

Modeless Commands

You can set or change some settings and functions at any time using a shortcut key for the command; this is a *modeless command*. You simply type the shortcut keys, enter the new value, and press Enter.

Modeless commands usually apply to values that you change frequently during design. Use the modeless command G, for example, to change the grid setting. Type G, the new setting, and press Enter. You can change the current layer by typing L, the new layer, and pressing Enter.

Modeless commands which take parameters should have a space between the command and the argument, such as N GND or GD 50.

Below is a summary of modeless commands, where: (X,Y) = coordinates; (s) = text; (n) = number. To view this topic at any time, type ? and press Enter.

Global Settings

Shortcut key	Description
C	Complementary format. Type C and press Enter to change the display to a complementary format, which views thermals and antipads on plane layers. Type C a second time and press Enter to restore the normal noncomplementary view.
D	Display last current layer on/off.
DO	Drill outline on/off.
E	Cycles through the End Via modes: <ul style="list-style-type: none"> • End No Via (where a trace ends in space) • End Via (where a trace ends with a via) • End Test Point (where a trace ends with a test point via)
I	Database Integrity Test.
L <n>	Change the current layer to <n>. <p><n> can be a number or name, for example (L 2) or (L top).</p>
N <s>	Highlights nets one by one. To place the highlighted net <s> at the top of the stack, repeat the command, for example, N GND.
N-	Unhighlights each highlighted net in reverse order.
N	Removes all highlighting from the nets.
O <r>	Displays an outline of pads and traces. See " To Use Outline View Mode " for more information.
PO	Pour outline on/off.
Q	Quick Measure . Snaps to the design grid when Grid Snap is on. Measurements are gridless when Grid Snap is off. You can also measure precise Euclidean distances between polar grid nodes using this command.
QL	Quick Length. Area select the route items you want to measure; such as route segments, nets, or pin pairs. Type QL; and press Enter. A report of the

	route item lengths for routed, unrouted, and total length appears in the default text editor.
R <n>	Reduce display width to <n>, for example, R 50.
RV	Toggles Make Like Reuse operations to compare or ignore value and tolerance attributes. See " To Make a Like Reuse in Verb Mode " or " To Make a Like Reuse in Object Mode " for more information.
SPD	Display generated plane data for split/mixed planes. This command controls an option in the Split/Mixed Plane tab of the Preferences dialog box.
SPI	Display plane thermal indicators. This command controls an option in the Split/Mixed Plane tab of the Preferences dialog box.
SPO	Display plane polygon outlines for split/mixed planes. This command controls an option in the Split/Mixed Plane tab of the Preferences dialog box.
T	Toggle Transparent Mode. See " To Use Transparent View Mode " for more information.
X	Text outline on/off.
W <n>	Changes width to <n>, for example W 5.

Grids

Shortcut key	Description
G <x> {<y>}	Grid global setting. The second parameter is optional. Sets the Design and Via grids simultaneously, for example, G 25, G 8.3 or G 16-2/3, G 25 25.
GD <x> {<y>}	Dot grid setting, for example, GD 8-1/3, GD 25 25, or GD 100. The second parameter is optional.
GP	Polar grid on/off. Use the polar grid for Radial Move, circular component arrays, and to create radial drawings.
GP r a	Move to a point specified by polar coordinates (radius and angle).
GPR r	Move to a point specified by the radius, using the existing angle.
GPA a	Move to a point specified by the angle, using the existing radius.
GPRA da	Move to a point specified by the current angle (da) value, using the existing radius.
GPRR dr	Move to a point specified by the current radius (dr), using the existing angle.
GR <xx>	Design grid setting, for example, GR 8-1/3, GR 25 25, G 25.
GV <xx>	Via grid setting, for example, GV 8-1/3, GV 25 25, or GV 25.

More Examples Of Grid Use

- 8 = (eight); - 8-1/3 = (eight and a third); - 8.33 = (eight point 33)

Search

Shortcut key	Description
S <s>	Search for reference designator/pin <s>, for example SU 1.1 or SU 1.
S <n> <n>	Search absolute at <n> <n>, for example S 1000 1000.
SR <n> <n>	Search relative X and Y, for example SR - 200 100.
SRX <n>	Search relative X, for example SRX 300.
SRY <n>	Search relative Y, for example SRY 400.
SS <s>	Search and Select by reference designator, for example SS U10. Note: Spaces may be important in modeless commands. For example, SS W1 and S SW1 have different meanings. SS W1 tells PADS Layout to search and select W1, while S SW1 tells it to search for SW1.
SS <s> *	You can search and select using an asterisk, *. Type SS, a space, the character you want to search by, and an asterisk. For example, to search and select all components beginning with a C, type SS C*. All components with a reference designator starting with C are selected. Note: This command is useful for placing parts. For example, you can select all resistors using SS R* and then choose Move Sequential from the pop-up menu to place the selected parts.
SX <n>	Absolute move to <n>, current Y, for example SX 300.
SY <n>	Absolute move to <n>, current X, for example SY 400.
XP	Search for and select route segments using pixels instead of segment width, allowing you to adjust a trace whose corners are less than the width of the trace.

Angles

Shortcut key	Description
AA	Any angle.
AD	Diagonal angle.
AO	Orthogonal angle.

Undo

Shortcut key	Description
UN [<n>]	Multiple undo command (1-100), <n> is optional. (Ex. UN 2) UN will undo 1 time.
RE [<n>]	Multiple redo command (1-100), <n> is

	optional. (Ex. RE 2) RE will redo 1 time.
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Design Rule Checking (DRC)

Shortcut key	Description
DRP	Prevent.
DRW	Warn.
DRI	Ignore Clearance.
DRO	Turn off DRC Mode.

Routing

Shortcut key	Description
E	Toggle between end via and end no via modes.
LD	Toggle between horizontal and vertical routing layer direction on the current layer.
PL <n> <n>	Paired Layer command, where <n> can be layer numbers or layer names. (for example, PL 1 2 or PL top bottom).
SH	Toggles Shove mode on or off.
V <name>	Select via type, for example V standard via.
VA	Automatic via selection.
VP	Use partial via.
VT	Use through hole via.
T	Toggle Transparent Mode.

Drafting Objects

Shortcut key	Description
HC	Circle shape draw mode.
HH	Path shape draw mode.
HP	Polygon shape draw mode.
HR	Rectangle shape draw mode.

Mouse Click Substitutes

Shortcut key	Description
M	Activate shortcut menu for current mode (right mouse button).
Spacebar	Perform a left mouse button click (to add corners, select items, complete, etc.) at the current cursor location.

Various

Shortcut key	Description
?	Show this help topic.
BMW	Basic Media Wizard. BMW creates a macro with associated files based on your last PADS Layout session or your current session. BMW records a session using the next.log file to simplify the process of reproducing a problematic PADS Layout session. This is also a command line

	option. See Start-up Options . BMW is associated with another modeless command, BLT. See " To Use BMW " for information on creating media.
BLT	Basic Log Test; it finds and runs the BMW macros to test or replay the media. See " To Run BLT " for information on playing back the PADS Layout session.
F <s>	Open file <s>, where <s> is the path and name of the file to open.