MCU-LINK: MCU-Link debug probe

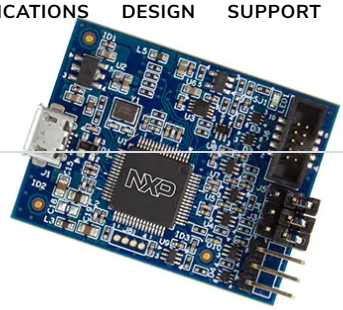
High performance, low-cost debug tool for Arm® Cortex M® based MCUs

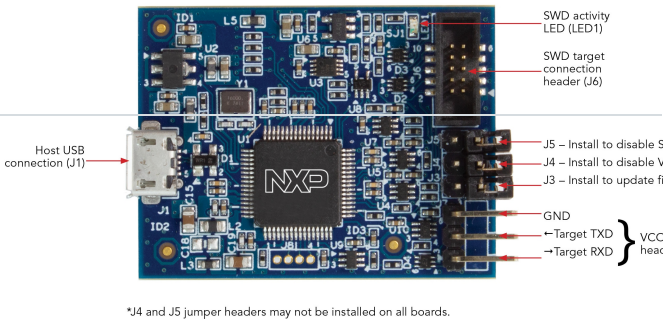
FOLLOW

Overview

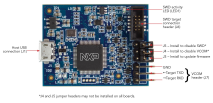
Jointly developed by NXP and Embedded Artists, MCU-Link is a powerful and cost effective debug probe that can be used seamlessly with MCUXpresso IDE, and is also [illegible] 3rd party IDEs that support CMSIS-DAP protocol. MCU-Link also includes a USB to UART bridge feature (VCOM) that can be used to provide a serial connection between the target MCU and a host computer. MCU-Link is based on the LPC55S69 (/design/development-boards/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, MacOS and Linux. A free utility from NXP provides an easy way to install firmware updates.





MCU-LINK Angle



MCU-LINK Top

MCU-Link introduction

Specifications

Supported Devices

Processors and Microcontrollers
K32 L Series Cortex-M4/M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k32-l-series-cortex-m4-m0-plus:K32-L-Series)
K Series Cortex-M4 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/k-series-cortex-m4:KINETIS_K_SERIES)
KL Series Cortex-M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/kl-series-cortex-m0-plus:KINETIS_L_SERIES)
KV Series Cortex-M4/M0+/M7 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/kv-series-cortex-m4-m0-plus-m7:KINETIS_V_SERIES)
KE Series Cortex-M4/M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/ke-series-cortex-m4-m0-plus:KINETIS_E_SERIES)
KM Series Cortex-M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/km-series-cortex-m0-plus:kM_SERIES)
LPC800 Cortex-M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc800-cortex-m0-plus-:MC_71785)
LPC1100 Cortex-M0+/M0 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1100-cortex-m0-plus-m0:MC_1392389687150)
LPC1200 Cortex-M0 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1200-cortex-m0:MC_71514)
LPC1300 Cortex-M3 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1300-cortex-m3:MC_1403790687302)
LPC1500 Cortex-M3 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1500-cortex-m3:MC_1403790713448)
LPC1700 Cortex-M3 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1700-cortex-m3:MC_1403790745385)
LPC1800 Cortex-M3 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc1800-cortex-m3:MC_1403790776032)
LPC4000 Cortex-M4 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc4000-cortex-m4:MC_1403790399405)
LPC51U68 Cortex-M0+ (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/high-performance-power-efficient-and-cost-sensitive-arm-cortex-m0-plus-mcus:LPC51U68)
LPC54000 Cortex-M4 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc54000-cortex-m4-:MC_1414576688124)
LPC5500 Cortex-M33 (/products/processors-and-microcontrollers/arm-microcontrollers/general-purpose-mcus/lpc5500-cortex-m33:LPC5500_SERIES)
i.MX RT crossover processors (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus:IMX-RT-SERIES)

Specifications

Technical and Functional Specifications

Microcontroller (MCU)	• LPC55S69 (/design/development-boards/lpcxpresso-boards/lpcxpresso55s69-development-board:LPC55S69-EVK) dual Arm Cortex-M33 microcontroller running at u
Connectivity	• Target UART to USB bridge feature
Debug	• SWD/JTAG debug interface to target via 10-pin Coresight connector • SWO support for profiling, interrupt tracing and low overhead data access
User Interface	• SWD activity LED
Firmware upgrade support	• Simple firmware update via USB

Buy

MCU-LINK (/part/MCU-LINK) ACTIVE

MCU-Link debug probe

Kit contains

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

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

Availability?

DISTRIBUTOR

Related Products

(/design/software/development-software/mcuxpresso-

(/design/microcontrollers-developer-resources/lpc-

software-and-tools-/universal-multilink-development-interface:UMultilink)

Universal Multilink Development Interface (/design/software/development-software/mcuxpresso-software-and-tools-/universal-multilink-development-interface:UMultilink)

Emulators, Probes, and Programmers

microcontroller-utilities/lpc-link2:OM13054)

LPC-Link2 (/design/microcontrollers-developer-resources/lpc-microcontroller-utilities/lpc-link2:OM13054)

Emulators, Probes, and Programmers

Design Resources

Get Started

1. Review these Get Started and Quick Reference Guide to get familiar with the hardware specifications.

Get Started and Quick Started Guide

Get Started with the MCU-Link (/document/guide/get-started-with-the-mcu-link:GS-MCU-LINK)

HTML GS-MCU-LINK

Getting to know your MCU-LINK (/docs/en/quick-reference-guide/MCULINKINSERT.pdf) (REV 0)

PDF 144.5 kB MCULINKINSERT [English]

DOCUMENTS (2)

Users Guide (1)

Quick Reference Guide (1)

DESIGN RESOURCES (2)

Design Tools & Files (2)

SOFTWARE (4)

Development Software (4)

Documents

Users Guide (1)

Get Started with the MCU-Link (/document/guide/get-started-with-the-mcu-link:GS-MCU-LINK)

This page will help guide you through the process of learning about your MCU-Link.

GS-MCU-LINK 18 Nov 2020 GS-MCU-LINK [English]

Quick Reference Guide (1)

Getting to know your MCU-LINK (/docs/en/quick-reference-guide/MCULINKINSERT.pdf) (REV 0)

Note: first production MCU-Link inserts have an error in the VCOM connection diagram. Please use this version instead. MCU-Link is a powerful and cost effective debug probe for microcontrollers that can be used seamlessly with NXP's MCUXpresso IDE, and is also compatible with 3rd party IDEs that support CMSIS-DAP protocol. MCU-Link is compatible with Windows 10, MacOS and Linux. A free utility from NXP provides an easy way to install firmware updates.

PDF 144.5 kB 27 Oct 2020 MCULINKINSERT [English]

Design Resources

Design Tools & Files (2)

Printed Circuit Boards and Schematics (1)

MCU-Link Base (/downloads/en/schematics/MCU-LINK-SCH.pdf) (REV PA6)

DOWNLOAD (/DOWNLOADS/EN

Schematic for the MCU-Link (base) debug probe from NXP (PDF format)

PDF 111.8 kB 2020-10-27 10:01:00 MCU-LINK-SCH

Design Files - miscellaneous (1)

MCU-Link Base design source files (/webapp/Download?colCode=MCU-LINK-DESIGNFILES) (REV PA6)

DOWNLOAD (/WEBAPP/DOWNL

Schematic source file (EAGLE format), BOM (Excel) and other design files for the MCU-Link (base) debug probe from NXP

ZIP 2.6 MB 2020-12-17 10:15:00 MCU-LINK-DESIGNFILES

Software

Development Software (4)

IDE and Build Tools (1)

MCUXpresso Integrated Development Environment (IDE) (/design/software/development-software/mcuxpresso-software-and-tools-/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE)

Easy-to-use software development tools for Kinetis, LPC, i.MX controllers based on Arm Cortex-M cores - GNU, Eclipse, profiling, debugger, trace

DOWNLOAD OPTIONS (/DESIGN/SOFTWARE/DEVELOPMENT-SOFTWARE/MCUXPRESSO-SOFTWARE-AND-TOOLS-/MCUXPRESSO-INTEGRATED-DEVELOPMENT-ENVIRONMENT-IDE:MCUXPRESSO-IDE?TAB=DESI

Host Device Drivers (3)

MCU-LINK CMSIS - Linux Package (/downloads/en/device-drivers/MCU-LINK_CMSIS-DAP-lin.zip) (REV 1.0)

DOWNLOAD (/DOWNLOADS/EN

Host driver configurations and firmware update utility for MCU-Link on Linux.

ZIP 798.1 kB 2020-10-27 09:02:00 MCU-LINK_CMSIS-DAP-lin

MCU-LINK CMSIS - Mac Package (/downloads/en/device-drivers/MCU-LINK_CMSIS-DAP-mac.zip) (REV 1.0)

DOWNLOAD (/DOWNLOADS/EN

Host driver configurations and firmware update utility for MCU-Link on MacOS.

ZIP 445.8 kB 2020-10-27 09:02:00 MCU-LINK_CMSIS-DAP-mac

MCU-LINK CMSIS - Windows Package (/downloads/en/device-drivers/MCU-LINK_CMSIS-DAP-win.zip) (REV 1.0)

DOWNLOAD (/DOWNLOADS/EN

Host driver configurations and firmware update utility for MCU-Link on Windows.

ZIP 368.4 kB 2020-10-27 09:02:00 MCU-LINK_CMSIS-DAP-win

Get Help

Search NXP Community

SEARCH (HTTPS://COMMUNITY.NXP.COM/T5/FORUMS/SEARCHPAGE/TAB/MESSAGE?Q=)

Recommended Communities

MCUXpresso General

MCUXpresso IDE

News 18 Jan 2021 | Read More (https://media.nxp.com/news-releases/news-release-details/nxp-unlocks-6ghz-spectrum-wi-fi-6e-tri-band-chipset-access)