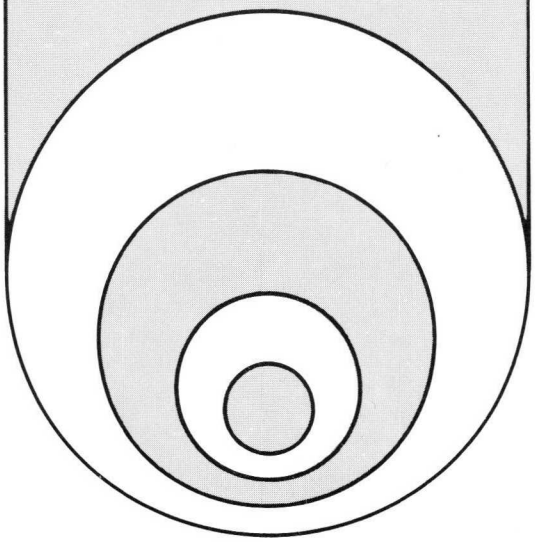
signetics

MICROPROCESSOR



SIMULATOR, VERSION 1.2.....SP53

A new version of the Simulator is available. This version performs the same functions as Version 1.0 (see Simulator Manual) with the following additional features:

1. Hexadecimal Object Module
   The Simulator accepts an object module produced by the Assembler in either decimal or hexadecimal format. The Simulator assumes that the object module is hexadecimal, unless the user specifies a decimal module by adding a fourth parameter, FORMAT, to the "EXECUTE SIMULATOR" command. This command is formatted differently depending upon the computer system on which the Simulator is installed.
2. 8K (8192 bytes) Object Module
   The Simulator reads and executes an object module with up to 8192 bytes.
3. Decimal Input to LIMIT Command
   The LIMIT command expects the number of instructions to be entered in decimal, not hexadecimal. Thus, a "LIMIT 40" command causes the program to execute 40_{10} not 64_{10} instruction. All other commands still expect their input parameters to be in hexadecimal.
4. Stack Wraparound Notification
   Whenever a RETC or a RETE is executed with the stack pointer equal to 0 or whenever a branch to subroutine instruction is executed with the stack pointer equal to 7, the Simulator prints the following message:

   STACK WRAPAROUND, IAR=XXXX

   Where XXXX identifies the address at which the wraparound occurred.
5. Termination Messages
   The Simulator prints a message for every kind of program termination:

TYPE OF TERMINATION	SIMULATOR RESPONSE
1. STOP. command	A trace of the last instruction executed is printed.
2. HALT instruction	A trace of the last instruction executed is printed.
3. LIMIT command	"LIMIT REACHED=XXXX, IAR=XXXX" is printed. A trace of the last instruction executed is printed.
4. Attempt to access area outside of memory	"ADDRESS OUT OF RANGE, IAR=XXXX" is printed. A trace of the last instruction executed is printed.
5. Attempt to execute instruction outside of memory	"IAR EXCEEDS MEMORY, IAR=XXXX" is printed.

6. Simulator Version Notification
   The simulator prints the following message whenever it starts to execute a program:

   2650 SM 1000 "PIPSIM" VERSION X.X

   X.X identifies the version of the simulator currently executing.