APPLICATION NOTE 11

Configuring Your PC for Optimal Speed with MMICAD

As many microwave designers are not necessarily "computer gurus", this application note will assist the MMICAD user with obtaining the optimal computer configuration.

Modifications to CONFIG.SYS

Using the MMICAD text editor, you should modify CONFIG.SYS to have the following lines at the beginning of the file:

```
(1)   DEVICE=C:\DOS\HIMEM.SYS
(2)   DOS=HIGH
(3)   DEVICE=C:\DOS\RAMDRIVE.SYS 2048 /E
(4)   DEVICE=C:\DOS\SMARTDRV.SYS 2048 /E
(5)   SHELL=C:\DOS\COMMAND.COM C:\DOS\ /e:3000 /p
(6)   FILES=40
(7)   BUFFERS=30
```

Explanation:

Line (1) will install the high memory driver needed by DOS to control extended memory.

Line (2) will install DOS in high memory, freeing more memory for use by MMICAD (DOS 5.0 or later).

Line (3) will install a 2 MByte RAMDRIVE in extended memory for use by MMICAD. The RAMDRIVE letter will be the letter after the last logical drive in your system (i.e. if you have a physical hard drive partitioned into drives C: and D:, RAMDRIVE.SYS will create a drive with a drive letter E: in extended memory).

Line (4) will create a 2 MByte DOS disk cache (to speed up disk operations).

Line (5) will increase the area that DOS uses for environment variables to 3000 bytes.

Line (6) will allow up to 40 files to be open at one time.

Line (7) will allocate 30 hard drive buffers for use by DOS.

Important

Expanded memory drivers (like EMM386.EXE provided by DOS 5.0) are not recommended for use by MMICAD (or any other software that uses floating point mathematics extensively). Many of these drivers interrupt program requests for floating point math and slow down your computer considerably. If you have a line in your CONFIG.SYS that installs an expanded memory driver, carefully consider your need for expanded memory.

Modification to AUTOEXEC.BAT

An environment variable called **MMICADTEMP** is used to specify the location of the directory where temporary files used by MMICAD will be written. This allows users to specify the location of their temporary directory, and supports operation of MMICAD on a Local Area Network (LAN). If **MMICADTEMP** is not set, the \MMICAD directory will be used for temporary file storage.

Usage:

SET MMICADTEMP = directory name

where: directory name is a valid directory on your network

This SET command may either be included in the AUTOEXEC.BAT batch file or typed at the DOS prompt before starting MMICAD.

Examples:

1. **SET MMICADTEMP = C:\MMICAD\TEMP**
   (This will define the C:\MMICAD\TEMP directory as the temporary file storage directory.)

2. **SET MMICADTEMP = F:**
   (This will define the root directory of drive F for temporary file storage. If drive F is a RAM DRIVE, the operation of MMICAD will speed up considerably.)

3. **SET MMICADTEMP = \USER\JEFF**
(This will define the \USER\JEFF directory of the current drive as the working directory.)

Important

To speed up the operation of MMICAD, option 2 above should be typed into your AUTOEXEC.BAT file.