Command Set Format

Table of Contents

File Menu

"New"

New

Clears the data base in preperation for a new design.

Load:

"LoadProject", "LoadPro", "OpenProject", "OpenPro"

LoadProject=FilePath\fileName

Without a file path will open a dialog box to select the .prj to be loaded.

LoadProject=A0.prj

Will open a dialog box to select the path to the .prj file.

LoadProject=C:\ProjectPath\A0.prj

Will open or load the project specified in the command.

LoadProject=(1:4)

Will load a project from the saved project list 1 :4.

"LoadPinlist"

LoadPinlist=filePath\FileName

Without a file path will open a dialog box to select the .pinlist to be loaded.

LoadPinlist=A0

.pinlist is appended to the end of the mane and if the file exists in the Application path it will be loaded. If not a dialog box is opened to select the path to the .pinlist file.

LoadPinlist=A0.pinlist

If the file exists in the Application path it will be loaded. If not a dialog box is opened to select the path to the .pinlist file.

LoadPinlist=C:\PinlistPath\A0.pinlist

Will load a pinlist specified in the command.

Loads a pinlist into a project. If a pronect does not exist you will be prompted to save a project. If no project is selected than a default "TEMP.prj" file will be created. If multiple .pinlist files are loaded only the first one will generate create a .prj file.

"LoadLIQ"

LoadLIQ=FilePath\FileName

Load the specified LIQ file into a project. This will create a new project and open the File Open Dialog box for file selection. At the command line it will use the tail of the command as the FilePath\FileName. The LIQ file contains all the information to recreate a project form a previously saved LIQ file.

"LoadDefault"

LoadDefault

Without a file path will look for the file "Default.def" in the Appplication path and load it. This file is included in the install list as a default default file.

LoadDefault=My.def

If a file name is given and no path than the Current project path is used to locate the path of the default file.

LoadDefault=C:\DefaultFilePath\MyDefault.def

If a full path is specified than the default file will be loaded from the path specified.

Save:

"SaveProject", "SavePro"

SaveProject

Without a name the current project will be overwritten with the current project changes.

SaveProject=A1

If just the name is given than the current path is used and .prj is appended to the name.

SaveProject=A1.prj

If the full name is given but no path than the current priject path is used to save the project.

SaveProject=C:\ProjectPath\Name.prj

The full path is used to save the project.

"SavePinlist"

SavePinlist

Note: if multiple pinlists are loaded the pinlist number must be specified (1:4)

SavePinlist=1

Without any filename the current component is used as the name with .pinlist appended to it and saved in the current project path.

SavePinlist=2 A2

Will append .pinlist to the name and save the pinlist to the current project path.

SavePinlist=3 A2.pinlist

Well save the pinlist to the current project path.

SavePinlist=4 C:\PinlistPath\pinfile.pinlist.

Will save the pinlist to the specified path using the specified name.

"SaveLIQ"

SaveLIQ

Without any filename the current component is used as the name with .liq appended to it and saved in the current project path.

SaveLIQ=A2

Will append .liq to the name and save the LIQ file to the current project path.

SaveLIQ=A2.liq

Well save the LIQ file to the current project path.

SaveLIQ=C:\LIQPath\pinfile.liq.

Will save the LIQ file to the specified path using the specified name.


"SaveDefault"
SaveDefault
If no path or file name given than the default settings are save to the Application path as Default.def.
SaveDefult=NewDefaults
Will append .def to the file name and save the file in the current project path.
Save Default=NewDefault.def
Will save the file in the specified path using the specified name.


"SaveWirelist"
SaveWirelist
With no parameters the wirelist will be saved as the current project name with the extension .wrl in the current project directory.
SaveWirelist=AB
Will append .wrl to the name and save it in the current project path.
SaveWirelist=AB.wrl
Will save the wirelist in the current project path.
SaveWirelist=C:\WireListPath\NewName.wrl
Will save the wirelist in the specified path using the specified name.


Export:
"ExportDieToExcel"
ExportDieToExcel
Exports the die pad information to Excel for viewing and editing.


"ExportSBPsToExcel"
ExportSBPsToExcel
Exports all the SBPs in the project to Excel for viewing and limited editing.


"ExportDieToWord"
ExportDieToWord
Exports the die pad information to Word for viewing and editing.


"ExportSBPsToWord"
ExportSBPsToWord
Exports all the SBPs in the project to Word for viewing and limited editing.


"ExportLIQ"
ExportLIQ=FilePath\FileName

Exports a short format of the LIQ file with no project setup information in it. The items to export are selectable in the ExportLIQShort fialog box. The items include CBPs, SBPs, Wires, Rings, Die Attach Pad. This short format can then be read back into the tool but only the die and diepad information can be read back. This process also creates a new project line the Open LIQ command.

"ExportDXF"
ExportDXF
Opens the ExporDXF dialog box.
ExportDXF=FilePath\FileName
Exports the DXF file to the specified file path. If only the file name is included than the current work path is used to the export directory.

"ExportDXFCancel"
ExportDXFCancel
Closes the ExportDXF dialog box.

Import:
"ImportDieFromExcel"
ImportDieFromExcel=FilePath\FileName
Imports the die pad imformation from Excel. This is usually a saved version that was previously exported to Excel and modified in Excel.

"ImportSBPsFromExcel"
ImportSBPsFromExcel=Filepath\FileName
Imports the SBPs imformation from Excel. This is usually a saved version that was previously exported to Excel and modified in Excel.

"ImportDieFromWord"
ImportDieFromWord=FielPath\FileName
Imports the die pad imformation from Word. This is usually a saved version that was previously exported to Wordl and modified in Word.

"ImportSBPsFromWord"
ImportSBPsFromWord=Filepath\FileName
Imports the SBPs imformation from Word. This is usually a saved version that was previously exported to Word and modified in Word.

"ImportLIQ"
ImportLIQ=FilePath\FileName

Imports the short format LIQ file. This will create a new project and save it as TEMP.prj. Only the die and diepad information is extracted. All other geometries are discarded since they depend on setup properties not contained in this file.


“PageSetup”
PageSetup
Opens the printer page setup dialog box.


“Print”
Print=ToPrinter
Sends the screen image and die data to the printer.


Print=ToFile
Sends the screen image and die data to a file. The name of the file is the project name and is placed in the project directory as a Rich Text File (.rtf).

Print=ToView
Sends the screen image and die data to a file. The name of the file is the project name and is placed in the project directory as a Rich Text File (.rtf). This file is then loaded into the File Viewer.


“EditFile”
EditFile=FilePath\FileName
Opens the file open dialog box and loads the selected file into Word for viewing and editing. This is normally a .kmd file derived from a .log file.


"ProgramExit", "Exit"
Exit
Terminates the program.

OptionsMenu

"FillPads", "Fill"
FillPads=True / False
If checked the CBPs are displayed with filled color. Red = Power, Green = Ground and Blue = Signal. Otherwise only the pad color outlines are displayed.
FillPads
With no parameters this command will toggle the current state of the control.

"PadText", "PinText", "Text"
PadText=True / False

If checked the text for the CBPs and SBPs is displayed.
PadText
With no parameters this command will toggle the current state of the control.

"Wires"
Wires=True / False
If checked the wires are displayed.
Wires
With no parameters this command will toggle the current state of the control.

"Attach", "DieAttach", "DieAttachPad"
DieAttach=True / False
If checked the die attach pad is displayed.
DieAttach
With no parameters this command will toggle the current state of the control.

"Tips", "ToolTips"
ToolTips=True / False
If checked the tool tips are displayed.
ToolTips
With no parameters this command will toggle the current state of the control.

"Die", "DieOnly"
DieOnly=True / False
If checked the only the die will be displayed.
DieOnly
With no parameters this command will toggle the current state of the control.

"Origin", "DieOrigin"
DieOrigin=Center / LLC
If checked, the coordinate system (0:0) is located at the center of the die otherwise it is located at the Lower Left Corner.
DieOrigin
With no parameters this command will toggle the current state of the control.

“MouseWheel”
MouseWheel=True/false
If checked than the direction of the mouse zoom is reversed.

"Cancel", "Esc", "Escape"
Cancel
Ends the current edit secession and returns to the select mode.


Properties Menu

“DefaultProperties”

DefaultProperties
Opens the Defaults properties dialog box.

“ProjectProperties”

ProjectProperties
Opens the Project/Die properties dialog box.

“TiersProperties”

TiersProperties
Opens the Tiers properties dialpg box.

“PadProperties”

PadProperties
Opens the CBPs, SBPs, and Wires properties diealog box

Tools Menu

“AttachTool”

AttachTool
Opens the Die Attach tool.

“AssignTool”

AssignTool
Opens the Tier Assignment tool

“Measure”

Measure
Enables the ruler to do point to point measurements. This is done by clicking on a point as the start point and then moving the mouse. As the mouse moves the status bar at the bottom of the screen is updated with X and Y information as well as distance.

“FanoutTool”

FanoutTool
Opens the Fanout tool.

“SelectTool”
SelectTool
Opens the Select tool.


“SplitCBP”
SplitCBP
Opens the Split CBP Manager tool.

3D:


“3DWBSU”
3DWBSU
Opens the 3D Wire Bond Setup dialog box.


“3DMaterial”
3Dmaterial=Al / Cu / Au
Used to select the metal type of bond wire. Used in the LR Estimator.

“3DDiameter”
3Ddiameter=0.5 / 0.7 / 0.8 / 1.0 / 1.25 / 1.5 / Custom
Sets the diameter of the bond wire. Used in the LR Estimator. If Custom than the values is user defined.

“3DDiameterValue”
3DdiameterValue=n.nnn
Sets the diameter of the bond wire if Custom is selected.

“3DFrequency”
3DFrequency=hz / Khz / Mhz / Ghz
Sets the frequency multiplier. Used in the LR Estimator.

“3DFrequencyValue”
3DFrequencyValue=n.nnn
Sets the frequency of the clock using the multiplier. Used in the LR Estimator.

“3DBaseLoopHeight”
3DBaseLoopHeight=Default / Custom
Sets the height of the base die wire bond loop. If Default is selected the height is based on the Default to value. If custom is selected than the value is user defined. Used in the LR Estimator and 3Dviewer.

“3DBaseLoopHeightValue”
3DBaseLoopHeightValue=n.nnn
Sets the height of the base die wire bond loop if custom is selected.

“3DBaseExtension”
3DBaseExtension=Default / Custom
Sets the horizontal extension of the base die wire bond loop. If Default is selected the extension is based on the Default to value. If custom is selected than the value is user defined. Used in the LR Estimator and 3Dviewer.

“3DBaseExtensionValue”
3DBaseExtensionValue=n.nnn
Sets the horizontal extension of the base die wire bond loop if custom is selected.

“3DStackLoopHeight”
3DStackLoopHeight=Default / Custom
Sets the height of the stack die wire bond loop. If Default is selected the height is based on the Default to value. If custom is selected than the value is user defined. Used in the LR Estimator and 3Dviewer.

“3DStackLoopHeightValue”
3DStackLoopHeightValue=n.nnn
Sets the height of the stack die wire bond loop if custom is selected.

“3DStackExtension”
3DStackExtension=Default / Custom /BaseDieEdge
Sets the horizontal extension of the die wire bond loop. If Default is selected the extension is based on the Default to value. If custom is selected than the value is user defined. If BaseDieEdge is selected than the wire is extended to the edge of the base die. Used in the LR Estimator and 3Dviewer.

“3DStackExtensionValue”
3DStackExtensionValue=n.nnn
Sets the horizontal extension of the stack die wire bond loop if custom is selected.

“3DStitchExtension”
3DStitchExtension=Default / Custom
Sets the horizontal extension of the die to die stitch. If Default is selected the extension is based on the Default to value. If custom is selected than the value is user defined. Used in the LR Estimator and 3Dviewer.

“3DStitchExtensionValue”
3DStitchExtensionValue=n.nnn
Sets the horizontal extension of the die to die stitch if custom is selected.

“3DReset”
3Dreset
Resets all the values to a default state.

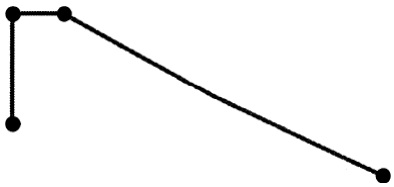
“3DDefaultTo”
3DDefaultTo= 1/8 / ¼ / ½ / 1 or blank

Sets the default to values to a fractional value of the base die height. If left blank it defaults to the height of the base die.

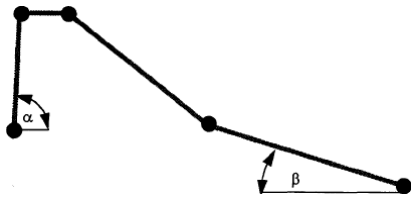
"3DModel"

3Dmodel=STD / Simple / Complex

This tells the 3D Vier and the LR Estimator which Bond Wire model to use. The STD model is a 5 segment wire and the default. The Simple and Preferred (Complex) models are based on the EIA/JESD59 Standard with the Simple having 3 segments and the Complex 5 segments. The complex is primarily used when all the Bond Wires got to a single tier or multiple tiers that are far from the die and close to each other. Possible conflicts arise if the tiers are far apart and close to the die. These wires are exported in the DXF file so they can be used by external analysis tools.They are exported as lines and have no width or thickness values attached to them.



EIA/JESD Simple



EIA/JESD Preferred (Complex)

"3DAlpha"

3DAlpha=n.n

This defines the angle of the Bond Wire as it leaves the die in the Complex model.

"3DBeta"

3Dbeta=n.n

This defines the angle of the Bond Wire as it approaches the SBP in the Complex model.

"3DEstimator"

3DEstimator

Runs the 3D Estimator and saves information in a file in the working directory under the name of ProjectName_LR.doc. This lists all the wires and their values. This file is then loaded into the text box at the bottom of the Wire Bond Setup dialog box.

"3DOK"

3DOK

Applies the wire bond parameters to the database for use in the LR Estimator and the 3D Viewer then closes the Wire Bond Setup dialog box. The 3D viewer will be updated the next time you click in the 3D viewer if the 3D Viewer is open.

"3DApply"

3DApply

Applies the wire bond parameters to the database for use in the LR Estimator and the 3D Viewer then closes the Wire Bond Setup dialog box. The 3D viewer will be updated the next time you click in the 3D viewer if the 3D Viewer is open.

“3DCancel”
3DCancel
Will close the Wire Bond Setup dialog box with out applying the settings.

“3DSave”
3DSave=FilePath\FileName
Saves the Wire Bond Setup data to a file. The default name of the file is the project name plus “_WBSU.dat”

“3DAutoSave”, 3DAuto
3DAutoSave=True/False
Controls the way data is saved when changes are made to any Wire Bond Setup parameter. If AutoSave is true than a silent WBSU save is executed whenever you leave the form. If False you will be prompted if you want to save changes. Right mouse click on the Save/Auto button will toggle between the 2 options.

“3DLoad”
3DLoad=FilePath\FileName
Loads a previously saved Wire Bond Setup file. The default name of the file is the project name plus “_WBSU.dat”

“3DView”
3DView
Opens the 3D view of the current project using the values set in the Wire Bond Setup dialog box. If any changes are made to any wire bond settings in the Wire Bond Setup dialog box, these changes will be seen when you click in the 3D Viewer after making and applying the changes. The left mouse allows you to rotate the image around the axises so you can view the die and wire bonds from any angle.

“3DViewCancel”
3DViewCancel
Closes the 3D Viewer.


Main Toolbar

“New”
New
Clears the database.


“Open”
Open=FilePath\FileName
Clears the database and opens the Open File Dialog box to select the project to be loaded.


“Save”
Save
Saves the current project.


“Print”
Print
Prints the current screen image and die data.


“DefaultsProperties”
DefaultProperties
Opens the Default Properties dialog box.


“ProjectProperties”
ProjectProperties
Opens the Project Properties dialog box.


“TierProperties”
TierProperties
Opens the Tier Properties dialog box.


“PadProperties”
PadProperties
Opens the CBP/SBP/Wires Properties dialog box.


“AttachTool”
AttachTool
Opens the Die Attach tool dialog box.


“AssignTool”
AssignTool
Opens the Tier Assignment tool dialog box.


“Measure”
Measure
Enables the tape measure tool for measuring point to point distances.


“FanoutTool”
FanoutTool

Opens the Fanout tool dialog box.


“SelectTool”
SelectTool
Opens the Select tool dialog box.


“AutoEdgeAndRenumber”
AutoEdgeAndRenumber
Initiates the Auto edge detection and pad renumbering process.


“Run”
Run=nnn.kmd
Executes the selected .kmd file.


“Pause”
None
Pauses a currentlyu running .kmd file.


“Step”
None
Steps to the next command in a .kmd file while in the pause mode.


“Stop”
None
Terminates the currently running .kmd file. Pressing Esc terminates the currently running .kmd file also.


Options Toolbar

"FillPads", "Fill"
FillPads=True / False
If true the CBPs are displayed with filled color. Red = Power, Green = Ground and Blue = Signal. Otherwise only the pad color outlines are displayed.
FillPads
With no parameters this command will toggle the current state of the control.

"PadText", "PinText", "Text"
PadText=True / False
If true the text for the CBPs and SBPs is displayed.

PadText
With no parameters this command will toggle the current state of the control.
 /

"Wires"

Wires=True / False
If true the wires are displayed.
Wires
With no parameters this command will toggle the current state of the control.
 / 

"Attach", "DieAttach", "DieAttachPad"

DieAttach=True / False
If true the die attach pad is displayed.
DieAttach
With no parameters this command will toggle the current state of the control.
 / 

"Tips", "ToolTips"

ToolTips=True / False
If true the tool tips are displayed.
ToolTips
With no parameters this command will toggle the current state of the control.
 /

"Die", "DieOnly"

DieOnly=True / False
If true the only the die will be displayed.
DieOnly
With no parameters this command will toggle the current state of the control.
 / 

"Origin", "DieOrigin"

DieOrigin=Center / LLC
If Center, the coordinate system (0:0) is located at the center of the die otherwise it is located at the Lower Left Corner.
DieOrigin
With no parameters this command will toggle the current state of the control.
 / 

"MouseWheel"

MouseWheel=True/false
If true than the direction of the mouse zoom is reversed.
 / 

"Cancel", "Esc", "Escape"

Cancel

Ends the current edit secession and returns to the select mode.


Editing Toolbar

“Move”

Move=(-25.351:0.000)
Move selected CBP or SBP pads (x:y) distance from current position.


"MoveToTier", "Move2Tier"

MoveToTier=3
Move selected SBP pad(s) to tier 1:4 from the current tier.
 (1 , 2 , 3 , 4)

"DeleteSelected"

DeleteSelected
Delete selected CBO or SBP pad(s).


Navigation Toolbar

"PanLeft", "PanL"

PanLeft
Pan left ¼ screen width. (Up Arrow Key)


"PanRight", "PanR"

PanRight
Pan right ¼ screen width. (Right Arrow Key)


"PanUp", "PanU"

PanUp
Pan up ¼ screen height. (Up Arrow Key)


"PanDown", "PanD"

PanDown
Pan down ¼ screen height. (Down Arrow Key)


"ZAll", "ZA"

Zall

Zoom to the extents of the design. (Home Key)

"ZoomOut", "ZOut"

ZoomOut

Zoom out ¼ zoom factor using the current center as the zoom center. (PgDn Key)

Using the mouse wheel to zoom out ¼ zoom factor using the current center as the zoom center.

"ZoomIn", "ZIn"

ZoomIn

Zoom in ¼ zoom factor using the current center as the zoom center. (PgUp Key)

Using the mouse wheel to zoom in ¼ zoom factor. The current mouse position is moved to the center of the screen and any future zoom actions will occur at the center of the screen.

"Pan"

Pan=(-78.978:42.170)

Pan to a selected point on the main or world window by clicking on either one.

"ZoomWindow", "ZoomW", "ZW"

ZoomWindow=(-66.790:126.510)-(10.238:59.233)

Zoom to a specific place on the main window clicking to set the start (x:y) and clicking abain to set the end (x:y).

Defaults

"DefaultProp", "DefaultPoperties", "DefProp", "DefProperties"

DefaultProperties

Opens the Default Properties dialog box.

"DefaultRefresh", "DefRefresh"

DefaultRefresh
Refresh the values in the dialog box.

"DefaultApply", "DefApply"

DefaultApply
Applies default setting to the project.

"DefaultOK", "DefOK"

DefaultOK
Applies the settings to the project and closes the dialog box.

"DefaultLoad", "DefLoad"

DefaultLoad
If no parameters are included then the Default.def in the Application path is loaded into the dialog box.
DefaultLoad=MyDef.def
If a file is specified but no path then the current project path is used when loading the defaults.
DefaultLoad=c:\DefPath\MyDef.def
The specified default file will be loaded from the specified path.

"DefaultSave", "DefSave"

DefaultSave
If no parameters are included then the Default.def file is saved in the Application path.
DefaultSave= NewDef
.def is appended to the name of the file and the file is saved in the current project path.
DefaultSave=NewDer.def
The default settings are saved as the file spedcified in the current project path.
DefaultSave=c:\DefPath\NewDef.def
The default settings are saved as the file specified in the specified path.

"DaultCancel", "DefCancel"

DefaultCancel
Close the dialog box without saving default values.

"DefaultTab", "DefTab"

DefaultTab=`1 / ExternalTools`
Open the Default External Tools tab.

DefaultTab=2 or Tiers
Open the Default Tiers tab.

DefaultTab=3 or Options
Open the Default Options tab.

DefaultTab=4 or Attach
Open the Default Die Attach tab.

DefaultTab=5 or Fanout
Open the Default Fanout tab.

Default Tiers:

Note: For each tier there is a set of default values listed below

"DefaultTierActive", "DefTierActive"
DefaultTierActive=1 True / False
If true the tier is used.

"DefaultTierDistance", "DefTierDistance"
DefaultTierDistance=1 10.000
This sets tier n a specified distance from the die.

"DefaultTierStyle", "DefTierStyle"
DefaultTierStyle=1 Guide / Ring
Sets the style of the ring n to either a Guide or a Ring

"DefaultTierShape", "DefTierShape"
DefaultTierShape=1 Arc / Flat
Sets the shape if the ring n to Arc or Flat

"DefaultTierBulge", "DefTierBulge"
DefaultTierBulge=1 11.000
Sets the height of the ring n arc if the shape is Arc.

"DefaultTierType", "DefTierType"
DefaultTierType=1 Power / Ground / Signal
Sets the type of tier n to Power, Ground or Signal.

"DefaultSBPOrient", "DefSBPOrient"
DefaultSBPOrient=1 Angle / Ortho
Sets the orientation to be applied to SBPs on Tier n. Either no rotation (Ortho) or angled towards the CBP.

"DefaultSBPWidth", "DefSBPWidth"
DefaultSBPWidth=1 4.000
Defines the Width of the SBPs on tier n.

"DefaultSBPHeight", "DefSBPHeight"
DefaultSBPHeight=1 6.000

Defines the height of the SBPs on tier n. This is also the width of the tier if it is style Ring.

"DefaultSBPEndCap", "DefSBPEndCap"
DefaultSBPEndCap=1 Flat / Round
Defiines the shape of the SBP pad endcaps on tier n. Either flat or round.

"DefaultWW", "DefWW"
DefaultWW=1 1.000
Defines the wire width for tier n. For all practical purposes this should be the same for all tiers.

"DefaultW2W", "DefW2W"
DefaultW2W=1 1.000
Defines the wire to wire distance used in the fanout process for tier n.

"DefaultW2P", "DefW2P"
DefaultW2P=1 5.000
Defines the wire to pad distance used in the fanout process for tier n.

"DefaultP2P", "DefP2P"
DefaultP2P=1 5.000
Defines the pad to pad distance used in the fanout process for tier n.

"DefaultMaxWireLength", "DefMaxWireLength"
DefaultMaxWireLength=1 50.000
Defines the max wire length for tier n. Used in post process checks after a fanout has been executed.

"DefaultMaxWireAngle", "DefMaxWireAngle"
DefaultMaxWireAngle=1 30.000
Defines the max wire angle for tier n. Used in post process checks after a fanout has been executed. This is a + or – value with 0 being perpindicular to an edge of the die.

Default Options:

"DefaultFillPads", "DefFillPads"
DefaultFillPads=True / False
If true the CBPs are displayed with filled color. Red = Power, Green = Ground and Blue = Signal. Otherwise only the pad color outlines are displayed.

"DefaultPadText", "DefPadText"
DefaultPadText=True / False
If true the text for the CBPs and SBPs is displayed.

"DefaultWires", "DefWires"
DefaultWires=True / False

If true the wires are displayed.

"DefaultDieAttach", "DefDieAttach"
DefaultDieAttach=True / False
If true the die attach pad is displayed.

"DefaultDieOrigin", "DefDieOrigin"
DefaultDieOrigin=Center / LLC
If Center, the coordinate system (0:0) is located at the center of the die otherwise it is located at the Lower Left Corner.

"DefaultToolTips", "DefToolTips"
DefaultToolTips=True / False
If true the tool tips are displayed.

"DefaultDieOnly", "DefDieOnly"
DefaultDieOnly=True / False
If true the only the die will be displayed.

Default Attach:

"DefaultAttachStyle", "DefAttachStyle"
DefaultAttachStyle=Solid / Hatch / None
Sets the style of the die attach pad to Solid, Hatched or None. If None than all the other parameters are not used..

"DefaultAttachHatchRows", "DefAttachHatchRows"
DefaultAttachHatchRows=6
If style Hatch is selected this defines how many rows are in the hatch pattern.

"DefaultAttachHatchColumns", "DefAattachHatchColumns"
DefaultAttachHatchColumns=4
If style Hatch is selected this defines how many colums are in the hatch pattern.

"DefaultAttachHatchWidth", "DefAttachHatchWidth"
DefaultAttachHatchWidth=3.000
If style Hath is selected this defines the line width for the hatch pattern.

"DefaultAttachMargin", "DefAttachMargin"
DefaultAttachMargin=1.000
If the die attach style is not equal to None than this defines the position of the die attach pad margin. This can be + or – depending on whether you want to oversize or undersize the die attach area.

"DefaultAttachPointStyle", "DefAttachPointStyle"
DefaultAttachPointStyle=Radial / Ortho

If the inner ring is attached to the die attach pad then this defines how the attachment is made from the attach pad to the inner ring.

"DefaultAttachPointCount", "DefAttachPointCount"

DefaultAttachPointCount=5
If the inner ring is attatched to the die attach pad this defines how many spokes are used to make the attachment.

"DefaultAttachPointWidth", "DefAttachPointWidth"

DefaultAttachPointWidth=3.000
If the inner ring is attached to the die attch pad than this defines the line width of the attachments.

"DefaultAttachPoint", "DefAttachPoint"

DefaultAttachPoint=Corner / Side / Both / None
I the inner ring is attached to the die attach pad then this defines how the attachment is made. At the corners only, sides only, both corners and sides or no attachment at all.

Default Fanout:

"DefaultFanoutClearBefore"

DefaultFanoutClearBefore=True / False
If true the fanout data will be lost and the SBP positions will be placed relative to the corrisponding CBP.

"DefaultFanoutCenterGroups"

DefaultFanoutCenterGroups=True / False
If true each group is centered based on the left most and right most pad in the group.

"DefaultFanoutKeepGroups"

DefaultFanoutKeepGroups=True / False
If true the groups from the fanout are kept in tact when a second fanout is run. This is handy if you want to run several itterations of the fanout manally just to see if any changes are made.

“DeffaultFanoutUntangle”

DefaultFanoutUntangle=True/False
This option is only active if the design uses stacked die. If enabled and seleced the fanout process will atempt to untangle crossed wires created when the stacked die wire bonds cross over the base die wires.

"DefaultFanoutPrecision"

DefaultFanoutPrecision=1 / 2/ 3
If you are using center groups than this defines what precision of accuracy you want to acchieve during the fanout process. The higher the precision the longer it takes to achieve that precision. This represents the decimal point precision of a micron.

"DefaultFanoutLeft"
DefaultFanoutLeft=True / False
If true than the left side of the die will be processed.

"DefaultFanoutBottom"
DefaultFanoutBottom=True / False
If true than the bottom side of the die will be processed.

"DefaultFanoutRight"
DefaultFanoutRight=True / False
If true than the right side of the die will be processed.

"DefaultFanoutTop"
DefaultFanoutTop=True / False
If true than the top side of the die will be processed.

“DefaultFanout”
DefaultFanout=All / Selected
Tells the tool which SBPs to opperate on when executing the fanout. If All than all the pads secified in the Edge selection will be used. If selected than only the selected SBPs will be used.

"DefaultFanoutKeepOrder"
DefaultFanoutKeepOrder=True / False
If true the pad order will be maintained. This will be come more importanttt when stacked die processing is implimented. Future releases. If false the pad order will be calculated every time the process is run.

"DefaultFanoutKeepEdges"
DefaultFanoutKeepEdges=True / False
If true the pad edge information will be maintained. This will be come more importanttt when stacked die processing is implimented. Future releases. If false the pad edge will be calculated every time the process is run.

"DefaultFanoutPushPull"
DefaultFanoutPushPull=True / False
If true the fanout process will make corrections based on the actural DRC rules in play. If false then only DRC errors that require a push to a pad will be applied. This can result in a les accurate fanout but faster time. The difference is in accuracy vs time.

"DefaultFanoutCheckDRC"
DefaultFanoutCheckDRC=True / False
If true the max wire and max angles are checked and if errors are found they are added to the fanout report.

"DefaultFanoutEffort"
DefaultFanoutEffort=1 to 10
*This determins how many itterations will be used during the fanout process. Values can be any number from 1 to 10 which represents n*10 itterations. The higher the number the more accurate the fanout will be. At some point if there are 3 itterations with no improvement, the process will be terminated.*

"DefaultFanoutOverrun"
DefaultFanoutEffort=10
This is used to prevent tier overrun that is rediculous. This could happen if you have set your DRC rules to wide forcing the tool to create an impossible fanout.

Project Properties

"ProjectProp", "ProjectProperties"
ProjectProperties
Displays the Project Properties dialog box

"ProjectApply"
TierApply
Applies setting to the project.

"ProjectOK"
TierOK
Applies the settings to the project and closes the dialog box.

"ProjectCancel"
TierCancel
Close the dialog box without saving projecxt values.

"DeleteComponent"
DeleteComponent=U2
Deletes the from the projec.t

"Component"
Component=U1
Selects the component for editing or viewing.

"DieWidth"
DieWidth=100
Defines the width of the die in the X direction.

"DieHeight"
DieHeight=100
Defiines the height of the die in the Y direction.

"DieThick"
DieThick=4
Defines the thickness of the die in the Z direction.

"DieX"
DieX=50
This defines the die X offset of a stacked device. The base die has an offset of 0.

"DieY"
DieY=50
This defines the die Y offset of a stacked device. The base die has an offset of 0.

"DIEZ"
DieZ=4
This defines the die Z offset of a stacked device. The base die has an offset of 0.

"DieBackBias"
DieBackBias=VCC
This defines the electrical charastics of the bottom or back of the chip. Normally VCC or Ground.

"DieRotation"
DieRotation=30
This defines the rotation applied to a stacked device. Plus is clockwise..

Tier Properties

"TIerProp", "TierProperties"
TierProperties
Displays the Tier Property dialog box

"TierApply"
TierApply
Applies setting to the project.

"TierOK"
TierOK
Applies the settings to the project and closes the dialog box.

"TierCancel"
TierCancel
Close the dialog box without saving tier values.

"TierTab"
TierTab=1 to 4
Selects which tier tab is active for editing or viewing.

Note: For each tier there is a set of default values listed below

"TierActive"
TierActive=1 True / False
If true the tier is used.

"TierDistance"
TierDistance=1 10.000
This sets tier n a specified distance from the die.

"TierStyle"
TierStyle=1 Guide / Ring
Sets the style of the ring n to either a Guide or a Ring

"TierShape"
TierShape=1 Arc / Flat
Sets the shape if the ring n to Arc or Flat

"TierBulge"
TierBulge=1 11.000
Sets the height of the ring n arc if the shape is Arc.

"TierType"
TierType=1 Power / Ground / Signal
Sets the type of tier n to Power, Ground or Signal.

"SBPOrient"
SBPOrient=1 Angle / Ortho
Sets the orientation to be applied to SBPs on Tier n. Either no rotation (Ortho) or angled towards the CBP.

"SBPWidth"
SBPWidth=1 4.000
Defines the Width of the SBPs on tier n.

"SBPHeight"
SBPHeight=1 6.000
Defines the height of the SBPs on tier n. This is also the width of the tier if it is style Ring.

"SBPEndCap"
SBPEndCap=1 Flat / Round
Defiines the shape of the SBP pad endcaps on tier n. Either flat or round.

"WW"
WW=1 1.000
Defines the wire width for tier n. For all practical purposes this should be the same for all tiers.

"W2W"
W2W=1 1.000
Defines the wire to wire distance used in the fanout process for tier n.

"W2P"
W2P=1 5.000
Defines the wire to pad distance used in the fanout process for tier n.

"P2P"
P2P=1 5.000
Defines the pad to pad distance used in the fanout process for tier n.

"MaxWireLength"
MaxWireLength=1 50.000
Defines the max wire length for tier n. Used in post process checks after a fanout has been executed.

"MaxWireAngle"
MaxWireAngle=1 30.000
Defines the max wire angle for tier n. Used in post process checks after a fanout has been executed. This is a + or – value with 0 being perpindicular to an edge of the die.

Pad Properties

"PadProp", "PadProperties"
PadProperties
Displays the Pad Properties dialog box.

"PadPropApply", "PadPropertiesApply"
PadPropertiesApply
Applies setting to the project.

"PadPropOK", "PadPropertiesOK"
PadPropertiesOK
Applies the settings to the project and closes the dialog box.

"PadPropCancel", "PadPropertiesCancel"
PadPropertiesCancel
Close the dialog box without saving pad values.

"CBPType"
CBPType=Power / Ground / Signal
Defines the type of the pad. Power (Red), Ground (Green), or Signal (Blue)

"CBPx"
CBPx=-50.000
Defines the CBP X coordinate to the center of the pad on the die.

"CBPy"
CBPy=-50.000
Defines the CBP Y coordinate to the center of the pad on the die.

"CBPHeight"
CBPheight=4.000
Defines the height of the CBP in the Y direction as viewed on the die.

"CBPWidth"
CBPWidth=5.000
Defines the width of the CBP in the X direction as viewed on the die.

"CBPEdge"
CBPEdge=Left / Bottom / Right / Top
Defines the edge assigned to the CBP. Left, Bottom, Right, or Top

"CBPNet"
CBPNet=Data0
The name or net assigned to the CBP pad.

Case "SBPPin"
SBPPin=99
The package pin name or number assigned to the SBP. By default it is the same as the CBP pad number.

"SBPTier"
SBPTier=2
Defines the tier assigned to the SBP 1 to 4.

"SBPx"
SBPx=-50.000
Defines the SBP X coordinate to the center of the pad on the substrate.

"SBPy"
SBPy=100.000
Defines the SBP Y coordinate to the center of the pad on the substrate.

"SBPEdge"
SBPEdge=Left / Bottom / Right / Top
Defines the edge assigned to the SBP. Left, Bottom, Right, or Top. By default it is the same as the CBP that it is attached to by the bond wire.

"WireCBPx"
WireCBPx=0.500
This is the X offset applied to the wire end attached to the CBP as viewed if the pad was at the top of the die and from the center of the pad.

"WireCBPy"
WireCBPy=0.500
This is the Y offset applied to the wire end attached to the CBP as viewed if the pad was at the top of the die and from the center of the pad.

"WireSBPx"
WireSBPx=0.500
This is the X offset applied to the wire end attached to the SBP as viewed if the pad was at the top of the die and from the center of the pad.

"WireSBPy"
WireSBPy=0.500
This is the Y offset applied to the wire end attached to the SBP as viewed if the pad was at the top of the die and from the center of the pad.

Attach Tool

"AttachTool"
Attach
This command will display the Attach Tool dialog box.

"AttachCancel"
AttachCancel
Close the dialog box without saving attach values.

"AttachOK"
AttachOK
Applies the settings to the project and closes the dialog box.

"AttachApply"
AttachApply
Applies the settings to the project and closes the dialog box.

"AttachStyle", "AttachStyle"
AttachStyle=Solid / Hatch / None

Sets the style of the die attach pad to Solid, Hatched or None. If None than all the other parameters are not used..

"AttachHatchRows", "AttachHatchRows"

AttachHatchRows=6
If style Hatch is selected this defines how many rows are in the hatch pattern.

"AttachHatchColumns", "AattachHatchColumns"

AttachHatchColumns=4
If style Hatch is selected this defines how many colums are in the hatch pattern.

"AttachHatchWidth", "AttachHatchWidth"

AttachHatchWidth=3.000
If style Hath is selected this defines the line width for the hatch pattern.

"AttachMargin", "AttachMargin"

AttachMargin=1.000
If the die attach style is not equal to None than this defines the position of the die attach pad margin. This can be + or – depending on whether you want to oversize or undersize the die attach area.

"AttachPointStyle", "AttachPointStyle"

AttachPointStyle=Radial / Ortho
If the inner ring is attached to the die attach pad then this defines how the attachment is made from the attach pad to the inner ring.

"AttachPointCount", "AttachPointCount"

AttachPointCount=5
If the inner ring is attatched to the die attach pad this defines how many spokes are used to make the attachment.

"AttachPointWidth", "AttachPointWidth"

AttachPointWidth=3.000
If the inner ring is attached to the die attch pad than this defines the line width of the attachments.

"DefaultAttachPoint", "DefAttachPoint"

DefaultAttachPoint=Corner / Side / Both / None
I the inner ring is attached to the die attach pad then this defines how the attachment is made. At the corners only, sides only, both corners and sides or no attachment at all.

Assign Tool

"AssignTool"

Displays the Assign Tool.

"AssignReset"
AssignReset
Clears all tier assignments.

"AssignApply"
AssignApply
Applies setting to the project.

"AssignOK"
AssignOK
Applies the settings to the project and closes the dialog box.

"AssignCancel"
AssignCancel
Close the dialog box without saving assign values.

"AssignToTier"
AssignToTier=2 Net VDD
Assign the named net to the specified tier.

AssignToTier=2 Net VDD U1
Assign the named net associated with a specific die, in the case of a stacked die project, to the specified tier.

AssignToTier=3 PkgPin 2 4 6 9 12 14 16 18 21 23 26 28
Assign the selected PkgPins to the specified tier.

AssignToTier=0 Pin 2 4 6 9 12 14 16 18 21 23 26 28
Assign the selected Pins to the specified tier.

"AssignBy"
AssignBy=Net / PkgPin / Pin
Determins how the data lists are displayed for selecting SBPs for tier assignment.

"AssignSelectAll", "AssignAll"
AssignSelectAll
This will select all pads in the unassigned list.

"AssignSplitTier", "AssignSplit"
AssignSplit=3 True / False
If a group of selected pads are to be split between 2 or more tiers than this command will check or uncheck the appropriate split check boxes. If true the tier selected will be included in the split list.

"AssignNDie"
AssignDie=U1

Select the die from which the pins will be assigned.

"AssignAutoApply"
AssignAutoApply=True / False
If this is true than assignments will be automatically applied to the design as the assignments are made.If false than you must manually apply the assignments to the design using the Apply of OK button.

Fanout Tool

"FanoutTool"
FanoutTool
Displays the Fanout tool.

"FanoutExecute"
FanoutExecute
Initiates the fanout process.

"FanoutClear"
FanoutClear
Removes all fanout data and places the SBPs in line with the coorisponding CBPs on its assigned tier.

"FanoutCancel"
FanoutCancel
Close the dialog box without saving fanout values.

"FanoutClearBefore"
FanoutClearBefore=True / False
If true the fanout data will be lost and the SBP positions will be placed relative to the corrisponding CBP.

"FanoutCenterGroups"
FanoutCenterGroups=True / False
If true each group is centered based on the left most and right most pad in the group.

"FanoutKeepGroups"
FanoutKeepGroups=True / False
If true the groups from the fanout are kept in tact when a second fanout is run. This is handy if you want to run several itterations of the fanout manally just to see if any changes are made.

“FanoutUntangle”
FanoutUntangle=True/False

This option is only active if the design uses stacked die. If enabled and seleced the fanout process will atempt to untangle crossed wires created when the stacked die wire bonds cross over the base die wires.

"FanoutPrecision"

FanoutPrecision=1 / 2/ 3

If you are using center groups than this defines what precision of accuracy you want to acchieve during the fanout process. The higher the precision the longer it takes to achieve that precision. This represents the decimal point precision of a micron.

"FanoutLeft"

FanoutLeft=True / False

If true than the left side of the die will be processed.

"FanoutBottom"

FanoutBottom=True / False

If true than the bottom side of the die will be processed.

"FanoutRight"

FanoutRight=True / False

If true than the right side of the die will be processed.

"FanoutTop"

DefaultFanoutTop=True / False

If true than the top side of the die will be processed.

"Fanout"

Fanout=All / Selected

Tells the tool which SBPs to opperate on when executing the fanout. If All than all the pads secified in the Edge selection will be used. If selected than only the selected SBPs will be used.

"FanoutKeepOrder"

FanoutKeepOrder=True / False

If true the pad order will be maintained. This will be come more important when stacked die processing is implimented. Future releases. If false the pad order will be calculated every time the process is run.

"FanoutKeepEdges"

FanoutKeepEdges=True / False

If true the pad edge information will be maintained. This will be come more importanttt when stacked die processing is implimented. Future releases. If false the pad edge will be calculated every time the process is run.

"FanoutPushPull"

FanoutPushPull=True / False

If true the fanout process will make corrections based on the actural DRC rules in play. If false then only DRC errors that require a push to a pad will be applied. This can result in a les accurate fanout but faster time. The difference is in accuracy vs time.

"FanoutCheckDRC"

FanoutCheckDRC=True / False
If true the max wire and max angles are checked and if errors are found they are added to the fanout report.

"FanoutEffort"

FanoutEffort=1 to 10
*This determins how many itterations will be used during the fanout process. Values can be any number from 1 to 10 which represents n*10 itterations. The higher the number the more accurate the fanout will be. At some point if there are 3 itterations with no improvement, the process will be terminated.*

"FanoutOverrun"

FanoutEffort=10
This is used to prevent tier overrun that is rediculous. This could happen if you have set your DRC rules to wide forcing the tool to create an impossible fanout.

Select Tool

"SelectTool"

SelectTool
Displays the Select tool.

"SelectTier"

SelectTier=1 True / False
This allows you to select pads based on a tier. If true the pads on the named tier will be selected.

"SelectEdge"

Select Edge=Left True / False
This allows you to select pads based on an edge. If true the pads on the named edge will be selected.

"SelectNet

SelectNet=VDD True
This allows you to select pads based on a net. If true the pads with the same named net name will be selected.

"SelectClear"

SelectClear

This will unselect all selected pads.

"SelectApply"
SelectApply
Applies setting to the project.

"SelectOK"
SelectOK
Applies the settings to the project and closes the dialog box.

"SelectCancel"
SelectCancel
Close the dialog box without saving select values.

"SelectBy"
SelectBy=CBP / SBP
Lets you select either CBPs or SBPs.

Select Manual

"SelCBP", "SelectCBP"
SelectCBP=70 71 72 73 74 75 76
Select CBP(s) using Shift or Control and mouse click to set start point, drag around CBP(s) then click to end selection. Double click on a CBP will select a single CBP.

"SelSBP", "SelectSBP"
SelectSBP=70 71 72 73 74 75 76
Select SBP(s) using Shift or Control and mouse click to set start point, drag around SBP(s) then click to end selection. Double click on a SBP will select a single SBP.

"SelWire", "SelectWire"
SelectWire=70 71 72 73 74 75 76
Selects wires by CBP Number. If a pad has been split the wire numbers will be 11 11.1 11.2 for example.

“SelStitch”, “SelectStitch”
SelectStitch=11:10s 7:8s
Selects Stitches by pad pairs seperated by “:” . A space seperates each pair.

Select Wires(s) and Stitches using Shift or Control and mouse click to set start point, drag across wires(s) then click to end point.

Export LIQ Tool

“ExportLIQTool”
ExportLIQTool
Displays the Export LIQ tool.

“ExportLIQ”
ExportLIQ=FilePath\FileName
Exports the selected items to the LIQ FilePath\FileName.

“ExportLIQCBP”
ExportLIQCBP= True/False
If true it will check the CBP export option and export the CBPs to the LIQ file.

“ExportLIQSBP”
ExportLIQSBP=True/False
If true it will check the SBP export option and export the SBPs to the LIQ file.

“ExportLIQWire”
ExportLIQwire=True/False
If true it will check the Wires export option and export the Wires to the LIQ file.

“ExportLIQRing”
ExportLIQRing=True/False
If true it will check the Rings export option and export the Rings to the LIQ file.

“ExportLIQAttach”
ExportLIQAttach= True/False
If true it will check the DieAttachPad export option and export the Die Attach Pad to the LIQ file.

“ExportLIQCancel”
ExportLIQCancel
Closes the ExportLIQ dialog box.

Split CBP Manager

“SplitTool”
SplitTool
Opens the Split CBP Manager tool.

“SplitCBP”
SplitCBP=11
Splits the selecte CBP into a new segment every time the button is clicked.

“JoinCBP”
JoinCBP=11
Joins the selected split CBP segments back into one segment.

“SplitApply”
SplitApply
Permanently applies the split to the project.

“SplitOK”
SplitOK
Permanently applies the split to the project and closes the dialog box.

“SplitCancel”
SplitCancel
Discards the currently unapplied splits and closes the dialog box.

Stitch Manager

“StitchTool”
StitchTool
Opens the Stitch Manager dialog box.

“Add Stitch”
AddStitch=Pad1 Pad2
Adds a pair of pads to the stitch list forming a new stitch.

“RemoveStitch”
RemoveStitch=*
RemoveStitch= 2 4 6
*If * is used than all the stitches in the stitch list will be removed. If index numbers are supplied than only those selected stitches will be removed.*

“SaveStitch”
SaveStitch=FileName
SaveStitch=FilePath\FileName
If only the file name is supplied than the current working directory will be used. If the full path is supplied than that is used.

“LoadStitch”
LoadStitch=FileName
LoadStitch=FilePath\FileName

If only the file name is supplied than the current working directory will be used. If the full path is supplied than that will be used

"StitchAutoApply"

StitchAutoApply=True/False
If true any changes made to the stitch list will be updated in the project.

"StitchApply"

StitchApply
Permanently applies the stitches to the project.

"StitchOK"

StitchOK
Permanently applies the stitches to the project and closes the dialog box.

"StitchCancel"

StitchCancel
Discards the currently unapplied stitches and closes the dialog box.

.Kmd Execution

"Wait"

Wait=2
Inserts a wait state in seconds to a .kmd script. This can be useful for debugging a script.
Wait=True / False
Overrides the Wait =n seconds command. If True than waits are executed. Default value. If false than no wait states will be executed. They can be placed anywhere in a .kmd file.

"Run"

Run
Without a file path will open a dialog box to select the .kmd file and execute it.
Run=A0.kmd
With only the file name specified the tool would search for the file in the current project path and execute it.
Run=C:\MyProjectPath\A0.kmd
With the full path specified the tool will execute the .kmd file from that location.

*Exectes a .kmd file which can be hand edited or created from a .log file which is created everytime you do an edit in the tool. All commands are logged during execution. This file can be edited with a word processor. A line ***Run A_0.kmd is added to the log file as a comment followed by a ***End Run comment at the completion of the run. The script can be terminated at any time during the run by presssing the escape key or the stop button. If terminated early a comment is added to the log file *Run Terminated by Operator. Command files can be nested within each*

other and will execute in the order presented. The .kmd file can be paused by clicking the pause button. While the .kmd file is in the pause mode, you can step through the commands one by one by clicking on the Step button.