

AsPacker Basic Demo

This demo will show you the basic steps from importing a Pinlist file to the Fanout. The Pinlist file defines the die and all the pads on the die. See the PinList File Format documentation for more details. Below is the actual Demo.kmd file, which can be executed from the Command line in the main window. The basic steps in building a project are:

1. Loading a Pinlist.
2. Setting up the program options.
3. Defining the Tier structure.
4. Defining the Die Attach Pad.
5. Assigning Substrate Bond Pads to Tiers.
6. Setting up the Fanout parameters and executing the Fanout.

A 1 second wait has been inserted between each step. This wait can be eliminated by executing the wait=false command at the command line. Turned on again by executing a wait=true command.

For more information you can view:

- Pinlist File Format
- LIQ File Format
- Command Set Format
- Screen Shots (*Gives detailed descriptions of all the controls and menu items*)
- Demo kmd files

Note: When the program is first run it will search your hard drive for Excel and either WinWord or WordPad. These files are required if you want to export a design to either Excel or a Word. This may take a few minutes depending on the size of your hard drive.

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Run=Demo.kmd

```
New
wait=1
LoadPinlist=Demo.pinlist
wait=1
Run=OptionsSetup.kmd
wait=1
Run=TiersSetup.kmd
wait=1
Run=DieAttachSetup.kmd
wait=1
Run=TierAssignmentSetup.kmd
wait=1
Run=Fanout.kmd
wait=1
SaveProject=Demo.prj
```

To see what is being executed in each kmd script see the listing below which is the log file generated from running the demo.kmd script. All .log files are kmd files and can be saved, edited and rerun for common tasks that are repeated. Kmd scripts can also be nested to any depth. The syntax for the commands can be found in the Command Set Format documentation. As the scripts are executed there is a comment line added to the log file indicating which script is being executed. E.g. *****Run optionssetup.kmd**. When the script is completed another comment is added *****End Run**. The listings in-between the Run and End is what is in the command file. Comments are designated by an “*” at the beginning of a line.

```
New
LoadPinlist=Demo.pinlist
SaveProject=Demo.prj
*
```

***Run OptionsSetup.kmd

```
FillPads=True
PadText=True
Wires=True
DieAttach=True
ToolTips=True
DieOnly=False
DieOrigin=Center
MouseWheel=False
***End Run
*
```

*****Run TiersSetup.kmd**

TierProproperties
TierTab=1
TierActive=1 True
TierDistance=1 500.000
TierShape=1 Flat
TierBulge=1 100.000
TierType=1 Ground
SBPOrient=1 Angle
SBPEndCap=1 Flat
SBPWidth=1 100.000
SBPHeight=1 100.000
WW=1 25.400
W2W=1 50.000
W2P=1 50.000
P2P=1 100.000
MaxWireLength=1 6350.000
MaxWireAngle=1 45.000
*
TierTab=2
TierActive=2 True
TierDistance=2 800.000
TierStyle=2 Ring
TierShape=2 Flat
TierBulge=2 100.000
TierType=2 Power
SBPOrient=2 Angle
SBPEndCap=2 Flat
SBPWidth=2 100.000
SBPHeight=2 100.000
WW=2 25.400
W2W=2 50.000
W2P=2 50.000
P2P=2 100.000
MaxWireLength=2 6350.000
MaxWireAngle=2 45.000
*
TierTab=3
TierActive=3 True
TierDistance=3 1100.000
TierStyle=3 Guide
TierShape=3 Arc
TierBulge=3 100.000

TierType=3 Signal
SBPOrient=3 Angle
SBPEndCap=3 Round
SBPWidth=3 100.000
SBPHeight=3 200.000
WW=3 25.400
W2W=3 50.000
W2P=3 50.000
P2P=3 100.000
MaxWireLength=3 6350.000
MaxWireAngle=3 45.000
*
TierTab=4
TierActive=4 True
TierDistance=4 1500.000
TierStyle=4 Guide
TierShape=4 Arc
TierBulge=4 100.000
TierType=4 Signal
SBPOrient=4 Angle
SBPEndCap=4 Round
SBPWidth=4 100.000
SBPHeight=4 200.000
WW=4 25.400
W2W=4 50.000
W2P=4 50.000
P2P=4 100.000
MaxWireLength=4 6350.000
MaxWireAngle=4 45.000
TierOK
***End Run
*

*****Run DieAttachSetup.kmd**

AttachTool
AttachStyle=Hatch
AttachHatchRows=3
AttachHatchColumns=3
AttachHatchWidth=100.000
AttachMargin=0.000
AttachPoint=Both
AttachPointWidth=100.000
AttachPointCount=3
AttachPointStyle=Radial

AttachOK
***End Run
*

*****Run TierAssignmentSetup.kmd**

AssignApply
AssignAutoApply=False
AssignBy=Net
AssignToTier=1 Net VSS
*AssignApply
AssignToTier=2 Net VDD
*AssignApply
*AssignBy=Pin
AssignSelectAll
*AssignBy=Pin
AssignSplit= Split
AssignToTier=3 Pin 2 4 6 9 12 14 16 18 21 23 26 28 30 32 35 38 40 42 44 47 50 52 54
58 60 62 64 68 70 72 76
*AssignApply
AssignToTier=4 Pin 3 5 8 10 13 15 17 19 22 24 27 29 31 34 36 39 41 43 46 48 51 53 55
59 61 63 67 69 71 75 1
*AssignApply
AssignOK
***End Run
*

*****Run Fanout.kmd**

FanoutTool
FanoutClearBefore=True
FanoutCenterGroups=True
FanoutKeepGroups=True
FanoutPushPull=True
FanoutLeft=True
FanoutBottom=True
FanoutRight=True
FanoutTop=True
Fanout=All
FanoutKeepOrder=True
FanoutKeepEdges=True
FanoutEffort=10
FanoutOverRun=15
FanoutPrecision=3

FanoutExecute
FanoutCancel
***End Run

SaveProject=Demo.prj