC1810FBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1810FET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1812JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1812JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1813JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1813JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1815JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1815JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1817JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1817JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1820FBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1820FET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1822JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1822JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1823JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1823JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1825JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1825JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1827JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1827JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
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LPC1547JBD48: Motion Control 32-bit Microcontroller based on ARM Cortex-M3

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LPC1830FBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1830FET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1830FET180: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1830FET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1833FET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1833JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1833JET100: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1833JET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1837FET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1837JBD144: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1837JET100: High Performance 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1837JET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1850FET180: Quad SPI Flash Interface (SPIFI), 200 kB SRAM, two High-speed USB, Ethernet, LCD, TFBGA180 package
 LPC1850FET256: Quad SPI Flash Interface (SPIFI), 200 kB SRAM, two High-speed USB, Ethernet, LCD, LBGA256 package
 LPC1853FET256: High Performance 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1853JBD208: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1853JET256: High Performance 32-bit Microcontroller based on ARM Cortex-M3
 LPC1857FET256: 1 MB flash, 136 kB SRAM, two High-speed USB, Ethernet, LCD, LBGA256 package
 LPC1857JBD208: High Performance 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC1857JET256: High Performance 32-bit Microcontroller (MCU) based on ARM Cortex-M3 Core
 LPC18S10FBD144: 32-bit ARM Cortex-M3 flashless MCU with security features; 136 kB SRAM; EMC
 LPC18S10FET100: 32-bit ARM Cortex-M3 flashless MCU with security features; 136 kB SRAM; EMC
 LPC18S30FBD144: 32-bit ARM Cortex-M3 flashless MCU with security features; 200 kB SRAM; Ethernet, two HS USB, EMC
 LPC18S30FET100: 32-bit ARM Cortex-M3 flashless MCU with security features; 200 kB SRAM; Ethernet, two HS USB, EMC
 LPC18S30FET256: 32-bit ARM Cortex-M3 flashless MCU with security features; 200 kB SRAM; Ethernet, two HS USB, EMC
 LPC18S37JBD144: 32-bit ARM Cortex-M3 MCU; 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, EMC, AES engine
 LPC18S37JET100: 32-bit ARM Cortex-M3 MCU; 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, EMC, AES engine
 LPC18S50FET180: 32-bit ARM Cortex-M3 flashless MCU with security features; 200 kB SRAM; Ethernet, two HS USB, LCD, EMC
 LPC18S50FET256: 32-bit ARM Cortex-M3 flashless MCU with security features; 200 kB SRAM; Ethernet, two HS USB, LCD, EMC
 LPC18S57JBD208: 32-bit ARM Cortex-M3 MCU; 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC, AES engine
 LPC18S57JET256: 32-bit ARM Cortex-M3 MCU; 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC, AES engine
LPC4000 Series: Mid-range Microcontrollers (MCUs) based on ARM® Cortex®-M4 Cores
 LPC4072FBD80: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4072FET80: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4074FBD144: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4074FBD80: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4076FBD144: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4076FET180: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4078FBD100: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4078FBD144: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4078FBD208: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4078FBD80: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4078FET180: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4078FET208: 32-bit ARM Cortex-M4 MCU; up to 512 kB flash, 96 kB SRAM; USB Device/Host/OTG; Ethernet; EMC; SPIFI
 LPC4088FBD144: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4088FBD208: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4088FET180: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
 LPC4088FET208: Mid-range 32-bit Microcontroller (MCU) based on ARM Cortex-M4 Core
LPC4300 Series: High Performance Microcontrollers (MCUs) based on ARM® Cortex®-M4/M0 Cores
 LPC4310FBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4310FET100: Dual-core Cortex-M4/M0, 168 kB SRAM, CAN, AES, SPIFI, SGPIO, SCT
 LPC4312JBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4312JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4313JBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4313JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4315JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4315JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4317JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4317JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4320FBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4320FET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
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LPC4322JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4323JBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4323JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4325JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; two High-speed USB, LCD, EMC
 LPC4325JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4327JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; two High-speed USB, LCD, EMC
 LPC4327JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4330FBD144: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, CAN, AES, SPIFI, SGPIO, SCT
 LPC4330FET100: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, CAN, AES, SPIFI, SGPIO, SCT
 LPC4330FET180: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, CAN, AES, SPIFI, SGPIO, SCT
 LPC4330FET256: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, CAN, AES, SPIFI, SGPIO, SCT
 LPC4333FET256: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4333JBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4333JET100: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4333JET256: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4337FBD144: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4337FET180: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4337FET256: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4337JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4337JET100: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4337JET256: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4350FBD208: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4350FET180: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, LCD, CAN, AES, SPIFI, SGPIO, SCT
 LPC4350FET256: Dual-core Cortex-M4/M0, 264 kB SRAM, 2 HS USB with on-chip PHY, Ethernet, LCD, CAN, AES, SPIFI, SGPIO, SCT
 LPC4353FET180: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4353JBD208: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4353JET256: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4357FBD208: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4357FET256: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4357JBD208: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; Ethernet, two High-speed USB, LCD, EMC
 LPC4357JET256: High Performance 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4/M0 Cores
 LPC4367JBD208: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC4367JET100: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC4367JET256: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC4370FET100: 32-bit ARM Cortex-M4 + 2 x M0 MCU; 282 kB SRAM; Ethernet; two HS USBs; 80 Msps 12-bit ADC; configurable peripherals
 LPC4370FET256: 32-bit ARM Cortex-M4 + 2 x M0 MCU; 282 kB SRAM; Ethernet; two HS USBs; 80 Msps 12-bit ADC; configurable peripherals
 LPC43S20FBD144: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 200 kB SRAM; USB
 LPC43S20FET180: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 200 kB SRAM; USB
 LPC43S30FBD144: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 264 kB SRAM; Ethernet; two HS USBs
 LPC43S30FET100: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 264 kB SRAM; Ethernet; two HS USBs
 LPC43S30FET256: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 264 kB SRAM; Ethernet; two HS USBs
 LPC43S37JBD144: 32-bit ARM Cortex-M4/M0 MCU; 1 MB flash and 136 kB SRAM; Ethernet, 2 x USB, EMC, AES engine
 LPC43S37JET100: 32-bit ARM Cortex-M4/M0 MCU; 1 MB flash and 136 kB SRAM; Ethernet, 2 x USB, EMC, AES engine
 LPC43S50FET180: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 264 kB SRAM; Ethernet; two HS USBs; LCD
 LPC43S50FET256: 32-bit ARM Cortex-M4/M0 flashless MCU with security features; 264 kB SRAM; Ethernet; two HS USBs; LCD
 LPC43S57JBD208: 32-bit ARM Cortex-M4/M0 MCU; 1 MB flash and 136 kB SRAM; Ethernet, 2 x USB, LCD, EMC, AES engine
 LPC43S57JET256: 32-bit ARM Cortex-M4/M0 MCU; 1 MB flash and 136 kB SRAM; Ethernet, 2 x USB, LCD, EMC, AES engine
 LPC43S67JBD208: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC43S67JET100: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC43S67JET256: High Performance 32-bit Microcontroller based on ARM® Cortex®-M4/M0
 LPC43S70FET100: 32-bit ARM Cortex-M4 + 2 x M0 MCU; 282 kB SRAM; Ethernet; two HS USBs; 80 Msps 12-bit ADC; configurable peripherals, AES en
 LPC43S70FET256: 32-bit ARM Cortex-M4 + 2 x M0 MCU; 282 kB SRAM; Ethernet; two HS USBs; 80 Msps 12-bit ADC; configurable peripherals, AES en
LPC54000 Series: Low Power Microcontollers (MCUs) based on ARM® Cortex®-M4 Cores with optional Cortex®-M0+ co-processor
 LPC54101J256BD64: Low Power 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4 Core
 LPC54101J256UK49: Low Power 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4 Core
 LPC54101J512BD64: Low Power 32-bit Microcontroller based on ARM® Cortex®-M4
 LPC54101J512UK49: Low Power 32-bit Microcontroller based on ARM® Cortex®-M4
 LPC54102J256BD64: Low Power 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4 Core
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LPC54102J256UK49: Low Power 32-bit Microcontroller based on ARM® Cortex®-M4

LPC54102J512BD64: Low Power 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4 Core

LPC4322JBD144: 32-bit ARM Cortex-M4/M0 MCU; up to 1 MB flash and 136 kB SRAM; two High-speed USB, LCD, EMC

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LPC800 Series: Low-Cost Microcontrollers (MCUs) based on ARM® Cortex®-M0+ Cores
    LPC810M021FN8: Low Cost 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
    LPC811M001FDH16: Low Cost 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
    LPC811M001JDH16: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC812M101FD20: Low Cost 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
    LPC812M101FDH16: Low Cost 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
    LPC812M101FDH20: Low Cost 32-bit Microcontroller (MCU) based on ARM® Cortex®-M0+ Core
    LPC812M101JD20: 32-bit ARM Cortex-M0+ microcontroller; 16 kB flash and 4 kB SRAM
    LPC812M101JDH16: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC812M101JDH20: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC812M101JTB16: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC822M101JDH20: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC822M101JHI33: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC824M201JDH20: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
    LPC824M201JHI33: Low Cost 32-bit Microcontroller based on ARM® Cortex®-M0+
   MAC7xxx Automotive Controllers
    MAC7111: 32-bit Automotive Microcontrollers
    MAC7112: 32-bit Automotive Microcontrollers
    MAC7116: 32-bit Automotive Microcontrollers
    MAC7121: 32-bit Automotive Microcontrollers
    MAC7131: 32-bit Automotive Microcontrollers
    MAC7136: 32-bit Automotive Microcontrollers
    MAC7200: 32-bit Automotive Microcontrollers
   S32 ARM Processors & Microcontrollers
    S32K: 32-bit Automotive General Purpose Microcontrollers
    S32V230: S32V230 Family of Processors for Advanced Driver Assistance Systems
 Power Architecture
   5xx Controllers
    MPC533: 32-bit Microcontrollers
    MPC535: 32-bit Microcontrollers
    MPC555: 32-bit Microcontrollers
    MPC561: 32-bit Microcontrollers
    MPC562: 32-bit Microcontrollers
    MPC563: 32-bit Microcontrollers
    MPC564: 32-bit Microcontrollers
    MPC565: 32 Bit Microcontroller
    MPC566: 32 Bit Microcontroller
   PowerQUICC® II (82xx)
    MPC8247: PowerQUICC® II Processor with PCI, USB, Communications Processor Module
    MPC8248: PowerQUICC® II Processor with PCI, USB, Security, Communications Processor Module
    MPC8250: PowerQUICC® II Processor with PCI, 128-ch. HDLC, 10/100 Ethernet
    MPC8255: PowerQUICC® II Processor with 128-ch. HDLC, UTOPIA II, 10/100 Ethernet
    MPC8265: PowerQUICC® II Processor with PCI, 256-ch. HDLC, UTOPIA II, 10/100 Ethernet
    MPC8270: PowerQUICC® II Processor with PCI, USB, 128-ch. HDLC, 10/100 Ethernet
    MPC8272: PowerQUICC® II Processor with PCI, USB, Security, Communications Processor Module with UTOPIA
    MPC8275: PowerQUICC® II Processor with PCI, USB, 128-ch. HDLC, UTOPIA II Ports, 10/100 Ethernet
  PowerQUICC II Pro (83xx)
    MPC8343E: PowerQUICC® II Pro Processor with DDR2, Dual PCI, 1 GB Ethernet, Dual USB, Security
   PowerQUICC® I (8xx)
    MPC850: PowerQUICC® Processor with CPM (2 SCC, 2 SMC), 10T Ethernet
  PowerQUICC® III (85xx)
    MPC8541E: PowerQUICC® III Processor with TDM, DDR, PCI, 1 GB Ethernet, Security, CPM with UTOPIA
    MPC8543E: PowerQUICC® III Processor with DDR2, PCI, PCI Express®, Serial RapidIO, SerDes, 1 GB Ethernet, Security
    MPC8545E: PowerQUICC® III Processor with DDR2, PCI, PCI Express®, SerDes, 1 GB Ethernet, Security
    MPC8547E: PowerQUICC® III Processor with DDR2, PCI, PCI Express®, SerDes, 1 GB Ethernet, Security
    MPC8548E: PowerQUICC® III Processor with DDR2, PCI, PCI Express®, Serial RapidIO, SerDes, 1 GB Ethernet, Security
    MPC8555E: PowerQUICC® III Processor with TDM, DDR, PCI, 1 GB Ethernet, Security, CPM with UTOPIA
    MPC8569E: PowerQUICC® III Processor with DDR2/3
Automotive Products
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Microcontrollers and Processors

LPC54102J512UK49: Low Power 32-bit Microcontroller (MCU) based on ARM® Cortex®-M4 Core

MC9S12H: S12H Automotive and Industrial Microcontrollers (MCUs) S12A: S12A Automotive and Industrial Microcontrollers (MCUs) S12B: S12B Automotive and Industrial Microcontrollers (MCUs) S12C: S12C Automotive and Industrial Microcontrollers (MCUs) S12D: S12D Automotive and Industrial Microcontrollers (MCUs) S12E: S12E Automotive and Industrial Microcontrollers (MCUs) S12G: Ultra-Reliable S12G General Purpose Automotive and Industrial Microcontrollers S12GC: S12GC Automotive and Industrial Microcontrollers (MCUs) S12HY: S12HY Scalable Value Line Cluster Solutions Microcontrollers (MCUs) with CAN S12HZ: S12HZ Scalable Instrument Cluster Solutions Microcontrollers (MCUs) with CAN S12K: S12K Automotive and Industrial Microcontrollers (MCUs) S12NE: Microcontroller S12P: S12P Automotive and Industrial Microcontrollers (MCUs) S12Q: S12Q Automotive and Industrial Microcontrollers (MCUs) S12XA: S12XA Automotive and Industrial Microcontrollers (MCUs) S12XB: S12XB Automotive and Industrial Microcontrollers (MCUs) S12XD: S12XD Automotive and Industrial Microcontrollers (MCUs) S12XE: Ultra-Reliable S12XE High-Performance Automotive and Industrial Microcontrollers S12XF: S12XF Automotive and Industrial Microcontrollers (MCUs) S12XHY: S12XHY Scalable Cluster Microcontrollers (MCUs) with CAN S12XHZ: S12XHZ Scalable Instrument Clusters Microcontrollers (MCUs) with CAN S12XS: S12XS Automotive and Industrial Microcontrollers (MCUs) mobileGT® (51xx/52xx) MPC5121e: 32-bit Power Architecture® Microcontrollers MPC5125: 32-bit microprocessor MPC5200: 32-bit Microcontrollers MPC5200B: 32-bit MCU for Automotive, Consumer & Industrial Applications MPC55xx MCUs MPC5510: NXP® 32-bit MCU for Body Electronics Applications MPC5534: 32-bit MCU for Low-End Automotive Powertrain Applications MPC5553: 32-bit MCU for Automotive Powertrain Applications MPC5554: 32-bit MCU for Powertrain Applications MPC5561: 32-bit MCU for Automotive ADAS Applications MPC5565: 32-bit MCU for Automotive Powertrain and Industrial Applications MPC5566: 32-bit MCU for Automotive Powertrain Applications MPC5567: 32-bit MCU for Auto Powertrain Applications Ultra-Reliable MPC56xx 32-bit Automotive & Industrial Microcontrollers (MCUs) MPC560xB: Ultra-Reliable MPC56xB MCU for Automotive & Industrial General Purpose MPC560xE: Ultra-Reliable 32-bit MCU for Automotive ADAS and Industrial Ethernet Applications MPC560xP: Ultra-Reliable MPC560xP MCU for Automotive & Industrial Safety Applications MPC560xS: Ultra-Reliable MPC560xS MCU for Automotive & Industrial Instrument Clusters MPC563xM: Ultra-Reliable MPC563xM for Automotive & Industrial Engine Management MPC564xA: Ultra-Reliable MPC564xA MCU for Automotive & Industrial Engine Management MPC564xB-C: Ultra-Reliable MPC564xB-C MCU for Automotive & Industrial Control Applications MPC564xL: Ultra-Reliable Dual-Core 32-bit MCU for Automotive and Industrial Applications MPC564xS: Ultra-Reliable MPC56xS MCU for Automotive & Industrial Instrument Clusters MPC5668G: Ultra-Reliable MPC5668G MCU for Automotive & Industrial Gateway Applications MPC5674F: Ultra-Reliable MPC5674F MCU for Automotive & Industrial Engine Management MPC5676R: Ultra-Reliable MPC5676R MCU for Automotive & Industrial Engine Management MPC567xK: Ultra-Reliable MPC567xK MCU for Automotive & Industrial Radar Applications Ultra-Reliable MPC57xx 32-bit Automotive & Industrial Microcontrollers (MCUs) MPC5746R: Automotive & Industrial Engine Management MCU MPC574xB-C-D-G: Ultra-Reliable MCUs for Automotive & Industrial Control and Gateway MPC574xP: Ultra-Reliable MPC574xP MCU for Automotive & Industrial Safety Applications MPC5777C: Ultra-Reliable MPC5777C MCU for Automotive & Industrial Engine Management MPC5777M: Ultra-Reliable MPC5777M MCU for Automotive & Industrial Engine Management MPC577xK: <u>Ultra-Reliable MPC577xK MCU for Automotive ADAS & Industrial Radar Applications</u> 8-bit S08 5.5V MCUs S08AC: 8-bit Flexis® AC128/96/60/48/32 MCUs

S08AW: 8-bit General Purpose AW60/48/32/16 MCUs

16-bit S12 & S12X MCUs

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S08D: 8-bit Cost-Effective with CAN D MCUs
 S08EL-SL: 8-bit EEPROM with LIN S08EL and S08SL MCUs
 S08FL: 8-bit Cost-Effective FL16/8 MCUs
 S08JM: 8-bit USB Cost-Effective JM MCUs
 S08LG: 8-bit Segment LCD S08LG32 and S08LG16 MCUs
 S08MP: 8-bit General Purpose MP MCUs
 S08QD: 8-bit Small Package QD MCUs
 S08RN: 8-bit EEPROM with TSI for Body Electronics MCUs
 S08SC4: 8-bit C4 Small Package SC4 MCUs
 S08SE: 8-bit General Purpose SE MCUs
 S08SF: 8-bit Motor Control SF MCUs
 S08SG: 8-bit Small Package SG MCUs
 S08SH: 8-bit General Purpose SH MCUs
 S08SL: 8-bit EEPROM with LIN S08EL and S08SL MCUs
 SO8SV: 8-bit General Purpose Best-in-Class performance SV MCUs
S12 MagniV Mixed-Signal Microcontrollers (MCUs) for Automotive & Industrial
 S12VR: S12VR Mixed-Signal MCU for Automotive & Industrial Relay Based Motor Control
 S12ZVC: S12ZVC Mixed-Signal MCU for Automotive & Industrial CAN Applications
 S12ZVH: S12ZVH Mixed-Signal MCU for Entry-Level Automotive & Industrial Clusters
 S12ZVHY: S12 MagniV<sup>®</sup> Mixed-Signal MCU for Automotive Instrument Cluster Applications
 S12ZVL: S12ZVL Mixed-Signal MCU for Automotive & Industrial LIN Applications
 S12ZVM: S12ZVM Mixed-Signal MCU for Automotive & Industrial Motor Control Applications
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Features

Ethernet, USB, and Serial communications interfaces
Very fast communications speeds
4.3" LCD Touch Screen
Power-switching relays to control target power
Production environment ready with voltage protection technology

Target Architectures

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Cyclone FX for ARM devices (ACP-CYCLONE-FX)
 <u>Kinetis®</u>
 S32
 LPC
Cyclone Universal FX (U-CYCLONE-FX)
 Kinetis®
 S32
 LPC
 Qorivva® (MPC5xxx)
 S12Z
 ColdFire V2/V3/V4
 ColdFire+/V1
 HC(S)12(X)
 HCS08
 HC08
 RS08
 Power MPC5xx/8xx
 DSC
 ARM® Nexus (MAC7xxx)
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Applications

Production Programming
Development/Prototyping
Testing
Field Maintenance

Cyclone FX Special Features

Extremely high speed (up to 25 Mb/s), intuitive, in-circuit flash programming On-board storage: 1GB, no practical limit to # of programming images

Programming images support count and date restrictions

Can run test and calibration code on the target device as part of the programming process

Secure Digital High Capacity (SDHC) port for expanded memory

USB & Control expansion ports

Flash Programming Highlights

Huge library of programming algorithms for thousands of MCUs
Serialization and dynamic data
Capable of programming external flash
Multiple image support for programming of different images during production runs
PC-controlled and Stand-Alone programming for production lines