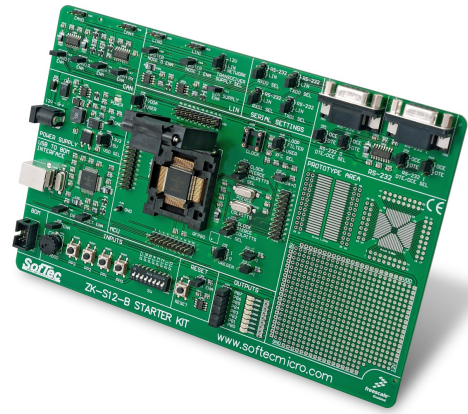# ZK-S12-B

Starter Kit for
Freescale HCS12(X) Family
(80-Pin LQFP ZIF Socket)

The ZK-S12-B Starter Kit is a full-featured, ready-to-use evaluation board for Freescale HCS12(X) microcontrollers. The Starter Kit has been designed for the evaluation and the debugging of user applications. A 80-pin LQFP ZIF (Zero Insertion Force) socket is provided which allows easy microcontroller insertion/extraction—the Starter Kit can be used as a single socket programmer. The Starter Kit takes advantage of CodeWarrior Development Studio Special Edition (which groups an Editor, Assembler, C Compiler and Debugger) and the BDM interface, which allows the download and debug of the user application into the microcontroller's FLASH memory.

Together with CodeWarrior, the Starter Kit provides you with everything you need to write, compile, download, in-circuit emulate and debug user code. Full-speed program execution allows you to perform hardware and software testing in real time. CodeWarrior offers a variety of tools for analyzing the program flow: breakpoints (both simple and complex), real-time memory update and trace buffer. All these features are implemented by taking advantage of the target microcontroller's debug peripheral. The Starter Kit is connected to the host PC through a USB port. The Starter Kit can be used as a standalone application, via its built-in USB-to-BDM bridge, or together with an external debugger through a BDM-compatible connection.

The ZK-S12-B Starter Kit offers you the following benefits:

- 80-pin Yamaichi ZIF socket;
- Real-time code execution/analysis;
- Built-in USB to BDM Interface for in-circuit debugging/programming;
- CAN area with two fault-tolerant CAN transceivers;
- LIN area with two LIN transceivers;
- Demo area with four push-buttons, a potentiometer, eight DIP-switches, eight LEDs and two RS-232 channels;
- DataBlaze programming utility;
- CodeWarrior Development Studio Special Edition, with editor, assembler, C compiler and debugger.

Starter Kit Features

- *LQFP ZIF socket (one or more devices are included);*
- *Built-in USB to BDM interface (USB 2.0);*
- *Header connectors with all microcontroller signals;*
- *Power supply section (3.3 V or 5.0 V);*
- *Two CAN connectors with transceivers (MC33388);*
- *Two LIN connectors with transceivers (MC33661);*
- *Two RS-232 connectors with transceivers;*
- *Eight user DIP-switches;*
- *Eight user LEDs;*
- *Potentiometer for analog input;*
- *Four push-buttons;*
- *Reset supervisor circuitry with push-button;*
- *Prototype area (with thru-hole and SMD area).*

Supported Devices

- *MC9S12A family;*
- *MC9S12B family;*
- *MC9S12C family;*
- *MC9S12D family;*
- *MC9S12DB/DG/DJ family;*
- *MC9S12GC family;*
- *MC9S12KC/KG/KL family;*
- *MC9S12XA/D/DG/DP/DT family (S12X core);*
- *And any future pin-to-pin compatible device.*

Starter Kit Package Contents

- *A full-featured evaluation board;*
- *A USB cable;*
- *A power adapter;*
- *CodeWarrior Development Studio Special Edition CD-ROM;*
- *SofTec Microsystems "System Software" CD-ROM;*
- *"QuickStart Tutorial" color poster;*
- *Printed user's manual.*

Order Code

ZK-S12-B, $395

More information and online ordering at www.softecmicro.com

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