SW3101/1 DOMAC Macro Assembler Package

RESUME

Programming of frequently used or performance/speed critical assembly-language procedures and programs is supported by the DOMAC Macro Assembler Package. The assembly language was developed as the systems programming language for the RC3600 Monitor and driver modules to facilitate implementation of a fast, small size system environment. The RC3600 Multiprogramming Utility System forms an efficient basis for well-structured assembly-language program implementation.

Some of the features of the DOMAC Macro Assembler Package are:

- Increased speed and reduced program size compared to high-level language programs.
- Use of assembler-coded procedures in high-level language programs.
- Powerful tools for structured program development, such as DO and BLOCK.
- Listing/source suppression, conditioned assembly.
- Support of various string formats.
- Predefined permanent and semipermanent (user-specified) symbol files.
- Symbolic addressing/identification and external definition blocks.
- Directly loadable relocatable binary output.
- Macro facilities.
- Linkage editor module with linking of relocatable binary modules and/or transformation into absolute binary/core image format, with or without system references.

DESCRIPTION

The DOMAC Macro Assembler Package comprises the DOMAC macro assembler, the DOMUS linkage editor, and a number of standard symboldefinition modules (machine instruction mnemonics, standard permanent symbols, and semipermanent symbols). The user can define his own semipermanent symbol file together with a semipermanent macro definition string file to modify the normal source text interpretation.

The assembler module supports directives for assembly control and storage location allocation for instructions, text strings, and numbers (radix variable). Instructions and data words may refer to storage locations by means of symbolic addresses called identifiers. An identifier may also refer to the value of an expression defined during assembly.

Large programs may be assembled in separate sections (using externals) and linked together by the linkage editor, which will perform any required transformation of the relocatable binary format into absolute binary/core image format.

A standard utility call format is used for the transfer of parameters from the user to the macro assembler/linkage editor to control options, such as the number of passes, module listing, cross-reference output, and output format.

SOFTWARE PREREQUISITES
DOMUS Operating and Utility System Package, SW3001/1.