



## REAL-TIME EMULATOR FOR THE ST6 MCU FAMILY

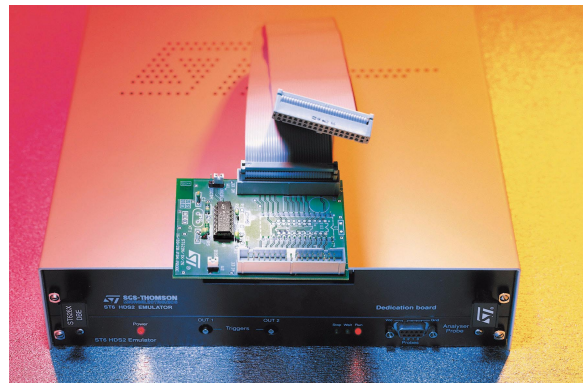
### Hardware Features

- Real time emulation
- 32 Kbytes of emulation memory
- Breakpoint on a single address or on an address range
- Break events can be defined in Program Space or Data space combined with up to 4 external signals
- 2 fully programmable signal outputs for hardware triggering or timing measurements
- Register read/write on-the-fly (without wait states)
- Selective trace in Address Range or Start/Stop mode
- Break on stack overflow
- 1 Kbytes of real trace memory
- Tracing of up to 32 bits including 4 external signals

### Software Features

#### Raisonance IDE and C Compiler (optionally available)

- IDE Interface (Ride) for Windows 95, Windows 98 and Windows NT
- C or assembler source-level debugging



### WGDB6 (Included with ST62xx-EMU2)

- WGDB6 (Windows GNU Debugger for ST6)
- Assembler source-level debugging
- On-line assembler/disassembler
- Log files capable of storing any displayed screen
- Batch execution of debugger commands
- Software breakpoints definable on source or disassembled code, to stop execution when a chosen instruction is reached.
- Memory breakpoints to stop execution when a pre-defined area of memory is accessed and optionally when a hardware-related condition is met.
- Step-by-Step execution on source code and machine code. A function call can optionally be considered as a single instruction, depending on the level of detail required.
- Keeps a trace of memory access during program execution.
- Enables you to view the stack contents.
- Enables you to view and modify the simulated/emulated ST6 memory and register contents.
- Enables you to view and modify data symbol values in real time, that is as your program is running.
- Automatically executes GDB6 command batch files, with or without the WGDB6 graphical interface, at start-up.

Rev. 2.0

### GENERAL DESCRIPTION

The ST6 Real Time Development System is an advanced hardware development system designed and configured to provide comprehensive support for the ST6 family of MCUs.

The ST6-HDS2 emulator is a modular system made up of 2 boards:

- a main board common to all ST6-HDS2 emulators and
- a dedication board (DBE) that is specific to a set of devices.

The ST6GP-DBE offers some additional features not supported by the other dedication boards:

- You can configure the ST6GP-DBE to emulate any of 22 ST6 devices simply by selecting it from a menu
- The entire configuration (device selection, options, clock rate...) is restored automatically each time you load the .HEX file in the debugger.
- LVD emulation
- OSG emulation

This emulator can be driven by the WGDB6 Debugger or by the new Raisonance IDE (Ride) with assembler or C source level debugging. The following functions are not available: time stamp, profiling, code coverage.

#### 3.1 Package Contents

- ST6-HDS2 Emulator
- A set of probes (including SOP adapters)
- Power supply
- Parallel interface cable
- "MCU on CD" CD-ROM
- User manual

#### 3.2 EPROM/OTP programming board (to be purchased separately)

When the code has been debugged using the emulator, a separate programming tool such as the ST6Exx-EPB, ST62xxx-KIT or a third-party programmer is needed to program the device with the INTEL hex format file produced by the linker.

## ORDERING INFORMATION

Sales Type	Description
ST62GP-EMU2	Complete emulator package for including dedication board, all probes and "MCU ON CD" software package). Supported devices: ST620x, ST621x, ST622x, ST6230/32, ST6218/28, ST625x, and ST626x. All packages supported Adapters required for SSOP devices: – 16-pin SSOP adapter: DB381 (ST626x-P/SSOP16) – 28-pin SSOP adapter: DB388 (ST626x-P/SSOP28)
ST62GP-DBE	Separate dedication board for ST620x, ST621x, ST622x, ST6230/32, ST6218/28, ST625x, and ST626x devices with probes.
ST6240B-EMU2	Complete emulator package for ST6240 devices (including dedication board, ST6240 QFP probe and "MCU ON CD" software package)
ST6242B-EMU2	Complete emulator package for ST6242 devices (including dedication board, ST6242 QFP probe and "MCU ON CD" software package)
ST624XB-EMU2	Complete emulator package for ST6246 devices (including dedication board, ST6246 SDIP probe and "MCU ON CD" software package)
ST624XB-DBE	Separate dedication board for ST624x devices
ST6240-P/QFP	Probe for ST6240
ST6242-P/QFP	Probe for ST6242
ST6246-P/QFP	Probe for ST6246
ST6280-EMU2	Complete emulator package for ST6280 devices (including dedication board, ST6280 QFP probe and "MCU ON CD" software package)
ST6285-EMU2	Complete emulator package for ST6285 devices (including dedication board, ST6285 QFP probe and "MCU ON CD" software package)
ST628X-EMU2	Emulator package for ST628X devices, without probes
ST628X-DBE	Separate dedication board for ST628X devices
ST6280-P/QFP	Probe for ST6280
ST6285-P/QFP	Probe for ST6285

**Note:** The emulator power supply operates at 220V or 110V

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