

The Level 6 GCOS/BES Macro Preprocessor is a non-overlaid one-pass processor which operates in 8K words of main memory, although up to 64K can be utilized if it is available. The Macro Preprocessor represents a significant enhancement to the program development system which effectively constitutes a separate language processor driven by its own language. It's designed to operate in a stand-alone system environment and is written in the Level 6 GCOS/BES Assembly language for execution on Models 6/36 and 6/34.

The Macro Preprocessor allows the user to define single-line abbreviations (Macro Call) for a group of assembly language statements (macro) and subsequently insert these statements into an assembly language source module. The Macro Preprocessor will accept macros residing as part of the source program, or residing on a disk library file.

The user has the capability of tailoring a macro, before its inclusion as part of the assembly language source module, by the use of the Macro Parameters of a Macro Call. Thirty-five such Macro Parameters are available for each Macro Call. In addition, the macros may contain control statements (Macro Variables) which may be used to modify the macro in which they are contained, or any other macro used in the assembly language source module. These variables are called Local and Global respectively, and 35 of each type is permissible. Other macro control statements permit conditional reordering of the processing sequence of the source lines in the macro expansion. This feature could provide for repetitive selection of some groups of lines and/or selective exclusion of other groups of lines.

A collection of Macro Functions which facilitate operations on source character strings is also available. These functions manipulate macro variables, parameters and other macro functions.

Finally, Macro Calls may be contained within macros. Such calls are said to be *nested*. There is no limit, other than the amount of main storage, on the allowable depth of nesting. A nested Macro Call may call the same macro in which it is contained. Such a call is said to be *recursive*. Depth of recursion also is limited only by available memory.

EQUIPMENT FUNCTIONS

Command input: KSR – operator's console

Source input: diskette

Library input: diskette

Source output: diskette

Fatal error messages: KSR – operator's console

SYSTEM REQUIREMENTS

Minimum equipment required:

- Level 6 CP with 8K words of main memory
- 2 diskette drives or cartridge disk
- System console (KSR) teleprinter, or low-cost Teletype-compatible CRT

Optional Equipment:

- Up to 64K words of main memory
- Additional diskette or cartridge disk drives
- Line or Serial Printer
- Card Reader

Specifications may change as design improvements are introduced.

The Other Computer Company:
Honeywell

HONEYWELL INFORMATION SYSTEMS