

# PCB-1.99j-mag1 command reference

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## misc operations

backspace remove object  
*[S][C]Btn1* remove object  
 escape pan (Gumby) mode  
*Btn1* create object or part  
 u undo operation  
*[S]r* redo operation  
*[S][C]u* clear undo-list  
 tab switch viewing side  
 cursor key move crosshair 1 grid  
*[S]cursor key* move crosshair 10 grid

## connections

*[S]f* reset found connections  
 f find connections  
*[S]backspace* remove connections

## user (:) commands

:DRC() check layout for rule violations  
 :l [file] load data file  
 :le [file] load element to buffer  
 :m [file] load layout to buffer  
 :q quit application  
 :rn [file] load netlist  
 :s [file] save data as file

## display

c center display  
 g increase grid spacing  
*[S]g* decrease grid spacing  
*[C]m* mark location  
 r clear and redraw output  
 z zoom in  
*[S]z* zoom out  
 v zoom extents

## selection

*Btn2* select/deselect object  
*[S]Btn2* add object to selection  
 drag *Btn2* select only objects in box  
 drag *[S]Btn2* add box to selection  
*[S]m* move selected to current layer

## copy and move

drag *Btn2* move object or selection  
 drag *[M]Btn2* copy object  
 drag *[S][M]Btn2* override rubberband & move  
 m move to current layer

## pastebuffer

*F3* enter pastebuffer-mode  
*[S]F3* rotate 90 degree cc  
*Btn1* copy to layout  
*[S]1..5* select buffer # 1..5  
 x copy selected objects to buffer  
*[S]x* cut selected objects to buffer

## sizing

s increase size of TLAPV <sup>a</sup>  
*[S]s* decrease size of TLAPV  
*[M]s* increase drill size of PV  
*[S][M]s* decrease drill size of PV  
 k increase clearance of LAPV  
*[S]k* decrease clearance of LAPV

## element

d display pinout  
*[S]d* open pinout window  
 h hide/show element name  
 n change element name

## pin/pad

n change name  
 q toggle square flag

## via

*F1* enter via-mode  
*[C]v* increase initial size  
*[S]v* decrease initial size  
*[M]v* inc. initial drilling hole  
*[S][M]v* dec. initial drilling hole  
*[C]h* convert via to mounting hole

## lines/arcs

*F2* enter line mode  
*F8* enter arc mode  
 l increase initial line size  
*[S]l* decrease initial line size  
 period toggle 45 degree enforcement  
 / cycle multiline mode  
*[S]* override multiline mode

## polygon

*F4* enter rectangle-mode  
*F6* enter polygon-mode  
*[S]p* close path  
 insert enter insert point mode

## text

*F5* enter text-mode  
 n edit string  
 t increase initial text size  
*[S]t* decrease initial text size

## rats nest

w add all rats  
*[S]w* add rats to selected pins/pads  
 e delete all rats  
*[S]e* delete selected rats  
 o optimize all rats  
*[S]o* optimize selected rats

<sup>a</sup>TLAPV: text, line, arc, pin or via

Obviously  $[S]$ ,  $[C]$ ,  $[M]$ ,  $F$  and  $Btn$  mean the shift, control, modifier1 (BTNMOD for buttons), function key and mouse button.