

# CEIBO

## ***inDART-HCS12/DP256***

### **Design Kit for Motorola MC9S12DP (USB)**

- Real-Time Code Execution & In-Circuit Debugging
- Built-In FLASH Programmer
- In-System Programming and Debugging through a BDM-Compatible Interface
- Metrowerks CodeWarrior IDE, with Editor, Assembler, C Compiler and Debugger
- USB Connection to the Host PC
- Evaluation Board with a Sample MC9S12DP256 Microcontroller Included (QFP112 Package)

### **Specifications:**

inDART-HCS12/DP256 is a powerful entry-level Design Kit for Motorola HCS12-based systems. It includes a BDM debugger/programmer and an evaluation board. inDART-HCS12/DP256 takes advantage of Metrowerks CodeWarrior HC(S)12 Integrated Development Environment and the BDM (Background Debug Module) feature to debug the user program. Together with CodeWarrior HC(S)12, inDART-HCS12/DP256 provides you with everything you need to compile, 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-HCS12/DP256 is connected to (and powered by) the host PC through a USB port, while the 6-pin BDM conn

### **Evaluation Board**

inDART-HCS12/DP256 includes a full-featured evaluation board specific for MC9S12DP microcontrollers (a MC9S12DP256 device in QFP112 package is included). The evaluation board includes DIP-switches, jumpers, LEDs, push-buttons, a potentiometer, prototyping area and a standard BDM connector and can be used for evaluation/experiments in the absence of a target application board.

### **Background Debug Module (BDM)**

All MCUs in the HCS12 family contain a single-wire background debug interface which supports in-circuit programming of on-chip non-volatile memory and sophisticated non-intrusive debug capabilities. This system does not interfere with normal application resources. It does not use any user memory or locations in the memory map and does not share any on-chip peripherals. The background debug module (BDM) uses a single-wire communication interface to allow non-intrusive access to target system memory and registers. inDART-HCS12 uses the standard, 6-pin BDM connector defined by Motorola to program and debug the target device.

### **CodeWarrior Integrated Development Environment**

inDART-HCS12 series tools come with (and are seamlessly integrated into) a free version of CodeWarrior Development Studio for HC(S)12 Microcontrollers, Special Edition. The CodeWarrior Development Studio for Motorola HC(S)12 Microcontrollers enables you to build and deploy HCS12 systems quickly and easily. CodeWarrior Development Studio for HC(S)12 Microcontrollers, Special Edition, includes the CodeWarrior integrated development environment (IDE); 12 KB code-size limited C compiler and C source-level debugger; macro assembler and Assembly-level debugger. The Special Edition allows you to evaluate CodeWarrior Development Studio for HC(S)12 Microcontrollers at no cost

### **Supported Devices**

MC9S12DP256