










Ultiboard Shortcuts & Quick Tips Sheet




Selection Filters

General tips and shortcuts



Selection Filters: The sensitivity of the Select tool () is adjusted using the Selection Filters.

Parts (), Traces (), Copper Areas (), Vias (), TH Pads (), SM Pads (), Text (), Other ()


Floating Tool Tip: Hold the <Ctrl> key down when using the Select tool () to view a floating *Tool Tip* label. The shape, pin, net and other information will be visually displayed during mouse navigation.


Placement tips and shortcuts

Placement by Ref Des: From the **Parts** tab (**Spreadsheet View**), drag the part placement icon () into the layout window to individually place parts.

Part Rotation <Ctrl+R> will rotate the part clockwise in 90° steps ()
<Ctrl+Shift+R> will rotate part counter-clockwise in 90° steps ()

Exact Part Location: The '*' key <Shift+8> allows a part to be placed at a specific X, Y location (from PCB origin).


Part Layer Swap: <Alt+S> will swap () selected component footprint between top and bottom layers.


Fix Part Location: Lock parts by highlighting part(s), *right clicking* and hitting the **Lock** () selection.


Alignment: Select multiple parts and right click. The Align menu allows you to align or space objects.

Routing tips and shortcuts

Manual Routing Methods Summary


Line Style () – <Ctrl+Shift+L> - Left click on pad to start; create arbitrary segments by moving mouse and left click to anchor until complete.


Follow-Me () – <Ctrl+T> – Left click on pad to start; move mouse to view recommended route segments, lock down segment routes by left clicking until complete.


Connection Machine () – Double click in **Ratsnest**; move mouse to view recommended route, left click to complete entire route.

Routing styles - While manual routing, hit the <space> key to switch between various styles of routing (45°, freeform, 90°, rotated 90°) - works for all manual routing styles.



Via while routing - In manual routing mode (), it is possible to create vias while routing. Start a route from a pin connection and hit 'Q' to swap between 2 preselected user layers

(select by clicking 2 copper layers from the Layers tab) or select from the layer control (). This will create an automatic via at a locked corner and allow for continued routing on the selected layers.

Via to ground plane – Use 'Q' in manual routing () to toggle between a layer to a configured layer with a copper plane (this will create via), draw a small segment and hit <Esc> key to stop trace. Via will automatically get connected to plane (if plane assigned to same net as routed net) with selected thermal relief style. Thermal relief style is set in plane properties.



DRC issues

To evaluate DRC issues, check the **Spreadsheet View** and the **Nets** to verify trace clearance settings. **Trace clearance** settings can also be found in **SMT Pads** and **THT Pads** tabs.