

Using CP/M under SIMH (altairz80) for Program Development

- 1) Create and edit assembly language source files using NotePad. Source files must be in the same directory as the altairz80.exe executable.
- 2) Double-click altairz80.exe to run it. Type “do cpm.txt” at the sim> prompt to execute the command file and boot Altair CP/M.

```
Altair 8800 (Z80) simulator V3.9-0 build 1000 (scp created Jan 29
2013 at 22:05:
09 with gcc 4.6.2)
```

```
sim> do cpm.txt
256 bytes [1 page] loaded at ff00 [ROM].
```

```
63K CP/M
Version 2.2mits (07/28/80)
Copyright 1980 by Burcon Inc.
```

```
A>
```

- 3) The CP/M programs R.COM and W.COM can be used to read files from the PC into the CP/M file system and write files from CP/M to the PC. For example, to read the file TEST.ASM from the PC into the CP/M file system:

```
A>r test.asm
```

```
READ V-2.24 (12-Jun-10) SIMH Interface V004
Read from "TEST.ASM" and write to "TEST.ASM".
3.75kB written.
```

```
A>
```

- 4) Standard CP/M development tools like ASM, MAC, LOAD (from Digital Research), as well as M80 and L80 from Microsoft are on the disk.
- 5) A CP/M batch file, ASM.SUB is available to simplify assembly using the ASM assembler. This batch file reads the specified source file from the PC, assembles it, then writes the .hex and .prn file back to the PC. For example, to assemble the program TEST.ASM using the batch file, type:

```
A>do asm test
```

- 6) To exit SIMH, type ctrl-e to return to the “sim>” prompt, then type “bye”.

Note: Other Altair disk images (including BASIC, Altair DOS, etc.) can be run under SIMH by editing the cpm.txt command file (or creating a new command file). Change the name of the disk image file name on the “attach” line to specify a different disk image file. Additional drives can be added as dsk1, dsk2, etc.