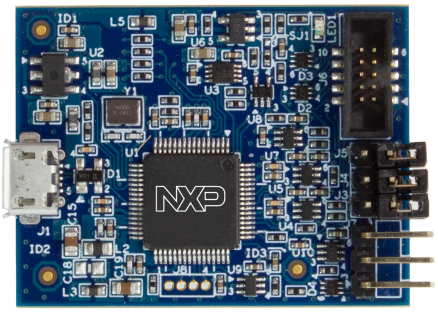
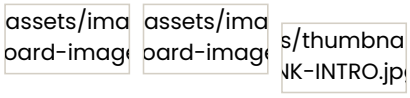
MCU-Link Debug Probe

MCU-LINK Receive alerts

Overview | Product Details | Documentation | Design Resources | Support | BUY OPTIONS | GET STARTED (/DOCUMENT/GUIDE/GE



Roll over image to zoom in



Jointly developed by NXP and Embedded Artists, MCU-Link is a powerful and cost effective debug probe that can be used seamlessly with MCUXpresso IDE, and is also compatible with 3rd party IDEs that support CMSIS-DAP protocol. MCU-Link also includes a USB to UART bridge feature (VCOM) that can be used to provide a serial connection between the target MCU and a host computer. MCU-Link is based on the LPC55S69 (/design/design-center/software/development-software/mcuxpresso-software-and-tools-/lpcxpresso-boards/lpcxpresso55s69-development-board:LPC55S69-EVK) microcontroller, and features a high-speed USB interface for high performance debug.

MCU-Link is compatible with Windows 10 and 11, MacOS and Linux. A free utility from NXP, also included with the LinkServer (/design/design-center/software/development-software/mcuxpresso-software-and-tools-/linkserver-for-microcontrollers:LINKERSERVER) package, provides an easy way to install firmware updates.

Product Details

Select a section:

Supported Devices | Features | System Requirements

Supported Devices

Processors and Microcontrollers

i.MX RT Crossover MCUs

- **i.MX-RT1024** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1024-crossover-mcu-with-arm-cortex-m7:i.MX-RT1024)**:** i.MX RT1024: Crossover MCU with Arm® Cortex®-M7
- **i.MX-RT600** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt600-crossover-mcu-with-arm-cortex-m33-and-dsp-cores:i.MX-RT600)**:** i.MX RT600 Crossover MCU with Arm® Cortex®-M33 and DSP Cores
- **i.MX-RT1020** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1020-crossover-mcu-with-arm-cortex-m7:i.MX-RT1020)**:** i.MX RT1020: Crossover MCU with Arm® Cortex®-M7
- **i.MX-RT1050** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1050-crossover-mcu-with-arm-cortex-m7-core:i.MX-RT1050)**:** i.MX RT1050 Crossover MCU with Arm® Cortex®-M7 Core
- **i.MX-RT1015** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1015-crossover-mcu-with-arm-cortex-m7-core-operating-

	up-to-500-mhz:i.MX-RT1015)**:** i.MX RT1015 Crossover MCU with Arm® Cortex®-M7 Core Operating Up to 500 MHz • **i.MX-RT1160** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1160-crossover-mcu-dual-core-arm-cortex-m7-and-cortex-m4:i.MX-RT1160)**:** i.MX RT1160 Crossover MCU Dual-Core Arm® Cortex®-M7 and Cortex-M4 • **i.MX-RT1060** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1060-crossover-mcu-with-arm-cortex-m7:i.MX-RT1060)**:** i.MX RT1060: Crossover MCU with Arm® Cortex®-M7 • **i.MX-RT500** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt500-crossover-mcu-with-arm-cortex-m33-dsp-and-gpu-cores:i.MX-RT500)**:** i.MX RT500 Crossover MCU with Arm® Cortex®-M33, DSP and GPU Cores • **i.MX-RT1010** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1010-crossover-mcu-with-arm-cortex-m7-core-operating-up-to-500-mhz:i.MX-RT1010)**:** i.MX RT1010 Crossover MCU with Arm® Cortex®-M7 Core Operating Up to 500 MHz • **i.MX-RT1064** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1064-crossover-mcu-with-arm-cortex-m7:i.MX-RT1064)**:** i.MX RT1064: Crossover MCU with Arm® Cortex®-M7 • **i.MX-RT1170** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1170-1-ghz-crossover-mcu-with-arm-cortex-cores:i.MX-RT1170)**:** i.MX RT1170: 1 GHz Crossover MCU with Arm® Cortex® Cores
K6x Ethernet	• **K65_180** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k65-180-mhz-dual-high-speed-and-full-speed-usbs-2mb-flash-anti-tamper-microcontrollers-mcus-based-on-arm-cortex-m4-core:K65_180)**:** Kinetis® K65-180 MHz, Dual High-Speed and Full-speed USBs, 2MB Flash, Anti-Tamper Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core • **K60_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k60-61-120150-mhz-mixed-signal-integration-and-anti-tamper-microcontrollers-based-on-arm-cortex-m4-core:K60_120)**:** Kinetis® K60/61-120–150 MHz, Mixed-Signal Integration and Anti-Tamper Microcontrollers based on Arm® Cortex®-M4 Core • **K60_100** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k60-100-mhz-mixed-signal-integration-microcontrollers-based-on-arm-cortex-m4-core:K60_100)**:** Kinetis® K60-100 MHz, Mixed-Signal Integration Microcontrollers based on Arm® Cortex®-M4 Core • **K63_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k63-120-mhz-256kb-sram-anti-tamper-microcontrollers-mcus-based-on-arm-cortex-m4-core:K63_120)**:** Kinetis® K63-120 MHz, 256KB SRAM, Anti-Tamper Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core • **K64_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k64-120-mhz-256-kb-sram-microcontrollers-mcus-based-on-arm-cortex-m4-core:K64_120)**:** Kinetis® K64-120 MHz, 256 KB SRAM Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Core • **K66_180** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k6x-ethernet/kinetis-k66-180-mhz-dual-high-speed-and-full-speed-usbs-2mb-flash-microcontrollers-mcus-based-on-arm-cortex-m4-core:K66_180)**:** Kinetis® K66-180 MHz, Dual High-Speed and Full-speed USBs, 2MB Flash Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
K2x / KS2x USB	• **K21_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-

purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k21-120-mhz-full-speed-usb-anti-tamper-microcontrollers-based-on-arm-cortex-m4:K21_120): Kinetis K21-120 MHZ, Full-Speed USB, Anti-Tamper Microcontrollers based on Arm® Cortex®-M4

- **K20_72** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k20-72-mhz-full-speed-usb-mixed-signal-integration-microcontrollers-mcus-based-on-arm-cortex-m4-core:K20_72): Kinetis® K20-72 MHz, Full-Speed USB, Mixed-Signal Integration Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K24_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k24-120-mhz-full-speed-usb-256kb-sram-microcontrollers-mcus-based-on-arm-cortex-m4-core:K24_120): Kinetis® K24-120 MHz, Full-Speed USB, 256KB SRAM Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K26_180** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k26-180-mhz-dual-high-speed-and-full-speed-usbs-2mb-flash-microcontrollers-mcus-based-on-arm-cortex-m4-core:K26_180): Kinetis® K26-180 MHz, Dual High-Speed and Full-Speed USBs, 2MB Flash Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K22_100** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k22-100-mhz-cost-effective-full-speed-usb-microcontrollers-mcus-based-on-arm-cortex-m4-core:K22_100): Kinetis® K22-100 MHz, Cost Effective, Full-Speed USB Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K20_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k20-120-mhz-full-speed-usb-mixed-signal-integration-microcontrollers-mcus-based-on-arm-cortex-m4-core:K20_120): Kinetis® K20-120 MHz, Full-Speed USB, Mixed-Signal Integration Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K20_100** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k20-100-mhz-full-speed-usb-mixed-signal-integration-microcontrollers-based-on-arm-cortex-m4-core:K20_100): Kinetis® K20-100 MHz, Full-Speed USB, Mixed-Signal Integration Microcontrollers based on Arm® Cortex®-M4 Core
- **K21_50** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k21-50-mhz-full-speed-usb-anti-tamper-microcontrollers-based-on-arm-cortex-m4-core:K21_50): Kinetis® K21-50 MHz, Full-Speed USB, Anti-Tamper Microcontrollers based on Arm® Cortex®-M4 Core
- **K28_150** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k28-150-mhz-2x-usb-core-voltage-bypass-2mb-flash-1mb-sram-mcus-based-on-arm-cortex-m4:K28_150): Kinetis® K28-150 MHz, 2x USB, Core Voltage Bypass, 2MB Flash, 1MB SRAM MCUs based on Arm® Cortex®-M4
- **K22_50** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k22-50-mhz-cost-effective-full-speed-usb-microcontrollers-mcus-based-on-arm-cortex-m4-core:K22_50): Kinetis® K22-50 MHz, Cost Effective, Full-Speed USB Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K22_120** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k22-120-mhz-cost-effective-full-speed-usb-microcontrollers-mcus-based-on-arm-cortex-m4-core:K22_120): Kinetis® K22-120 MHz, Cost Effective, Full-Speed USB Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
- **K20_50** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k20-50-mhz-full-speed-usb-mixed-signal-integration-microcontrollers-based-on-arm-cortex-m4-core:K20_50): Kinetis® K20-50 MHz, Full-Speed USB, Mixed-Signal Integration Microcontrollers based on Arm® Cortex®-M4 Core

	• **K27_150** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-arm-cortex-m4/k2x-ks2x-usb/kinetis-k27-150-mhz-2x-usb-2mb-flash-1mb-sram-microcontrollers-mcus-based-on-arm-cortex-m4-core:K27_150)**:** Kinetis® K27-150 MHz, 2x USB, 2MB Flash, 1MB SRAM Microcontrollers (MCUs) based on Arm® Cortex®-M4 Core
KE Series Arm Cortex-M4/M0+	• **KE06** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/kinetis-ke06-48-mhz-mainstream-with-can-microcontrollers-mcus-based-on-arm-cortex-m0-plus-core:KE06)**:** Kinetis® KE06-48 MHz, Mainstream with CAN Microcontrollers (MCUs) based on Arm® Cortex®-M0+ Core • **KE1xZ** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/72mhz-5v-main-stream-cm0-plus-mcu-with-nxp-touch-tsi-and-can-control:KE1xZ)**:** 72MHz, 5V Main Stream CM0+ MCU with NXP Touch (TSI) and CAN Control • **KE02_40** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/kinetis-ke02-40-mhz-entry-level-microcontrollers-mcus-based-on-arm-cortex-m0-plus-core:KE02_40)**:** Kinetis® KE02-40 MHz, Entry-Level Microcontrollers (MCUs) based on Arm® Cortex® -M0+ Core • **KE04** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/kinetis-ke04-48-mhz-mainstream-microcontrollers-mcus-based-on-arm-cortex-m0-plus-core:KE04)**:** Kinetis® KE04-48 MHz, Mainstream Microcontrollers (MCUs) based on Arm® Cortex®-M0+ Core • **KE02** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/kinetis-ke02-20-mhz-entry-level-microcontrollers-mcus-based-on-arm-cortex-m0-plus-core:KE02)**:** Kinetis® KE02-20 MHz, Entry-Level Microcontrollers (MCUs) based on Arm® Cortex®-M0+ Core • **KE1xF** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-arm-cortex-m4-m0-plus/kinetis-ke1xf-168mhz-performance-with-can-5v-microcontrollers-based-on-arm-cortex-m4:KE1xF)**:** Kinetis KE1xF-168MHz, Performance with CAN 5V Microcontrollers based on Arm® Cortex®-M4
LPC5500 Arm Cortex-M33	• **LPC55S6x** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-arm-cortex-m33/high-efficiency-arm-cortex-m33-based-microcontroller-family:LPC55S6x)**:** High Efficiency Arm® Cortex®-M33-Based Microcontroller Family • **LPC550x** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-arm-cortex-m33/lpc550x-s0x-baseline-arm-cortex-m33-based-microcontroller-family:LPC550x)**:** LPC550x/S0x: Baseline Arm® Cortex®-M33-Based Microcontroller Family • **LPC552x-S2x** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-arm-cortex-m33/lpc552x-s2x-mainstream-arm-cortex-m33-based-microcontroller-family:LPC552x-S2x)**:** LPC552x/S2x: Mainstream Arm® Cortex®-M33-based Microcontroller Family • **LPC551X-S1X** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-arm-cortex-m33/lpc551x-s1x-baseline-arm-cortex-m33-based-microcontroller-family:LPC551X-S1X)**:** LPC551x/S1x: Baseline Arm® Cortex®-M33-Based Microcontroller Family • **LPC553x** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-arm-cortex-m33/lpc553x-s3x-advanced-analog-armcortex-m33-based-mcu-family:LPC553x)**:** LPC553x/S3x: Advanced Analog Arm®Cortex®-M33-Based MCU Family
LPC1100 Arm Cortex-M0+/M0	• **LPC1100** (/products/processors-and-microcontrollers/arm-microcontrollers/general-

	purpose-mcus/lpc1100-arm-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontroller-mcu-based-on-arm-cortex-m0-cores:LPC1100): Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm Cortex-M0 Cores • **LPC11C00** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-arm-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontroller-mcu-based-on-arm-cortex-m0-cores:LPC11C00): Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0 Cores • **LPC11E00** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-arm-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontroller-mcu-based-on-arm-cortex-m0-plus-and-cortex-m0-cores:LPC11E00): Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0+ and Cortex®-M0 Cores • **LPC11AXX** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-arm-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontrollers-mcus:LPC11AXX): Scalable, Entry-Level 32-bit Microcontrollers (MCUs) • **LPC11U00** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-arm-cortex-m0-plus-m0/scalable-entry-level-32-bit-microcontroller-mcu-based-on-arm-cortex-m0-plus-and-cortex-m0-cores:LPC11U00): Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0+ and Cortex®-M0 Cores
LPC1500 Arm Cortex-M3	• **LPC1517JBD48** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1500-arm-cortex-m3/motion-control-32-bit-microcontroller-based-on-arm-cortex-m3:LPC1517JBD48): Motion Control 32-bit Microcontroller based on Arm® Cortex®-M3 • **LPC1517JBD64** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1500-arm-cortex-m3/motion-control-32-bit-microcontroller-based-on-arm-cortex-m3:LPC1517JBD64): Motion Control 32-bit Microcontroller based on Arm® Cortex®-M3 • **LPC1519JBD64** (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1500-arm-cortex-m3/motion-control-32-bit-microcontroller-based-on-arm-cortex-m3:LPC1519JBD64): Motion Control 32-bit Microcontroller based on Arm® Cortex®-M3

Less ^

Features

Microcontroller (MCU)	• LPC55S69 (/design/design-center/software/development-software/mcuxpresso-software-and-tools-/lpcxpresso-boards/lpcxpresso55s69-development-board:LPC55S69-EVK) dual Arm® Cortex®-M33 microcontroller running at up to 150 MHz
Debug	• High speed USB interface • CMSIS-DAP firmware • SWD target debug • SWO trace/profiling I/O support • Supports target debug for systems running from 1.2V to 5V
User Interface	• Status LED for ease of use • USB to serial COM port (VCOM)

Supported IDEs

- Compatible with MCUXpresso IDE
- Compatible with tools/IDEs that support CMSIS-DAP protocol
- Compatible with MCUXpresso for VS Code (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/mcx-arm-cortex-m/mcx-a-series-microcontrollers/mcuxpresso-for-visual-studio-code:MCUXPRESSO-VSC)

System Requirements

- When using MCUXpresso IDE, MCU-Link firmware version 3.xxx and newer uses WinUSB, and requires MCUXpresso IDE version 11.7 or later

Buy Options

Availability: In stock
Inventory: 19
Shipping: Normally ships 1-2 business days

BUY FROM NXP (HTTPS://STORE.NXP.COM/WEBAPP/ECOMMERCE.ADD_ITEM.FRAMEWORK?PART_NUMBER=MCU-LINK&QUANTITY=1&ITEM_TYPE=TOOL_HW)

BUY FROM DISTRIBUTOR

MCU-LINK (/part/MCU-LINK)

MCU-Link Debug Probe.

Kit Contains

- MCU-Link debug probe
- Target debug connector
- VCOM connector cable
- Spare jumpers