





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/
Programmers for Freescale
HC08 Family FLASH Devices

www.softecmicro.com

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,

File Edit Wew Search Protect	t Dahun	Process	or Expect	Window Halo	6
Market Market					
	9.91	M 1		·	
Dema.mca			=:IM	## - () - PL - [] - Part C-Pogan Fier Merowers (Coewanor CW05_V3.0 (Coewanor_Examples) C-Vian as	en -
				MATH ASM	•••
♦ Soffec inDART-HCS08	B &	Ø 🦫	Þ-		***
Filez Link Order Teegetz				Copyright (c) 2003 SofTec Hicrosystems http://www.softecmicro.com/	
File	Code	Data M	- 1	***************************************	•••
a readme fait	rv/a	n/a	회사	ADC Sample for SofTec Microsystems IDS-MCS08GB Demo Board	
⊟ Sources ■ maintenn □ ⊕ Prn	43 43 0	0 -	2 2	 - By rotating the potentioneter (PTBO channel 0), you affect the results of the A/D conversion, and the value of each conversion is displayed on the IEDs on PTB(7,0); 	
burner bbl default pro	n/a n/a	n/a n/a	N N	 By pressing the PTCS push button, the DIP-switches status on PTA[70] is diplayed on the LEDs on PTF[70]. 	
☐ ☐ Debugger Project File ☐ SofTec_inDART HCS	n/a	n/a	n	Nake sure that all of the "IED ENABLE" jumpers, the "SW ENABLE" jumpers, the "POTENTIONETER ENABLE" jumper and the "ATD REFERENCE" jumpers are all in the	e ei
☐ ☐ Debugger Crid Files ☐ Postload and	n/a	0	2	default position.	
Preload and	rv'a	n/a n/a	21		•••
M Startus cred	n/a n/a	n/a n/a	2	EDEF Entry, main	
			- 1	Peripheral registers definition	**
				PTAD EOU 80000 : Port A data register	**
				PTCD EOU 80008 Port C data register	
				PTCPE BOU 80009 : Port C pull-up enable register PTFD BOU 80040 : Port F data register	
				PTFDD EQU \$0043 : Port F data direction register	
				ATSDC E0U 90051 ATD status and control register	
				ATDFE EQU 80054 ATD pin enable register	
				ATDRH: EQU 80052 ATD result register (high) ATDRL: EQU 80053 ATD result register (low)	
				SRS: BUU \$1800 : SIM reset status register	
				;	**
				DEFAULT_RON SECTION	
				Peripheral Initialization	**
				: reriphered initialization	**
			91	init:	
9 Han	43		201	Line 2 Col 2 (4)	

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.

Ordering Code (*)	Emulator/Programmer	Evaluation Board	Supported Devices (1)					
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, GT8, GT16 (QFP44 Package, ZIF Socket)					
INDART-HC08/GZ	•	•	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908GR4, GR8, GR16, GZ8, GZ16, GZ32, GZ48, GZ60 (QFP32 Package, ZIF Socket)					
INDART-HC08/GZ64	•	•	Same as INDART-HC08/D; Evaluation Board Specific for MC68HC908GZ32, GZ48, GZ60 (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)					
Notes in DART HOOP Caring models and their respective augmented devises listed in this table are undeted at Exhaunt 2005. For the latest name places visit our underted								

(1) 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.

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 q



An inDART-HC08 Design Kit Package



Web: http://www.softecmicro.com E-mail: info@softecmicro.com Our Local Partner

www.softecmicro.com