NAME

as – assembler

SPARC SYNOPSIS

as [**–b**] [**–K PIC**] [**–L**] [**–m**] [**–n**] [**–o** *outfile*] [**–P**] [**–D***name*] [**–D***name=def*] [**–I***path*] [**–U***name* **...**] [**–q**] [**–Q***y* | *n*] [**–s**] [**–S**[*a* | *C*]] [**–T**] [**–V**] [**–xarch=v7**] [**–xarch=v8**] [**–xarch=v8a**] [**–xarch=v8plus**] [**–xarch=v8plusa**] [**–xF**] *filename* ...

x86 SYNOPSIS

as [**–m**] [**–n**] [**–o** *outfile*] [**–P**] [**–D***name*] [**–D***name=def*] [**–I***path*] [**–U***name* **...**] [**–Q***y* | *n*] [**–s**] [**–V**] *filename* ...

AVAILABILITY

SUNWsprot

DESCRIPTION

The **as** command creates object files from assembly language source *files*.

OPTIONS

The following flags may be specified in any order:

–D*name*
–D*name=def* When the **–P** option is in effect, these options are passed to the **cpp**(1) preprocessor without interpretation by the **as** command; otherwise, they are ignored.

–I*path* When the **–P** option is in effect, this option is passed to the **cpp**(1) preprocessor without interpretation by the **as** command; otherwise, it is ignored.

–m Run the **m4**(1) macro processor on the input to the assembler.

–n Suppress all the warnings while assembling.

–o *outfile* Put the output of the assembly in *outfile*. By default, the output file name is formed by removing the **.s** suffix, if there is one, from the input file name and appending a **.o** suffix.

–P Run **cpp**(1), the C preprocessor, on the files being assembled. The preprocessor is run separately on each input file, not on their concatenation. The preprocessor output is passed to the assembler.

–Qy | **n** Produce the "assembler version" information in the comment section of the output object file if the *y* option is specified; if the *n* option is specified, the information is suppressed.

–s Place all stabs in the **.stabs** section. By default, stabs ares placed in **stabs.excl** sections, which are stripped out by the static linker, **ld**(1), during final execution. When the **–s** option is used, stabs remain in the final executable because **.stab** sections are not stripped by the static linker.

3f4–U*name* When the **–P** option is in effect, this option is passed to the **cpp**(1) preprocessor without interpretation by the as command; otherwise, it is ignored.

–V Write the version number of the assembler being run on the standard error output.

SPARC Options

–b Generate extra symbol table information for the Sun SourceBrowser.

–K PIC Generate position-independent code.

–L Save all symbols, including temporary labels that are normally discarded to save space, in the ELF symbol table.

–q Perform a quick assembly. When the –**q** option is used, many error checks are not performed.
Note: This option disables many error checks. It is recommended that you do not use this option to assemble handwritten assembly language.

–S[*a* | *C*] Produce a disassembly of the emitted code to the standard output.
• Adding the character *a* to the option appends a comment line to each assembly code which indicates its relative address in its own section.
• Adding the character *C* to the option prevents comment lines from appearing in the output.

–T This is a migration option for 4.x assembly files to be assembled on 5.x systems. With this option, the symbol names in 4.x assembly files will be interpreted as 5.x symbol names.

–xarch=v7 This option instructs the assembler to accept instructions defined in the SPARC version 7 (V7) architecture. The resulting object code is in ELF format.

–xarch=v8 This option instructs the assembler to accept instructions defined in the SPARC-V8 architecture, less the quad-precision floating-point instructions. The resulting object code is in ELF format.

–xarch=v8a This option instructs the assembler to accept instructions defined in the SPARC-V8 architecture, less the quad-precision floating-point instructions and less the *fsmuld* instruction. The resulting object code is in ELF format. This is the default choice of the -xarch= options.

–xarch=v8plus This option instructs the assembler to accept instructions defined in the SPARC-V9 architecture, less the quad-precision floating-point instructions. The resulting object code is in ELF format. It will not execute on a Solaris V8 system (a machine with a V8 processor). It will execute on a Solaris V8+ system.

–xarch=v8plusa This option instructs the assembler to accept instructions defined in the SPARC-V9 architecture, less the quad-precision floating-point instructions, plus the instructions in the Visual Instruction Set (VIS). The resulting object code is in V8+ ELF format. It will not execute on a Solaris V8 system (a machine with a V8 processor). It will execute on a Solaris V8+ system

–xF Generates additional information for performance analysis of the executable using SPARCworks analyzer. If the input file does not contain any stabs (debugging directives), then the assembler will generate some default stabs which are needed by the SPARCworks analyzer. Also see the manual page **dbx**.

ENVIRONMENT

TMPDIR
as normally creates temporary files in the directory **/tmp**. You may specify another directory by setting the environment variable **TMPDIR** to your chosen directory. (If **TMPDIR** isn't a valid directory, then **as** will use **/tmp**).

FILES

By default, **as** creates its temporary files in **/tmp**.

SEE ALSO

cc(1B), **cpp**(1), **ld**(1), **m4**(1), **nm**(1), **strip**(1), **tmpnam**(3S), **a.out**(4)

NOTES

If the –**m** (invoke the **m4**(1) macro processor) option is used, keywords for **m4**(1) cannot be used as symbols (variables, functions, labels) in the input file since **m4**(1) cannot determine which keywords are assembler symbols and which keywords are real **m4**(1) macros.

Whenever possible, you should access the assembler through a compilation system interface program such as **cc**(1B).

All undefined symbols are treated as global.