

# USB Multilink Universal: An All-In-One Development Interface

Affordable & Versatile

## Overview

P&E's **USB Multilink Universal** is the next step forward for P&E's successful line of USB Multilink hardware interfaces. It combines support, in a single interface, for many Freescale architectures, including: **HCS08**, **HC(S)12(X)**, **ColdFire® V1/ColdFire+ V1**, **ColdFire V2-4**, **Qorivva® MPC55xx/56xx**, and **Kinetis®**. The USB Multilink Universal 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 groundbreaking USB Multilink Universal 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 Multilink's speed and reliability make it ideal for development. It is natively supported by recent versions of CodeWarrior®, current P&E software applications, and Kinetis toolchains from IAR, Keil, and Mentor Graphics. The USB Multilink Universal can also be configured to support a specific architecture when using software packages which do not yet natively support the all-in-one nature of the USB Multilink Universal. This allows it to work with many existing software applications and toolchains.

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

# A Universal Approach

The USB Multilink Universal is the first product in a new line that will soon include the **USB Multilink Universal FX**: a high-speed version of the USB Multilink Universal with additional enhancements.

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

### **Target Architectures**

- Kinetis
- · HCS08
- RS08
- $\cdot$  HC(S)12(X)
- · ColdFire +/V1
- · ColdFire V2-4
- · Qorivva MPC55xx/56xx

#### **Applications**

· Development/Prototyping

#### Hardware Features

- Fast, hassle-free USB 2.0 communications interface
- 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
- Includes ribbon cables for supported architectures
- · Compact size



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