CYCLONE PRO: The Ultimate Development To Production Tool
Fast & Flexible

Overview

The **Cyclone PRO** is a powerful **stand-alone** in-circuit programmer and debug interface for Freescale's HC08, HCS08, HC(S)12(X), RS08, and ColdFire+/V1 architectures. The Cyclone is able to control a processor using the processor's debug port, which allows the user to quickly debug code and program it onto the microcontroller. Communication with the PC occurs via **Ethernet, USB, or Serial Port**. Once the Cyclone is configured, programming operations may be completed in **one touch** with or without a PC.

The Cyclone's flexibility and intuitive software allow for a seamless transition between **development** and **production** environments. The Cyclone and the target being debugged may be local to the PC or connected remotely via Ethernet. Multiple Cyclones on your network can easily be detected and controlled from the same PC. In addition, the Cyclone PRO has been specifically designed with features like voltage protection technology in order to withstand the rigors of a production environment.

For debugging, prototyping, and other development projects, the Cyclone can be used in **Interactive Mode** as a robust hardware debug interface between the PC and the microcontroller. A header is generally mounted on the microcontroller's PCB which facilitates the **in-circuit** debug and programming. The Cyclone is supported by P&E's development software, **Freescale's Codewarrior**, and other third-party software (available separately).

In **Stand-Alone Mode,** the Cyclone PRO is configured and loaded with one or more programming images. Control of the Cyclone may then be **automated** using a PC (e.g., for large production runs), or the Cyclone can be operated **independently of the PC** (e.g., for field updates). An **LCD screen** facilitates configuration and operation of the unit. The display's menu-based navigation allows the user to easily select the image to be programmed when the Cyclone PRO contains multiple programming images.

More information on the Cyclone PRO is available at **www.pemicro.com**.

Target Architectures

· HC08
· HCS08
· HC(S)12(X)
· RS08
· ColdFire+/V1

Applications

· Production Programming
· Development/Prototyping
· Testing
· Field Maintenence

Hardware Features

· Ethernet, USB, and Serial Communication Interfaces
· Supports extremely fast communication speeds
· LCD Screen
· CompactFlash interface for expanded memory
· Multi-voltage support for targets ranging from 1.8 to 5.5 Volts
· Production environment ready with voltage protection technology
· Allows switching of the target's power supply
· Able to provide power to the target via the debug connection (BDM or MON08)

Flash Programming Highlights

· Supported by Freescale's CodeWarrior, P&E and third-party software (available separately)
· Supports a variety of Freescale architectures
· Highly intuitive, fast in-circuit flash programming
· Capable of programming internal and external flash
· Multiple image support for programming of different images during production runs
· Trimming capabilities
· PC-controlled and stand-alone functions for programming and testing of units on production lines

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