

CEIBO

inDART-STX/D

In-Circuit Debugger/Programmer for STMicroelectronics ST FIVE 508 and ST72F Families (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
- Built-In ISP Programmer
- USB Connection to the PC

Specifications:

inDART-STX/D is a powerful entry-level tool for STMicroelectronics ST FIVE- and ST7- based systems. inDART-STX/D is an in-circuit debugger/programmer which supports all of the devices of the ST72F FLASH family as well as all of the devices of the ST FIVE 508 FLASH family. inDART-STX/D takes advantage of the ISP (In-System Programming) feature to program the FLASH memory of the target microcontrollers. inDART-STX/D seamlessly integrates into your favorite development environment: STMicroelectronics STVD7 and Metrowerks CodeWarrior for ST7 (if you are working with ST7 devices) or STMicroelectronics Visual FIVE and Raisonance RKit-ST5 (if you are working with FIVE devices). All of these development environments are conveniently included with inDART-STX, thus providing you with everything you need to quick-start your projects: you can write, compile (the provided compilers are limited evaluation versions), download (program), in-circuit emulate and debug your code right out of the box. The debugger/programmer unit is connected to the host PC through a USB port, while the 10-pin connector of the product fits into the target's ISP connector.

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.

Program Execution Notes

inDART-STX executes programs in real-time. However, under some circumstances, program execution is not performed in real-time. This happens when working with HDFlash target devices (such as ST72F321, 324, 521, 621, 651, etc.) and one or more breakpoints are set. For detailed information, please refer to the inDART-STX for ST7 user's manual and user's manual addendum.

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.

ST FIVE Software Updates

The System Software CD provided with the instrument contains the STMicroelectronics Visual FIVE IDE and an evaluation versions of the Raisonance RKit-ST5 Development Suite. To get updated versions of these software packages, please refer to the respective websites (<http://www.stmcu.com>)

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.

inDART-STX/D Device List

ST52F500x2
ST52F500x3
ST52F501Lx1
ST52F501Lx2
ST52F501Lx3
ST52F502Lx1
ST52F502Lx2
ST52F502Lx3
ST52F503x2
ST52F503x3
ST52F510x2
ST52F510x3
ST52F513x2
ST52F513x3
ST52F514x1
ST52F514x3
ST72F260G1B
ST72F260G1M
ST72F262G1B
ST72F262G1M
ST72F262G2B
ST72F262G2M
ST72F264G1B
ST72F264G1M
ST72F264G2B
ST72F264G2M

ST72F321AR6T
ST72F321AR7T
ST72F321AR9T
ST72F321J7T
ST72F321J9T
ST72F321M7T
ST72F321M9T
ST72F321R6T
ST72F321R7T
ST72F321R9T
ST72F324J2B
ST72F324J2T
ST72F324J4B
ST72F324J4T
ST72F324J6B
ST72F324J6T
ST72F324K2B
ST72F324K2T
ST72F324K4B
ST72F324K4T
ST72F324K6B
ST72F324K6T
ST72F521AR6T
ST72F521AR7T
ST72F521AR9T
ST72F521M7T

ST72F521M9T
ST72F521R6T

ST72F521R7T
ST72F521R9T
ST72F561J4T
ST72F561J6T
ST72F561J7T
ST72F561K4T
ST72F561K6T
ST72F561R6T
ST72F561R7T
ST72F561R9T
ST72F621J2B
ST72F621J2T
ST72F621J4B
ST72F621J4T
ST72F621K4B
ST72F621L4M
ST72F622K2B
ST72F622L2M
ST72F623F2B
ST72F623F2M
ST72F63BK1B
ST72F63BK1M
ST72F63BK2B
ST72F63BK2M
ST72F63BK4B
ST72F63BK4M
ST72F651AR6T
ST72F651R6T

ST72F652AR4T
ST7FDALIF2M
ST7FLITE05B
ST7FLITE05M
ST7FLITE09B
ST7FLITE09M
ST7FLITE20F2B
ST7FLITE20F2M
ST7FLITE25F2B
ST7FLITE25F2M
ST7FLITE29F2B
ST7FLITE29F2M
ST7FMC2M9T
ST7FMC2N6B
ST7FMC2R6T
ST7FMC2R7T
ST7FMC2S4T
ST7FMC2S5T