

## In-circuit debugging and in-circuit programming tool for ST7

Data Brief

### Features

- In-circuit debugging features:
  - Source level and symbolic debugging
  - Unlimited instruction breakpoints
  - Execution control including instruction stepping
  - Advanced breakpoints on data, access type, access range, stack...(depending on model)
  - Watch variables, registers and peripherals
- In-circuit programming features: Blank check/erase/read/verify for Flash EEPROM memory and option bytes

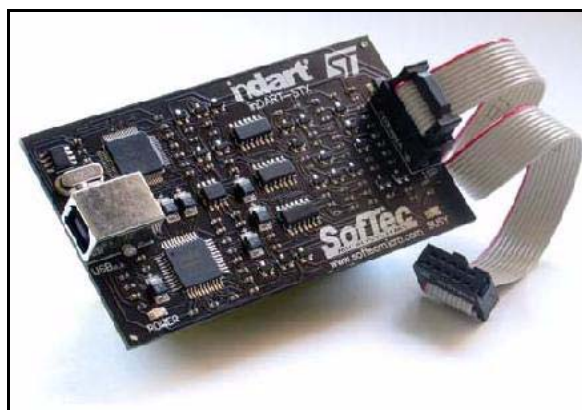
### Description

The inDART is a powerful, low-cost in-circuit debugging (ICD) and in-circuit programming (ICP) tool, developed for ST7 in partnership with Softec Microsystems ([www.softecmicro.com](http://www.softecmicro.com)).

The inDART takes advantage of the ST7 Visual Develop (STVD7) integrated development environment and ST7 in-circuit communication (ICC) capability to deliver ICD and ICP for a wide range of ST7 Flash microcontrollers.

Hardware and software debugging features include real-time code execution, stepping and breakpoints.

The inDART offers parallel or USB connection to the host PC, depending on the model, and 10-pin ICC connection for connecting to evaluation or application board.



The inDART kit contains:

- inDART ICC interface board to connect the host PC to an evaluation or application board
- Evaluation board that includes an ST7 (except for the STXF-INDART)
- inDART edition of the STVD7 integrated development environment

**Table 1. Device summary**

inDART order code	Microcontroller
STXF-INDART/USB	All ST7 Flash MCUs
ST7FLIT0-IND/USB	ST7FLITE0x
ST7FLIT2-IND/USB	ST7FLITE2x
ST7F264-IND/USB	ST72F264
ST7F521-IND/USB	ST72F521
ST7C254-INDART	ST72C104 ST72C215 ST72C216 ST72C254
ST7C334-INDART	ST72C124 ST72C314 ST72C334
ST7FLITE0-INDART	ST7FLITE0x
ST7F264-INDART	ST72F26x

## Ordering information

The following table helps you to determine which inDART is suitable for you.

**Table 2. InDART details**

Microcontroller	inDART	Advanced breakpoints	Real time	Evaluation board (MCU)	Host PC connection
All ST7 Flash MCUs	STXF-INDART/USB	Yes <sup>(1)</sup>	Yes <sup>(2)</sup>		USB
ST7FLITE0x	ST7FLIT0-IND/USB	Yes <sup>(1)</sup>	Yes <sup>(2)</sup>	Yes (ST7FLite09 – DIP16)	USB
ST7FLITE2x	ST7FLIT2-IND/USB	Yes <sup>(1)</sup>	Yes <sup>(2)</sup>	Yes (ST7FLite29 – DIP16)	USB
ST72F264	ST7F264-IND/USB	Yes <sup>(1)</sup>	Yes <sup>(2)</sup>	Yes (ST7F2649 – SDIP32)	USB
ST72F521	ST7F521-IND/USB	Yes <sup>(1)</sup>	Yes <sup>(2)</sup>	Yes (ST7F521 – TQFP64) <sup>(3)</sup>	USB
ST72C104 ST72C215 ST72C216 ST72C254	ST7C254-INDART		Yes	Yes (ST7C254 – SDIP32)	Parallel
ST72C124 ST72C314 ST72C334	ST7C334-INDART		Yes	Yes (ST7C334 – DIP56)	Parallel
ST7FLITE0x	ST7FLITE0-INDART		Yes	Yes (ST7FLite09 – DIP16)	Parallel
ST72F26x	ST7F264-INDART		Yes	Yes (ST7F264 – SDIP32)	Parallel

1. Advanced breakpoints only for MCUs with on-chip debug module
2. Real time, with breakpoint limitation for MCUs without on chip debug modules
3. This evaluation board also supports ST72F32x

## Revision history

**Table 3. Document revision history**

Date	Revision	Changes
01-Feb-2005	1	Initial release.
30-Mar-2009	2	Modified references to inDart-ST7 to inDART, in line with product family name.

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