



## Keyboard Shortcuts

Function Key Command Assignments	
Key	Description
F1	Open Help (context sensitive)
F3	Interactive route (dynamics enabled)
F4	Toggle layer pair (during routing)
F5	Zoom in (Navigation Window)
F6	Zoom out (Navigation Window)
F7	Swap workspace and Navigation Window contents
F8	Lock view (Navigation Window)
F9	Autorouting, start
F10	Autorouting, resume
F11	Autorouting, pause
F12	Autorouting, stop

  

Editing	
Shortcut	Description
Delete	Delete the selected object
Escape	Cancel command
Ctrl+H	Highlight object
Ctrl+U	Remove highlighting from current object
Alt+Click	Toggle highlighting on/off
Alt+Click+Drag	Toggle highlighting objects in the enclosed area

  

Selection	
Shortcut	Description
Click	Select an object
Spacebar	
Ctrl+A	Select all design objects based on selection filter
Click+Drag	Start an area selection
Tab	Cycle selection of adjacent objects in pick radius
Ctrl+Click	Toggle object selection or select multiple objects
Ctrl+Click+Drag	Add to or remove from selected objects using an area selection

  

Placement Operations	
Shortcut	Description
Ctrl+E	Move the selected object(s)
Tab	Rotate a component (during component move mode)
Ctrl+R	Rotate the selected component(s) 90 degrees
Ctrl+I	Spin the selected object
Shift+F	Flip a component to the opposite side of the board

  

File Operations	
Shortcut	Description
Ctrl+N	Create a new design file (blank)
Ctrl+O	Open a design file
Ctrl+S	Save a design file

Panning, Zooming, and Navigation	
Shortcut	Description
Home	Zoom to fit the board outline to the maximum of the viewable workspace
Keypad (7)	
Ctrl+B	
Ctrl+Alt+E	Zoom to fit all objects in the design to the maximum of the viewable workspace
Middle+Drag	Zoom from center. Drag up to zoom in. Drag down to zoom out.
Keypad (5) (Numlock On)	
Shift+Middle+Drag	Zoom from corner. Drag up to zoom in. Drag down to zoom out.
Keypad (.) (Zoom Mode only)	
Alt+Z	Zoom to fit the selectable object(s) to the maximum of the viewable workspace
Ctrl+W	Toggle Zoom Mode on/off
Click	Zoom in at the pointer (Zoom Mode)
Page Up	
Space Bar	
Keypad (9)	
Right-Click	Zoom out at the pointer (Zoom Mode)
Page Down	
Keypad (3)	
Page Up	Zoom in at the pointer
Keypad (9)	
Ctrl+Wheel Fwd	
Page Down	Zoom out at the pointer
Keypad (3)	
Ctrl+Wheel Back	
Down Arrow	Move the pointer down one design grid
Up Arrow	Move the pointer up one design grid
Left Arrow	Move the pointer left one design grid
Right Arrow	Move the pointer right one design grid
Middle-Click	Pan to center the view on the pointer location
Keypad (0)	
Insert	
Alt+Middle+Drag	Pan dynamically
Wheel Back	Pan down one line
Wheel Fwd	Pan up one line
Shift+Wheel Back	Pan right one line
Shift+Wheel Fwd	Pan left one line
Ctrl+Alt+Wheel Back	Pan down one pixel
Ctrl+Alt+Wheel Fwd	Pan up one pixel
Alt+Shift+Wheel Back	Pan right one pixel
Alt+Shift+Wheel Fwd	Pan left one pixel
Keypad (2)	Pan down one increment
Keypad (4)	Pan left one increment
Keypad (6)	Pan right one increment
Keypad (8)	Pan up one increment

Routing Operations	
Shortcut	Description
<b>Click</b>	Add a corner (interactive routing)
<b>Space Bar</b>	
<b>Alt+R</b>	Add arc of radius set with RAD modeless command (interactive routing)
<b>Shift+Click</b>	Add a via (interactive routing)
<b>Alt+Shift+Click</b>	
<b>Alt+A</b>	Add an arc (interactive routing)
<b>Backspace</b>	Remove the last routed corner on a trace or the last corner on a 2D line (in polygon drawing mode)
<b>Shift+S</b>	Stretch (interactive routing mode)
<b>Click</b>	Complete (interactive routing) when pointer is near a valid completion point
<b>Double-Click</b>	Complete (interactive routing) when pointer is near a valid completion point
<b>Ctrl+Click</b>	End (interactive routing)
<b>Ctrl+Alt+Click</b>	
<b>Ctrl+M</b>	Run length minimization
<b>Ctrl+Page Down</b>	Reset length monitor to zero (interactive routing)
<b>Ctrl+L</b>	Toggle the Length Monitor on/off
<b>Shift+E</b>	Toggle Estimated Length (Et) display (pin pair or net)
<b>Ctrl+Tab</b>	Cycle through via patterns (differential pair routing)
<b>Shift+A</b>	Begin an accordion (interactive routing mode)
<b>Double-Click</b>	End an accordion (interactive routing)
<b>Shift+N</b>	Toggle Dynamic Reconnect on/off
<b>Shift+D</b>	Toggle "Dynamically route" mode on/off (interactive routing)
<b>Alt+G</b>	Toggle snap to routing grid on/off
<b>Shift+G</b>	Toggle guard bands on/off
<b>Shift+R</b>	Switch rules (component/regular)
<b>Tab</b>	Switch trace (route separately mode)
<b>Tab</b>	Show the length of the alternate trace in differential pair
<b>Shift+X</b>	Split pair around obstacle (routing differential pairs)
<b>Shift+Z</b>	Route separately (routing differential pairs)

Opening Menus and Dialog Boxes	
Shortcut	Description
<b>Right-Click</b>	Open the popup menu
<b>Double-Click</b>	Open Properties dialog box for the selected object
<b>Alt+Enter</b>	
<b>Ctrl+Q</b>	
<b>Ctrl+Enter</b>	Open the Options dialog box
<b>Ctrl+Alt+C</b>	Open the Colors page of the Options dialog box
<b>Ctrl+Alt+D</b>	Open the last viewed page of the Options dialog box
<b>Ctrl+Alt+G</b>	
<b>Ctrl+Alt+N</b>	Open the View Nets dialog box
Mouse Button Substitutions	
Shortcut	Description
<b>M</b>	Open the popup menu for the current mode (same as right-click)
<b>Space Bar</b>	Activate a left-click to add corners, select items, complete, and so on; at the current pointer location
Layer List Navigation	
Shortcut	Description
<b>Alt+Up Arrow</b>	Change the current layer to the next - descending in the list
<b>Alt+Scroll Back</b>	
<b>Alt+Down Arrow</b>	Change the current layer to the next - ascending in the list
<b>Alt+Scroll Fwd</b>	
Protection of Objects	
Shortcut	Description
<b>Shift+P</b>	Protect objects
<b>Shift+U</b>	Unprotect objects
DRC Operations	
Shortcut	Description
<b>Alt+D</b>	Open DRC Settings dialog box
<b>Alt+X</b>	Explain the last DRC error (component move mode)
Viewing	
Shortcut	Description
<b>Alt+N</b>	Display the next view
<b>Alt+P</b>	Display the previous view
<b>Ctrl+Alt+P</b>	

# Modeless Commands

Grid Settings	
Command	Description
<b>G &lt;x&gt; {&lt;y&gt;}</b>	Set all grids (Routing, Test Point, Via, Fanout, Component), except the Displayed grid
<b>GC &lt;x&gt; {&lt;y&gt;}</b>	Set the Component grid
<b>GD &lt;x&gt; {&lt;y&gt;}</b>	Set the Displayed (Dot) grid
<b>GF &lt;x&gt; {&lt;y&gt;}</b>	Set the Fanout grid
<b>GR &lt;x&gt; {&lt;y&gt;}</b>	Set the Routing grid
<b>GS</b>	Toggle snap to the routing grid on/off
<b>GT &lt;x&gt; {&lt;y&gt;}</b>	Set the Test Point grid
<b>GV &lt;x&gt; {&lt;y&gt;}</b>	Set the Via grid
<b>GGH</b>	Create a Hard Grid Statistics report
<b>GGM</b>	Create a Medium Grid Statistics report
<b>GGS</b>	Create a Soft Grid Statistics report
Setting the Design Units	
Command	Description
<b>UI</b>	Set Design Units to inches
<b>UM</b>	Set Design Units to mils
<b>UMM</b>	Set Design Units to millimeters (metric)
<b>UUM</b>	Set Design Units to Microns (metric)
Highlighting	
Command	Description
<b>H &lt;net&gt;</b>	Highlight specified net on/off
<b>HCR</b>	Toggle highlighting of component pads and traces with rules on/off
<b>HO</b>	Turn highlight of selected object(s) on/off
<b>HD</b>	Set highlight to Dim other objects
<b>HG</b>	Set highlight to Gray other objects
<b>HH</b>	Set highlight to Crosshatch highlighted objects
Net Name Visibility	
Command	Description
<b>NN</b>	Toggle the visibility of the net names
<b>NNP</b>	Toggle the display of the net names on pins
<b>NNT</b>	Toggle the display of the net names on traces
<b>NNV</b>	Toggle the display of the net names on vias
Line/Trace Angle Settings	
Command	Description
<b>AA</b>	Set Any angle mode
<b>AD</b>	Set Diagonal angle mode
<b>AO</b>	Set Orthogonal angle mode
Line/Trace Width Settings	
Command	Description
<b>R &lt;n&gt;</b>	Set "Minimum display width" to <n>, example R 50. Widths less than <n> display as single pixel center lines
<b>W &lt;n&gt;</b>	Change current trace or line width to <n>, example W 5

Plower Settings	
Command	Description
<b>PB</b>	Toggle Push Trace Behind Mode on/off (current trace)
<b>PC</b>	Enable Plow After Click Mode (current trace)
<b>PP</b>	Enable Plow with Pointer Mode (current trace)
<b>PR</b>	Enable Plower Rip Up Mode (current trace)
<b>PX</b>	Disable Plowing (current trace)
Search Commands	
Command	Description
<b>S &lt;x&gt; &lt;y&gt;</b>	Search absolute at <x> <y>, for example S 1000 1000
<b>S &lt;s&gt;</b>	Search for ref. designator/pin, for example S U1.1 or S U1
<b>SR &lt;x&gt; &lt;y&gt;</b>	Search relative X and Y, for example SR -100 -50
<b>SRX &lt;x&gt;</b>	Search relative X at current Y, for example SRX 300
<b>SRY &lt;y&gt;</b>	Search relative Y at current X, for example SRY 400
<b>SS &lt;s&gt;</b>	Search and Select by ref. designator, for example SS U10
<b>SX &lt;x&gt;</b>	Search absolute X at current Y, for example SX 300
<b>SY &lt;y&gt;</b>	Search absolute Y at current X, for example SY 400
Pour Outline Mode Settings	
Command	Description
<b>PO</b>	Toggle Pour Outline on/off
Object Visibility	
Command	Description
<b>DP</b>	Toggle Distinguish Protected Objects mode on/off
<b>I</b>	Toggle Distinguish Protected Objects on/off (no Shortcut dialog box)
<b>O</b>	Toggle Outline Mode on/off (no Shortcut dialog box)
<b>PN</b>	Pin Number Display on/off
<b>T</b>	Transparent Mode on/off (no Shortcut dialog box)
<b>U</b>	Toggle Unroute Display on/off
<b>Y</b>	Toggle Color by Net on/off (no Shortcut dialog box)
Via Commands	
Command	Description
<b>E</b>	Cycle End Via Mode (No Via, Via, Test Point)
<b>V</b>	Open the Via dialog box
<b>VA</b>	Set the Via Mode to Automatic
<b>VG</b>	Toggle Via guides display on/off
<b>VP</b>	Set the Via Mode to Partial
<b>VT &lt;name&gt;</b>	Set the Via Mode to Through

Layer Commands	
Command	Description
L <n>	Change the current layer to <n>
PL <n1> <n2>	Set the Layer pair
DRC Settings	
Command	Description
DRC	Toggle on-line DRC Mode
SUS	In component move, suspend the cursor to examine DRC issues on the Errors Spreadsheet tab
Measurement	
Command	Description
Q	Quick measure with dynamic rules
General Mode Settings	
Command	Description
SC	Toggle Smooth Traces on Complete on/off
DG	Toggle direction guides on/off when moving trace segments
Miscellaneous	
Command	Description
MS	Move Sequential (after selecting components)
RAD <n>	Arc radius set to the <radius> value. example RAD 45

Quick Layer Visibility	
Command	Description
Z	Return the layer view to normal
Z {+<layer>} {-<layer>}	Add or remove a layer from the current set of displayed layers
Z <n-m>	View only the range of layers you type
Z <layer n> {<layer m> ...}	View only the layers you type
Z *	View all layers
Z 0	Hide all layers
Z A	View the active layer
Z B	View only the bottom layer
Z C <-C>	View only the current layer
Z D	View all documentation layers
Z E	View all electrical layers
Z I	View all internal layers
Z O	View only the outside layers (the top and bottom layers)
Z T	View only the Top layer
Z U	Toggle view of unroute connections (visible on all layers)
ZR <name>	Restore a Quick Layer View configuration
ZS <name>	Save a Quick Layer View configuration