



ST6 Assembler-Linker Toolset (AST6 4.50, LST6 3.40)

1 Preface

1.1 About these release notes

This is Version 1.0 of the release notes for the ST6 Assembler-Linker Toolset (AST6 4.50, LST6 3.40) releases.

1.2 Customer support

For more information on this tool or if you need more help, please contact the nearest sales office, see "Contact List" below.

1.2.1 Software updates

You can get software updates from the ST Internet web site <http://mcu.st.com>. For information on firmware and hardware revisions, call your distributor or ST using the contact list given below.

1.2.2 Contact list

U.S. /Canada

For technical support, the US/Canada is split into 3 territories. According to your area, contact the nearest sales office and ask to be transferred to an 8-bit microcontroller Field Applications Engineer (FAE):

Canada and East coast

STMicroelectronics
Lexington Corporate Center
10 Maguire Road, Building 1, 3rd floor
Lexington, MA 02421
Phone: (781) 402-2650

Mid West

STMicroelectronics
1300 East Whitfield Road, Suite 410
Schaumburg, IL 60173
Phone: (847) 517-1890

West coast

STMicroelectronics, Inc.
30101 Agoura Court
Suite 118
Agora Hills, CA 91301
Phone: (818) 865-6850

Europe

France (33-1) 47407575
Germany (49-89) 460060
U.K. (44-1628) 890800

Japan

(81-3) 3280-4120

Asia/Pacific Region

Hong-Kong (852) 2861 5700
Sydney (61-2) 9580 3811
Taipei (886-2) 2378-8088

2 READ ME FIRST

This chapter describes important information about this release. It is preferable to read it *before* you attempt to install *ST6 Assembler-Linker Toolset*.

2.1 Host PC system requirements

The *ST6 Assembler-Linker Toolset* can be installed on PCs and compatibles running with Windows[®] 95, Windows[®] 98, Windows[®] 2000 or Windows[®] NT[®] 4.0 operating systems.

2.2 Installing the ST6 Assembler-Linker toolset

Your programming system comes with a CD-ROM that contains a number of ST6, ST7 and ST9 software tools. To install and setup the ST6 Assembler-Linker Toolset, follow these steps:

- 1 Insert the "MCU on CD" CD-ROM into your CD-ROM drive. The CD-ROM's autorun feature will open up a welcome screen on your PC. If this autorun feature does not work, use Windows[®] Explorer to browse to the CD-ROM's root folder, and double click on **Welcome.exe**.
- 2 Select **Install Your Development Tools** from the list of options. A new screen will appear listing the different families of STMicroelectronics microcontrollers.
- 3 Use your mouse to select **ST6 Tools**, then **ST Tools** and then the **ST6 Toolchain**.
- 4 The install wizard will be launched. Follow the instructions that appear on the screen.

3 Release information

3.1 Release information for previous releases

3.1.1 ST6 Assembler (AST6)

Releases 4.30 and 4.40

Intermediate releases only—not available to public.

Release 4.20

Bug fixes:

- When compiling large assembly files the error "**47: Out of label space**" occurred in previous versions. This has been corrected.
- The progress bar (star characters) used to signify that assembly is in progress has been suppressed as it generated strange results when using the assembler with certain IDE tools.

Release 4.10

Bug fix:

- A problem existed where the **-D** option didn't work—the second argument was not taken into account. The **-D** option format is as follows:
-D <first argument> <blank> <second argument>
The option works now, providing you must respect the following rule: if the **-D** option has no second argument, the **-D** must be at the end of the line.

Release 4.01

Bug fix:

- Empty segment generated unsuitable error message. It generates now a warning:
"Warning 73: Couldn't find entry for segment '<segment name>' in mapfile <file.map>"

Release 4.0

New features:

- Port Assembler is now a 32-bit application under Windows[®] 95 and Windows[®] NT[®]. Windows[®] 3.11 is no longer supported.
- Addition of the **"-x"** option which allows the generation of the same number of lines as the source file.

Release 3.0

Note: *IMPORTANT INFORMATION: To be able to improve the debugging information reported by the linker LYN, the object code (*.obj) has been changed in version 2.0. As a result, when using this package, always recompile all your assembly files if your assembler has a version earlier than 2.0. Not doing so will produce the following message:*

Lyn : Error 7: Corrupted Object File

New features:

- The assembler now support files larger than 64K characters. The upper limit is 10 Mbytes.

Bug fixes:

- ASM with option **-fi** could produce a listing format with wrong start and end addresses, when the directory path name contained dot character(s) '.', (91).

- When using the option `-fi=<file>.map`, the assembler may fail in the following cases:
 - Some segments are empty (error 73). The workaround is to comment them out.
 - When you try to assemble a file that has not been used for producing the `.map` file error 73 occurs. The workaround is to use the file during the first link.
 - Some EXTERN labels are never used (warning 80). The workaround is to comment them out.

Warnings:

- The Crash-Barrier assembler ASM displays unexpected behavior, when a `#define` is used twice with the same name, but with different values, for example:

```
#define OP1 1
...
#define OP1 4
```

ASM replaces OP1 by 1 in the second `#define`, then replaces all occurrences of 1 by 4!!!.

3.1.2 ST6 LINKER (LST6)

Releases 3.10, 3.20 and 3.30

Intermediate versions not released to public.

Release 3.00

New features:

- Port Linker is now a 32-bit application under Windows[®] 95 and Windows[®] NT[®]. Windows[®] 3.11 is no longer supported.

Bug fix:

- Suppress progress bar: it generated strange characters on `stderr` especially when using the assembler with an IDE tool.

Release 2.00

Code cleanup for Solaris port, ANSI-C use, and DLL alternate implementation.