



USB Multilink Universal FX: A High-Speed, All-In-One Development Interface

Affordable & Versatile

Overview

P&E's **USB Multilink Universal FX** is the latest **high-speed** addition to P&E's successful line of USB Multilink hardware interfaces. It combines support, in a single interface, for many Freescale architectures, including: **Kinetis®**, **Qorivva® MPC55xx/56xx**, **ColdFire® V1/ColdFire+ V1**, **ColdFire V2-4**, **HCS08**, **RS08**, **HC(S)12(X)**, **DSC**, and **HC16/683xx**. It includes all the features of the USB Multilink Universal, plus these additional benefits:

- **up to 10X faster communications speed than the USB Multilink Universal***
- **can provide power to the target MCU**
- **I/O line clamping**
- **supports legacy Freescale devices**

The USB Multilink Universal FX is an easy-to-use debug and programming interface which allows the PC to communicate with a target processor through the USB port of the PC. It controls the microprocessor by accessing the debug port of the target. The Multilink is able to accommodate communications with a variety of Freescale MCUs by featuring multiple headers, which can be accessed by simply flipping open the plastic case. Ribbon cables for the supported MCUs are conveniently included.

Development Solutions

The USB Multilink Universal FX's exceptional speed and reliability make it ideal for development. It is natively supported by recent versions of CodeWarrior®, current P&E software applications, and toolchains from IAR, Keil, Cosmic, and Mentor Graphics (check with vendor for device compatibility).

P&E offers several In-Circuit Programmers for supported architectures that can be used with the USB Multilink Universal FX to program internal and external flash devices. It also works with many of P&E's In-Circuit Debuggers for supported architectures to control the target processor's execution, read/write registers and memory, and perform full C source-level debug.

More information on the USB Multilink Universal FX is available at www.pemicro.com.

*Performance enhancements are greatest for synchronous devices: Kinetis, Qorivva, Coldfire V2-V4, DSC, HC16/683xx.

Target Architectures

- Kinetis
- Qorivva MPC55xx/56xx
- ColdFire +/V1
- ColdFire V2-4
- HCS08
- RS08
- HC(S)12(X)
- DSC
- HC16/683xx

Applications

- Development/Prototyping

Hardware Features

- Very high-speed, hassle-free USB 2.0 communications interface
- Can provide power to target MCU
- Draws power directly from the USB port – no external power supply needed
- Multi-voltage support for targets ranging from 1.6 to 5.25 Volts
- I/O line clamping
- Includes ribbon cables for supported architectures
- Compact size