

- Streamlined Debugging
- Fully IDE-Integrated
- Simple to Configure & Operate



Multilink Overview

Multilink debug probes allow a PC access to the Background Debug Mode (BDM) or JTAG interface on wide range of ARM Cortex and 8-16-/32-bit devices, in order to halt normal processor execution and use the PC to control the processor. The user can then directly control the target's execution, read/write registers and memory values, debug code on the processor, and program internal or external FLASH memory devices.

Supported manufacturers include NXP, STMicroelectronics, Cypress, Infineon, Silicon Labs, and many others. Multilink connects between a USB port on a Windows machine and the standard debug connector on the target. Microcontrollers are supported via the multiple headers located under a flip lid on the Multilink case. Ribbon cables suitable for a variety of architectures are included.

Standard Features

All Multilink debug probes offer these standard features:

- USB interface from PC to Multilink allows for fast, easy programming and debugging -- with the ease and compatibility of the USB interface.
- Draws power from USB interface-- no separate power supply required (draws less than 1mA from the target).
- Works with target voltage: 1.8V-5.25V
- Supports JTAG daisy chaining of multiple ARM MCUs
- ARM device support includes both the JTAG and SWD protocols
- Includes USB cable, Type A Male to Type B Male, 6-ft.

8/16/32 BIT DEVICES:

NXP:	S32
	ColdFireR V1
	ColdFireR V2/V3/V4
	MPC55xx-57xx
	DSC
	S12Z
	HC(S)12(X)
	HCS08, RS08**
	MPC5xx/8xx FX only
	HC16/683xx FX only
Micro:	SPC5

"Universal" Features

MULTILINK UNIVERSAL LC and **MULTILINK UNIVERSAL FX** also include these features:

- Pipelined programming algorithms for some Power Architecture families that dramatically increase programming speed.
- Auto-frequency detection + trimming capabilities for HCS08 devices
- Auto-frequency detection for HC(S)12(X) devices.
- Generates programming voltage on RESET line for RS08 devices.
- Target Frequency: 16Khz-50Mhz (applies to HCS08, RS08, CFV1, S12Z, or HCS12X only)



CYCLONE PROGRAMMERS

In-system, stand-alone programmers for internal & external flash.

Versatile programming tools built for reliability on the production line. Rich feature sets offer terrific value. Support for ARM Cortex, AURIX TriCore, Renesas, PowerPC and 8-/16-/32-bit architectures.



Cyclone LC Programmer Features

Program with one touch, with or without a PC, after configuring a programming image. Programming can also be fully automated with the included Cyclone Control Suite.

- Simple To Configure & Operate
- Extensive Device Support
- Reliable & Feature Rich
- Easily Automated

Cyclone FX Advanced Features

The Cyclone FX programmer adds a tremendous boost in speed and storage size, allows expandable memory via the SD card slot, ProCryption Security, advanced automation & useful control port features.

- ProCryption Security (AES/RSA Encryption)
- WiFi Control, High-Speed Programming
- Massive Internal & Expandable Storage
- Advanced Automation & Gang Programming

EASY SETUP & POWERFUL FEATURES SAVE VALUABLE TIME



**SIMPLE SETUP/
PC-BASED**



**STAND-ALONE
MODE**



**CONTROL MULTIPLE UNITS
w/ CYCLONE FX or Advanced License**

Device Support

NXP: kinetis/S32, LPC, i.MX, HC08, HCS08, HC(S)12(X), S12Z, ColdFire V2/V3/V4, RSO8, Power MPC5xx/8xx, DSC, CPU3xx, QORIVVA MPC5xxx, 68HC16

STM: SPC5, STM8, STM32

Renesas: H8 and H8s/Tiny, MC16C and M16C80, M32C, R8C, RH850, RL78, RX600

Infineon TriCore: AUDO TC1xx, AURIX TC2xx/TC3xx

Legacy Devices: HC05, HC11, MAC7xxx, MCORE