

NAME

as – NS16000 assembler (nasm when cross-support)

SYNOPSIS

as [**-l**] [**-y**] [**-L**] [**-q**] [**-i**] [**-v**] [**-o** *objfile*] *sourcefile*

nasm [**-l**] [**-y**] [**-L**] [**-q**] [**-i**] [**-v**] [**-o** *objfile*] *sourcefile*

DESCRIPTION

As assembles the named source file, producing a standard object file.

See *GENIX Assembler Reference Manual* for a detailed description of assembler features.

The available flags are:

- l** Produce a listing on standard output, which shows the object code emitted for each source line. If any syntax errors are encountered, then the listing is suppressed and the errors are displayed.
- y** Produce a dump of the symbol table to standard output. The symbols are presented in alphabetical order, with the following information for each symbol: its name; line number defined on; addressing mode (plus zero, one, or two offsets as needed); and a cross-reference listing of line numbers on which the symbol is referenced. If the symbol is undefined, the message “**** undefined ****” is output next to the symbol name in place of other information.
- L** Output defined symbols which begin with an “L” to the object file for the debugger. These symbols are usually discarded to save space in the resultant symbol table.
- q** Put link table relative to the SB register. This speeds up execution time of external calls because link table entries can be referenced as offsets from the SB register, saving a memory reference to a Module Table entry.
- i** Ignore differences in case in user-defined labels or symbols. Either upper or lower case letters may always be used for directives, reserved words, and opcodes. Normally, the assembler distinguishes user-defined labels or symbols that vary only in case.
- v** Use virtual memory for intermediate storage rather than a temporary file.
- o** *objfile*
Leave the output of the assembler on the file *objfile*. If this option is omitted, *a.out* is used.

FILES

a.out	default resultant object file
stab.h	symbol table format
/tmp/lst[123]*	temporary files for listing
/tmp/asm[12]*	temporary files

SEE ALSO

a.out(5), ld(1), nm(1), stab(5)

CROSS-SUPPORT

In a cross-support environment, the NS16000 assembler is called *nasm*, and the default object file is *a16.out*. Also, *nasm* uses /tmp for temporaries, instead of /usr/tmp.

BUGS

Expressions involving floating constants are not allowed.

If a span dependent expression is used as a repeat count, the assembler may give an “attempt to overwrite” error.

The assembler gets into infinite loops when branch instructions have expressions that contain minus signs. Insert “nop” instructions between the symbols whose difference is being compiled.