# Importing AutoCAD dxf's into OrCAD.

OrCAD is very sensitive on the names of the layers that it allows for imports. A file called maxdxf.ini, found in the OrCAD subdirectory, tells OrCAD what the name of the layers are expected during the import. Through some modification of this file and complete layer name changing within AutoCAD should allow a translation from an AutoCAD dxf file directly into an OrCAD max file.

First step is to explode the entire AutoCAD drawing. This can be done by highlighting the entire layout and then hit 'x' and then the spacebar. OrCAD does not import blocks very well so all drawings need to be broken down into small sections.

You will need to open up the maxdxf.ini file and make some modifications to allow ease of importing. The file can most likely be found in the folder...

#### C:\OrCAD\OrCAD\_xx.x \tools\layout

Within this folder you will find the maxdxf.ini folder. Open it up using a text editor, Word or some other means.

Scroll down the document until you come to

```
COMP_NAME= U1COMP_ORIGIN= 0,0COMP_PADS_TOP= COMP_PADS_TOP_LAYERCOMP_PADS_BOT= COMP_PADS_BOT_LAYERCOMP_PADS_BOT= COMP_PADS_BOT_LAYERCOMP_PADS_THRU= COMP_PADS_ALL_LAYERS; THRU hole pads on all copper layers
```

You will need to comment out the comp rows with a semicolon. This is done by simply putting one semicolon at the beginning of each line. You are simply telling OrCAD this section is just a bunch of comments or notes rather than effective code.

Now scroll all the way to the bottom. You will see something similar to...

### ASYBOT = UNMAPPED\_AUTOCAD\_LAYERS

There is a quick description right above it that tells you why this comment is here. It's used for any layers that were not called out. You are welcome to leave it in or comment it out. If you comment it out, some of the layers will not be imported that are not specifically called out.

Scroll back up almost to the top of the file. The first blocked section is bracketed and named [LAYER]. Since AutoCAD has a default layer '0', rename the **GLOBAL\_LAYER** to '0'.

It should look something like this:

### [LAYER]

GLOBAL	LAYER = 0
ТОР	= TOP
BOTTOM	= BOTTOM
GND	= GND
INNER	= INNER
PLANE	= PLANE
POWER	= POWER
INNER1	= INNER1
INNER2	= INNER2
INNER3	= INNER3
INNER4	= INNER4
INNER5	= INNER5
INNER6	= INNER6
INNER7	= INNER7
INNER8	= INNER8
INNER9	= INNER9

INNER10	= INNER10
INNER11	= INNER11
INNER12	= INNER12
INNER13	= INNER13
INNER14	= INNER14
INNER15	= INNER15
INNER16	= INNER16
SMTOP	= SMTOP
SMBOT	= SMBOT
SPTOP	= SPTOP
SPBOT	= SPBOT
SSTOP	= SSTOP
SSBOT	= SSBOT
ASYTOP	= ASYTOP
ASYBOT	= ASYBOT
DRLDWG	= DRLDWG
DRILL	= DRILL
FABDWG	= FABDWG
РНОТО	= PHOTO
HOLES	= HOLES

Save and close the file.

Now go back into AutoCAD with the dxf file you wish to use open. Using the pull down menu...

Format... Layer....

You'll now see a list of your layers for your design. The names listed will need to be changed to exactly match the maxdxf.ini files listed above. You can modify the layer names by clicking once to highlight it and then once again for modification. Do this one by one for all the layers in the design similar to the figure below. Please note that sometimes the layers you want to change are not in the list. You can simply name the layer any name from the list and then change it in OrCAD. For example, you can name the soldermask layer HOLES for the import and then change it back. You just want to abide by the import list for now.

Show: All		•	Cur	rent:	0		
Name O Asytop Board_outline Eottom Drill Drill Grid Inner Inner Inner2	0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		F		Continuous	<b>•</b>	New Delete
Details Name: Bott Color: S Linetype:	om «/hite —— Continuous o xref-dependent I	▼ ▼ ayers		Dn Freeze ii Freeze ii Freeze ii Lock	n all viewports n current viewport n new viewports		

Once all the layer names are changed and match the names in the maxdxf.ini list above, you will need to export the dxf.

File...

Export..

Select the dxf in AutoCAD 14 format

Browse to the location where you want to place it

Type in the name you want to call it ..

Save.

You can now import this dxf into OrCAD.

From OrCAD,

File.. Import... DXF to Layout..

Browse to find the dxf you just saved.

Select the file and depress the 'Translate' button.

It should take a short period of time and then display something similar to...

## MAXDXF Version 10.0.0 Copyright 1985-2003 Cadence Design Systems, Inc.

#### Translate time 2 seconds

That completes the conversion from a dxf to OrCAD.

Note: If you received errors at the end stating something to the effect that the entities on AutoCAD layer xxxx were discarded, it most likely is because you chose to comment out the ASYTOP line at the bottom of the maxdxf.ini file and did not change ALL the layers to appropriate OrCAD names. Go back and modify all the AutoCAD names or uncomment out the last line of the maxdxf.ini file.