



# CYCLONE MAX: The Ultimate Development To Production Tool

## Fast & Flexible

### Overview

The **Cyclone MAX** is a powerful **stand-alone** in-circuit programmer and debugger for Freescale's high-end architectures. The Cyclone is able to control a processor using the processor's debug port. Communication occurs via **Ethernet, USB, or Serial Port**, allowing the user to quickly debug code and program it onto a microprocessor. Once the Cyclone is configured, programming operations are completed in **one touch**.

The Cyclone's flexibility and intuitive software allows for a seamless transition between **development** and **production** environments. The Cyclone and the target being debugged may be local to the PC or remotely connected via Ethernet. Multiple Cyclones on your network can easily be detected and controlled from the same PC. In addition, the Cyclone MAX 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 communications interface between the PC and the target. Devices can be programmed **in-circuit**, already mounted on a circuit board. The Cyclone is supported by P&E software, Freescale's Codewarrior, and other third-party software (available separately).

In **Stand-Alone Mode**, the Cyclone MAX 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 completely **independent 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 MAX contains multiple programming images.

More information on the Cyclone MAX is available at [www.pemicro.com](http://www.pemicro.com).

### Target Architectures

- ColdFire® V2/V3/V4
- Power® (MPC5xx/8xx)
- Qorivva® (MPC55xx/56xx)
- Kinetis® ARM
- ARM® Nexus (MAC7xxx)

### Applications

- Production Programming
- Development/Prototyping
- Testing
- Field Maintenance

### Hardware Features

- Ethernet, USB, and Serial Communication Interfaces
- Supports extremely fast communications speeds
- LCD Screen
- Compact Flash interface for expanded memory
- Multi-voltage support for targets ranging from 1.8 to 5.5 Volts
- Production environment ready with voltage protection technology

### Flash Programming Highlights

- Supports a variety of 32-bit Freescale architectures
- Highly intuitive, fast in-circuit flash programming
- Capable of programming external flash
- Multiple image support for programming of different images during production runs
- PC-controlled and stand-alone function for programming and testing of units on production lines