



USB  
Connection!

**Real-Time Code Execution and In-Circuit Debugging without Probes—Works with All Packages**

Universal—Supports the Whole HC08 Family

Built-In FLASH Programmer

In-System Programming and Debugging through a MON08-Compatible Interface

Metrowerks' CodeWarrior IDE with Editor, Assembler, C Compiler and Debugger

## inDART-HC08 Series

**In-Circuit Debuggers/  
Programmiers for Freescale  
HC08 Family FLASH Devices**

# inDART-HC08 Series

In-Circuit Debuggers/Programmers for Freescale HC08 Family

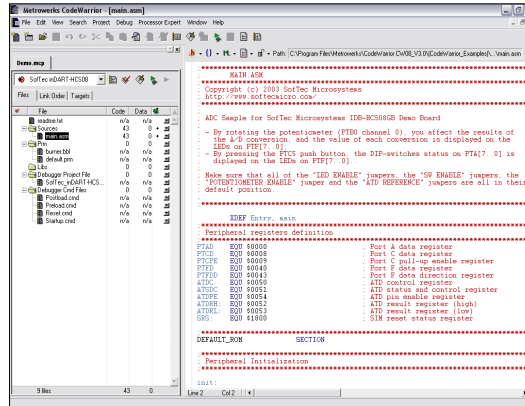


## Overview

inDART-HC08 is a powerful entry-level tool for Freescale HC08-based systems. inDART-HC08 takes advantage of Metrowerks CodeWarrior HC08 Integrated Development Environment and the ISP (In-System Programming) feature to program the FLASH memory of the HC08 family of microcontrollers. Together with CodeWarrior HC08, inDART-HC08 provides you with everything you need to download (program), in-circuit emulate and debug user code. Full speed program execution allows you to perform hardware and software testing in real time. inDART-HC08 is connected to the host PC through a USB port, while the 16-pin connector of the product fits into the target's standard MON08 connector. On Design Kit packages, a full-featured experiment board for a specific HC08 microcontroller is also included.

## CodeWarrior IDE

inDART-HC08 comes with a free version of CodeWarrior Development Studio for HC08 Microcontrollers, Special Edition. The CodeWarrior Development Studio for Freescale HC08 Microcontrollers enables you to build and deploy HC08 systems quickly and easily. This tool suite provides the capabilities required by every engineer in the development cycle, from board bring-up to firmware development to final application development. With a common, project-based, development environment reuse becomes a natural by-product as each team builds on the work already completed by the previous team. CodeWarrior Development Studio for HC08 Microcontrollers, Special Edition,



The CodeWarrior IDE

includes the CodeWarrior integrated development environment (IDE); 16 KB code-size limited C compiler and C source-level debugger; macro assembler and Assembly-level debugger and FLASH programming support. The Special Edition allows you to evaluate CodeWarrior Development Studio for HC08 Microcontrollers at no cost.

## Evaluation Boards

On Design Kit packages, a full-featured, microcontroller-specific experiment board is also included. The demo board can be used for evaluation/experiments in the absence of a target application board. All demo boards feature a ZIF socket for easy microcontroller replacement—demo boards, used in conjunction with inDART-HC08, can be used as programmers.

## Main Features

- In-circuit debugging;
- Real-time code execution;
- Built-in FLASH programmer (with SofTec Microsystems DataBlaze programming utility);
- In-system programming and debugging through a MON08-compatible interface;
- Metrowerks CodeWarrior IDE (the same user interface of all Freescale tools), with editor, assembler, C compiler and debugger.

## Operating Features

- 2.2 to 5.0 V devices supported;
- Working frequency up to the microcontroller's maximum;
- Jumperless hardware mode setting;
- Automatic VTST voltage generation;
- Automatic target baud rate detection;
- Hardware self diagnostic test.

## CodeWarrior IDE

- Editor;
- Assembler;
- C Compiler (16-KB limited);
- Linker;
- Source level and symbolic debugger.

## Debugging Capabilities

- Reset, Start, Stop, Single Step, Step Over, Step Out;
- One hardware breakpoint;
- Watch variables, registers and peripherals.

## Programming Capabilities

- Blank Check/Erase/Program/Read/ Verify FLASH memory;
- Automatic trimming calibration.

## System Requirements

- A 133-MHz (or higher) PC running Windows 98, Me, 2000 or XP;
- 128 MB of RAM plus 600 MB of free HD space;
- A USB port.
- CD-ROM drive for installation.

## Electrical And Physical Specifications

Operating voltage: provided by the USB connector  
Dimensions: 95 x 55 x 15 mm  
Weight: 25 g

Ordering Code (*)	Emulator/Programmer	Evaluation Board	Supported Devices (*)
INDART-HC08/D	●		Whole HC08 FLASH Family
INDART-HC08/AP	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908AP8, AP16, AP32, AP64 (QFP48 Package, ZIF Socket)
INDART-HC08/GP	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908GP32, G78, G116 (QFP44 Package, ZIF Socket)
INDART-HC08/GZ	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908GR4, GR8, GR16, G28, GZ16, GZ32, GZ48, GZ90 (QFP32 Package, ZIF Socket)
INDART-HC08/GZ64	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908GZ32, GZ48, GZ90 (QFP64 Package, ZIF Socket)
INDART-HC08/JK	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908JK1, JK3, JK8 (DIP20 Package, ZIF Socket)
INDART-HC08/JL	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908JL3, JL8 (DIP28 Package, ZIF Socket)
INDART-HC08/QY	●	●	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908QY1, QY2, QY4, QY5, QY8, MC68HLC908QY1, QY2, QY4 (DIP16 Package, ZIF Socket)

\*Note: inDART-HC08 Series models and their respective supported devices listed in this table are updated at February 2005. For the latest news, please visit our website.

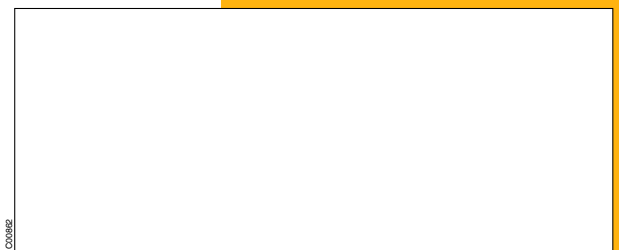


An inDART-HC08 Design Kit Package



Development Tools  
for the Embedded World

Web: <http://www.softecmicro.com>  
E-mail: [info@softecmicro.com](mailto:info@softecmicro.com)



Our Local Partner