

## Programming sockets for ST7 microcontrollers

Data Brief

### Features

- ICC interface (HE10 connector) for connection to any ICP capable ST7 development tool
- Supports 3.3V - 5V

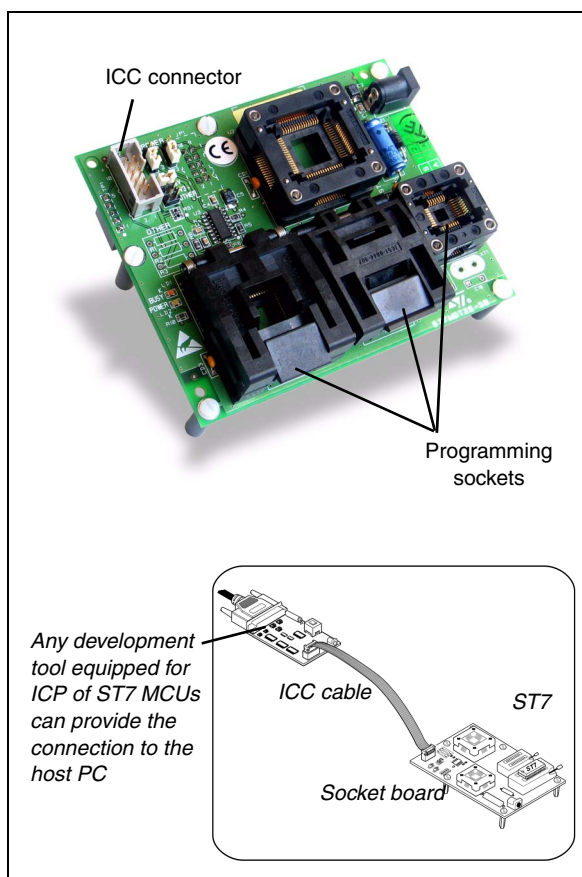
### Description

The ST7-SocketBoards (ST7SBxx) complement all ST7 emulation, in-circuit debugging and programming tools that are equipped for in-circuit programming (ICP) by providing a platform for on-socket programming of ST7 microcontrollers.

The relationship between an ST7-SocketBoard and it's corresponding microcontroller is detailed in [Table 1](#).

**Table 1. Correspondances**

| ST7-SocketBoard | Microcontroller  |
|-----------------|--|
| ST7SB10-SUO     | ST7FLITESx, ST7FLITEUSx, ST7FLITE0x, ST7FL0x, ST7FLITEU0x  |
| ST7SB10-123     | ST7FLITE1x, ST7FLIT1xB, ST7FLITE2x, ST7FLITE3x, ST7FL1x, ST7FL3x, ST7DALI  |
| ST7SB20J        | ST72F32Ax, ST72F321BJx, ST72F321BKx, ST72F321Jx, ST72F324x, ST72F325Cx, ST72F325Jx, ST72F325Kx, ST72F340Kx, ST72F340Sx, ST72F344Kx, ST72F344Sx |
| ST7SB20M        | ST72F321ARx, ST72F321BARx, ST72F321BRx, ST72F321Mx, ST72F321Rx, ST72F325ARx, ST72F521x   |
| ST7SB25         | ST72F361x, ST72F561x   |
| ST7SB40-QP48    | ST72F345Cx   |



The illustration and photo show one example of ST7-SocketBoard. However, programming sockets vary for the different models of socket boards, depending on package types for the ST7 family that they support.

## Using the ST7-SocketBoard

Tools you can use with your ST7-SocketBoard include:

- STX-RLink in-circuit debugger/programmer
- ST7-DVP3 series emulators
- ST7-EMU3 series emulators
- ST7-STICK programmer

Each socket board is designed to furnish all the sockets required to program the microcontrollers in all the package types for specific family or subfamily of ST7 Flash microcontrollers.

Socket boards connect to ICP-capable, ST7 tools via their 10-pin In-Circuit Communication (ICC) connector.

When used with the ST7-STICK, users have the additional possibility of connecting their socket board directly to the ST7-STICK using the female HE10-connector on the bottom of the socket board, eliminating the need for an additional power supply.

## For more information

The microcontroller support site on [www.st.com](http://www.st.com) provides a number of free tool and microcontroller support features including software downloads, on-line product selector, user groups and complete documentation.

The following documents with information relating to this product are available for free download:

- *ST7SB SocketBoard user manual* - Information about setting up the socket board.
- *ST7 Visual Programmer online help* - Information to help you program your application to your ST7 using this Windows-based programming software and an ST7-STICK programmer.
- *ST7 Visual Develop user manual* - Information about programming your ST7 from STVD7.
- *ST7xxx datasheet* - Complete information about the features of your target ST7 microcontroller.

## Ordering information

The ST7-SocketBoards are available from STMicroelectronics' sales offices and distributors. For more information and complete documentation please visit the STMicroelectronics microcontroller support site [www.st.com](http://www.st.com).

**Table 2. Order codes**

| Order code                  | Microcontroller  |
|-----------------------------|--|
| ST7SB10-SUO <sup>(1)</sup>  | ST7FLITESx, T7FLITEUSx, ST7FLITE0x, ST7FL0x, ST7FLITEU0x   |
| ST7SB10-123 <sup>(1)</sup>  | ST7FLITE1x, ST7FLIT1xB, ST7FLITE2x, ST7FLITE3x, ST7FL1x, ST7FL3x, ST7DALI  |
| ST7SB20J <sup>(1)</sup>     | ST72F32Ax, T72F321BJx, ST72F321BKx, T72F321Jx, ST72F324x, ST72F325Cx, ST72F325Jx, ST72F325Kx, ST72F340Kx, ST72F340Sx, ST72F344Kx, ST72F344Sx |
| ST7SB20M <sup>(1)</sup>     | ST72F321ARx, ST72F321BARx, ST72F321BRx, ST72F321Mx, ST72F321Rx, ST72F325ARx, ST72F521x   |
| ST7SB25 <sup>(1)</sup>      | ST72F361x, ST72F561x   |
| ST7SB40-QP48 <sup>(1)</sup> | ST72F345Cx   |

1. Add suffix /US, /EU or /UK for the power supply for your region.

## Revision history

**Table 3. Document revision history**

| Date        | Revision | Changes   |
|-------------|----------|---|
| 24-Jan-2006 | 1        | Initial release.  |
| 6-Sep-2006  | 2        | Updating cover page with new supported microcontrollers and socket boards.                              |
| 31-Oct-2006 | 3        | Removed ST7SB40-QN40 from list of order codes.<br>Added ST7Lxx microcontrollers to list of order codes. |
| 05-Dec-2008 | 4        | Removed ST7SB10-26X, and added ST7FLITEU0x in <a href="#">Table 1</a> and <a href="#">Table 2</a> .     |

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