

# CEIBO

## **inDART-STX/LITE0**

### **Design Kit for STMicroelectronics ST7FLITE0 (USB)**

- Real-Time Code Execution Without Probes--Works with All Packages
- Standard Chip Used--No Bondouts, 100% Electrical Characteristics Guaranteed
- Seamlessly Integrates Into your Favorite Development Environment: STMicroelectronics STVD7 or Metrowerks CodeWarrior (Both Are Provided)
- Built-In ISP Programmer
- USB Connection to the PC
- Includes **inDART-STX/D** + Evaluation Board with a Sample ST7FLITE0 Microcontroller (DIP16 Package)

### **Specifications:**

inDART-STX/LITE0 is a Design Kit package which includes the inDART-STX in-circuit debugger/programmer unit plus an evaluation board specific for the ST7FLITE0 microcontroller (in DIP16 package). inDART-STX/LITE0 takes advantage of STMicroelectronics STVD7 (Visual Debug) Integrated Development Environment and the ISP (In-System Programming) feature to program the FLASH memory of the microcontrollers. Together with STVD7, inDART-STX/LITE0 provides users with everything they need to write, compile (evaluation versions of Cosmic and Metrowerks C Compilers are provided), download, in-circuit emulate and debug user code. inDART-STX/LITE0 is also supported by Metrowerks CodeWarrior IDE--an evaluation version of which is provided as well. Full-speed program execution allows users to perform hardware and software testing in real time. inDART-STX/LITE0 is connected to the host PC through an USB port, while the 10-pin probe of the debuggers fit into the target's standard ISP connector. The instrument is powered by the USB bus, so an external power supply is not required.

### **Evaluation Board**

This package includes a full-featured evaluation board specific for the ST7FLITE0 microcontroller (DIP16). The evaluation board includes DIP-switches, jumpers, LEDs, push-buttons, a potentiometer, prototyping area and a standard ISP connector and can be used for evaluation/experiments in the absence of a target application board.

### **The inDART Technology**

Contrariwise to traditional in-circuit emulation (where the target application is executed and emulated inside the emulator), inDART-STX uses the very same target microcontroller to carry on in-circuit execution. This means that all microcontroller's peripherals (timers, A/D converters, I/O pins, etc.) are not reconstructed or simulated by an external device, but are the very same target microcontroller's peripherals. Moreover, the inDART-STX debugging approach ensures that the target microcontroller's electrical characteristics (pull-ups, low-voltage operations, I/O thresholds, etc.) are 100% guaranteed.

### **Design Kit Advantages**

The evaluation boards included in the various Design Kit packages feature a specific microcontroller with the addition of a ready-to-use ISP interface. Just plug the inDART-STX ISP cable into the evaluation board's ISP connector, load the provided sample application into

the user interface and you're ready to work. It's an hassle-free way of immediately working with your target device. Additionally, evaluation boards feature LEDs, push-buttons, DIP-switches, potentiometers and a prototyping area. Of course, the inDART-STX in-circuit debugger/programmer unit included in Design Kit packages is the same unit included in all other packages--it still supports all of the devices of the ST72F FLASH family as well as all of the devices of the ST FIVE 508 FLASH family.

### **ST7 Software Updates**

The System Software CD provided with the instrument contains the STMicroelectronics STVD7 IDE, an evaluation versions of the Cosmic C Compiler and an evaluation version of Metrowerks CodeWarrior for ST7.

### **Programming Library (DLL)**

The optional IPL-ST7 Programming Library is a DLL which includes all of the low-level functions that allow users to set up the instrument and perform, from within their own Windows application, most of the programming commands and functions of the DataBlaze user interface. The IPL-ST7 Programming Library contains C written routines, and can be used to interface the instrument from within, for example, a Microsoft Visual C or Visual Basic application, as well as any other programming language that supports the DLL mechanism. The IPL-ST7 Programming Library can be purchased both as an accessory to every instrument of the inDART-ST7 series and inDART-STX for ST7 series, or separately. Full documentation and examples are included. An USB software protection key is provided with every copy of IPL-ST7: the protection key must be plugged into any USB port on the PC where the library functions of IPL-ST7 are used.

### **Supported Devices**

ST7FLITE05B

ST7FLITE09B