

## U-MULTILINK-FX: Universal Multilink FX High-Speed Development Interface ☆

P&E's USB Multilink Universal FX is a high-speed, all-in-one development interface which allows a PC access to the Background Debug Mode (BDM) or JTAG interface on Freescale Kinetis, Qorivva 55xx/56xx, ColdFire V1/+V1, ColdFire V2-4, HCS08, RS08, HC(S)12(X), DSC, and HC16/683xx microcontrollers. It's 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. The Multilink controls the microprocessor by accessing the debug port of the target. It's 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.

The Multilink'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. Support varies by architecture, so contact the vendor to determine compatibility.

P&E offers several In-Circuit Programmers for supported architectures, including Kinetis, that can be used with the USB Multilink Universal FX to program internal and external flash devices. The USB Multilink Universal FX 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.

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

### Features

The USB Multilink Universal FX includes all of the features offered by the USB Multilink Universal, plus these additional features:

- High-speed communications: up to 10X faster than Multilink Universal\*
- Fast, hassle-free USB 2.0 communications interface
- Compact size
- Can provide power to target
- Draws power directly from the USB port - no external power needed
- I/O line clamping
- Multi-voltage support for targets ranging from 1.6 to 5.25 Volts
- Supports legacy Freescale devices

### Related Software and Tools

[UMultilink](#): Universal Multilink Development Interface



### Supported Devices

#### V1 MCUs

S08 5.5 Volts Microcontrollers

#### S08 3.6 Volts Microcontrollers

RS08

S12 and S12X

#### ColdFire+ MCUs

PX Series Power Architecture® Microcontrollers

#### V2 Embedded Processors

#### V2 MCUs

#### V3 Embedded Processors

#### V4 Embedded MPU

Qorivva MPC56xx

Qorivva MPC55xx

#### K10 Baseline MCUs

#### K20 USB MCUs

#### K30 Segment LCD MCUs

#### K40 USB and Segment LCD MCUs

#### K50 Measurement MCUs

#### K60 Ethernet Crypto MCUs

#### K70\_120: Kinetis K70 Graphic LCD 120/150 MHz MCUs

#### MC56F80xx

56F824X\_825X: Digital Signal Controller

#### MC56F81xx

MC56F84xx: Digital Signal Controllers

#### M683XX

#### HC16

### Featured Documentation

[USBMLUNIVERSALFX](#): Technical Summary For USB Multilink Universal FX

[U-MULTILINK-FXFS](#): A High-Speed, All-In-One Development Interface Fact Sheet

### Kit Contains

- U-Multilink-FX
- Ribbon cables for Freescale MCUs