

# 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: **Kinetis®**, **Qorivva® MPC55xx/56xx**, **Power Architecture PX Series**, **ColdFire+® V1/ColdFire V1, ColdFire V2/3/4**, HCS08, HC(S)12(X), S12Z, and DSC. 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 Universal'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, Cosmic, and Mentor Graphics. It 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. 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.

# A Universal Approach

P&E also offers the **USB Multilink Universal FX**, a very high-speed version of the USB Multilink Universal with additional enhancements. These two all-in-one development interfaces give you the choice of prioritizing speed or cost.

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

# Target Architectures

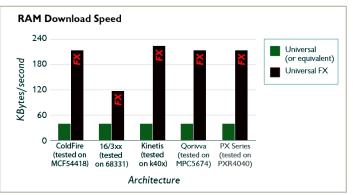
- Kinetis
- · Qorivva MPC55xx/56xx
- · Power Architecture PX Series
- ColdFire + V1/ColdFire V1
- ColdFire V2/3/4
- · HCS08
- RS08
- $\cdot$  HC(S)12(X)
- S12Z
- $\cdot$  DSC

### 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





(c)2011 P&E Microcomputer Systems, Inc. Freescale, CodeWarrior, ColdFire, Qorivva, and Kinetis are registered trademarks of Freescale Semiconductor, Inc.