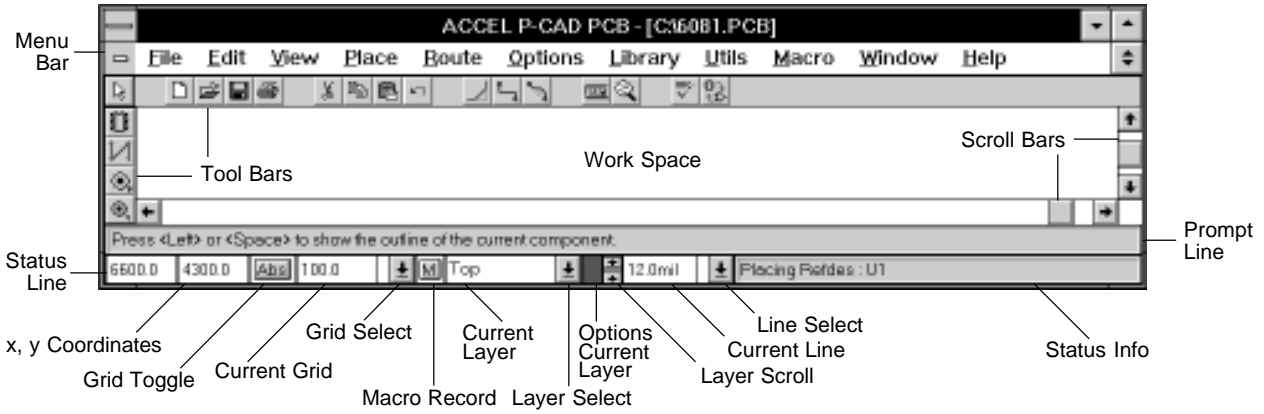
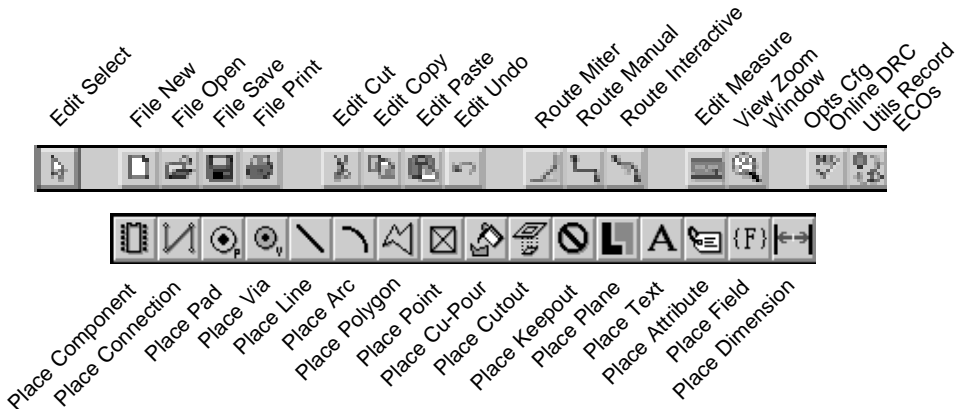


ACCEL PCB Quick Reference



Tool Bars



Keyboard Shortcuts (Default)

- | | |
|---|--|
| F1 — Help | J — Enter Coordinate |
| Alt + F4 — File Exit | L — Cycles forward through board layer list |
| Alt + mouse — Enables freehand drag | Shift + L — Cycles backward through board layer list |
| Arrow keys — Moves cursor | M — Starts or stops the macro recorder |
| Shift + arrow — Moves cursor 10 grid points | Ctrl + N — File New |
| Backspace — Unwind | O — Cycles forward through orthogonal modes |
| Ctrl + mouse — Multiple Select | Shift + O — Cycles backward through orthogonal modes |
| Del — Deletes selected objects | Ctrl + O — File Open |
| Back slash (\) — Stops route in mid-connection | Ctrl + P — File Print |
| Forward slash (/) — Stops route in mid-connection | Q — Draft mode toggle |
| Esc — Mouse cancel | R — Rotates objects 90 degrees |
| Shift + mouse — Sub select | Shift + R — Rotates objects by predefined degrees |
| Spacebar — Left mouse button | S — Edit Select |
| (+) or (=) — Zoom in | Ctrl + S — File Save |
| (-) — Zoom out | Shift + T — Edit Move to Layer |
| A — Grid toggle | Ctrl + Z or U — Edit Undo |
| C — Zoom Center | Ctrl + V — Edit Paste |
| Ctrl + C — Edit Copy | W — Line width next |
| D — Increases the Ref Des (if in Place Component) | Shift + W — Line width previous |
| Shift + D — Decreases the Ref Des (if in Place Component) | X — Cursor style toggle |
| E — Executes temporary macro | Ctrl + X — Edit Cut |
| F — Flips objects/toggles ortho mode pairs | Y — Options layers |
| G — Cycles forward through the grids | Z — Zoom Window |
| Shift + G — Cycles backward through the grids | |

ACCEL EDA Procedures Summary

PCB

SELECT There are three ways to access Select mode: Left-click the Select icon in the Toolbar, run Edit Select or press the *S* key. *Shift* sub selects and *Ctrl* extends selection. To single select: Left-click on a single object or press the spacebar twice.

MULTIPLE SELECTS To multiple select: *Ctrl*-left-click on additional objects to add them to the current selection. All items are selected by running Edit Select All.
To block select: Left-click and drag to form a block around a group of objects. Items can be included or excluded using option block selection.
To toggle through co-located objects: Spacebar multiple times without moving the mouse.

SUB SELECT To sub select: *Shift*-left click on an object. Alter the silkscreen: On the correct silkscreen layer, *Shift*-left click on the object. Run Edit Properties. Island removal in copper pours: On the correct layer, *Shift*-left click the island. Edit Delete. Change pad styles: On the correct layer, *Shift*-left click a pad. Run Edit Properties to change the pad style.

DESELECT To deselect, left-click in any clear area of the workspace which is outside of the selection region or run the Edit Deselect All command. To deselect individual objects from a multiple select: *Ctrl*-left click on the object.

ALIGN COMPONENTS Select one or more components. Choose a Selection Point if desired. Run Edit Align Components.

COPY Select one or more objects. Run Edit Copy (*Ctrl*-C) followed by Edit Paste (*Ctrl*-V); or *Ctrl*-left-click in the selection region then drag to the desired location and release. To copy one or more objects from one layer to another or from one design to another, run Edit Copy. Change to the desired layer or design file, then run Edit Paste.

DELETE Select one or more objects. Press the *DEL* key; run Edit Delete; or right-click to display the pop-up menu and choose Delete.

DUPLICATE Select one or more objects. Run Edit Copy Matrix.

FLIP Select one or more objects. Press the *F* key to flip.

HIGHLIGHT NETS Net objects are arcs, connections, copper pours, lines, pads, polygons and vias that are part of a net.
To Highlight, run Edit Nets. Choose one or more nets from the list box and click the Highlight button; or select one or more net objects, right-click to display the pop-up menu and choose Select Net. Right-click again and choose Highlight.
To Unhighlight, run Edit Nets. Choose one or more nets from the list box and click the Unhighlight button; or select one or more net objects, right-click to display the pop-up menu and choose Select Net. Right-click again and choose Unhighlight. To Unhighlight the entire design, run Edit Unhighlight All.

PROPERTIES To make changes to an object (size, shape, width, etc.), select one or more objects of the same type. Run Edit Properties; or right-click to display the pop-up menu and choose Properties. Double mouse click displays properties for selected item.

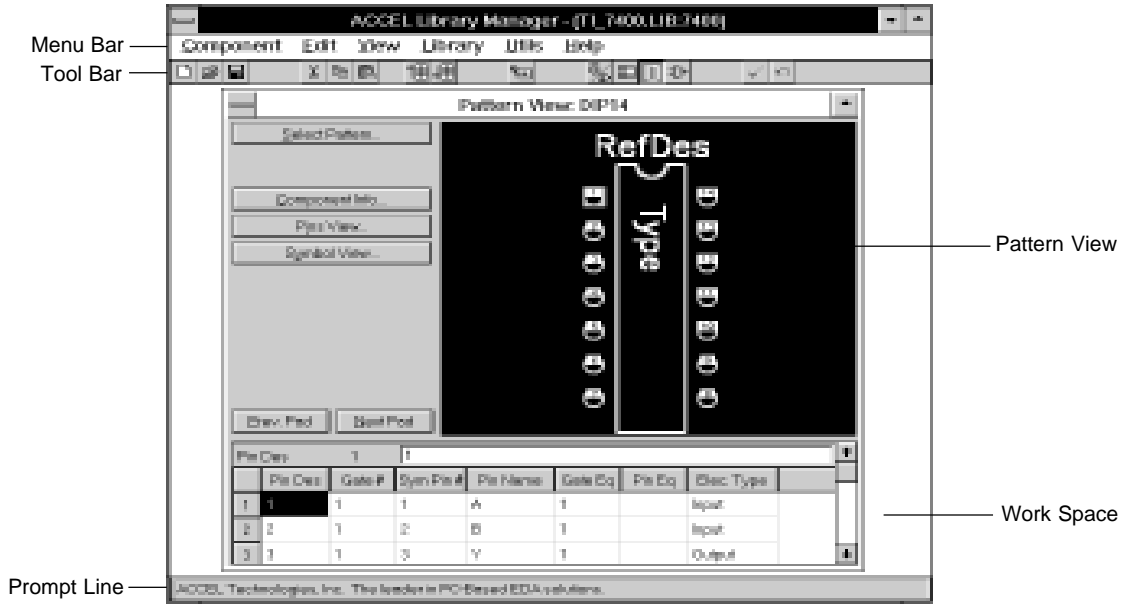
ACCEL EDA Procedures Summary

- MOVE** Select one or more objects. Left-click in the selection region, then drag to the desired location and release; or *Alt*-left-click in the selection region, then drag to the desired location (you don't need to hold down the left mouse button while dragging) and left-click to finish; or press the spacebar once with the cursor in the selection region, drag to the desired location, and left-click or press the spacebar to finish. To move an object from one layer to another. Select one or more objects. Set the current layer to the desired destination. Run Edit Move To Layer.
- NET INFO** Net objects are arcs, connections, copper pours, lines, pads, polygons and vias that are part of a net. Select a single net object. Run Edit Nets, choose a net from the list box, and click the Info button; or right-click to display the pop-up menu and choose Net Info.
- PLACE** Select the object to be placed from the Place menu or the Toolbar. Left-click in the workspace to begin placement.
- RENUMBER** There are two types of Renumber: Ref Des and Pad Num. Ref Des: Run Utils Renumber. Select Ref Des. All Ref Des will be renumbered either automatically or manually from Top to Bottom or Left to Right. Indicate the Starting Ref Des and Increment Value. Pad Num: Select the pad or group of pads. Run Utils Renumber. Select Pad Num. It is a manual operation. Indicate the Starting Number and Increment Value. Click on each pad to assign a pad number. As each pad highlights, the pad number is assigned.
- RESIZE** Objects that can be resized are arcs, lines, polygons, copper pours, cutouts, planes and keepouts. Select a single object. Left-click over a handle and drag to resize. To resize text, select one or more text objects. Run Edit Properties; or right-click to display the pop-up menu and choose Properties.
- ROTATE** Select one or more objects. Press the *R* key to rotate in 90 degree increments. Press *Shift+R* to rotate the user-defined increment specified in the Options Configure dialog box.
- SELECTION POINT** Select one or more objects. Right-click to display the pop-up menu and choose Selection Point. Click-left to locate the point, used as a point of reference for subsequent editing operations.
- UNDO** There are four ways to perform an Undo: Click the Undo icon on the Toolbar; press *Ctrl+Z*; press *U*; or run Edit Undo.
- UNWIND** During placement, you can "unwind" lines, polygons, copper pours, cutouts, planes, keepouts and manual routes by pressing the *backspace* key.

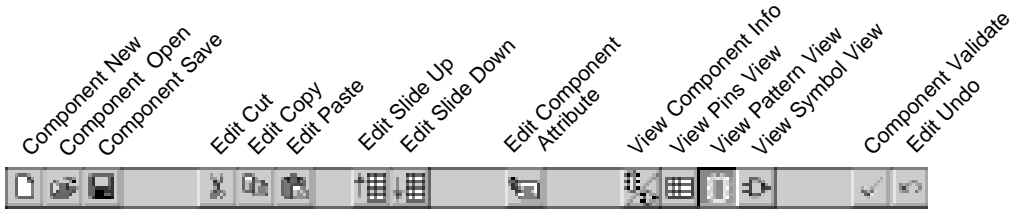
LIBRARY MANAGER

- TRANSLATE** To translate Tango-PCB Series II, Tango-Schematic Series II, Schema and/or PDIF libraries into ACCEL libraries, run Library Translate.
- MERGE PATTERNS** To copy patterns from an ACCEL library containing patterns into an ACCEL library that contains no patterns to make a complete integrated library, run Library Merge Patterns.
- LIBRARY QUERY** To obtain detailed information about a library, use the Library Query command.

ACCEL Library Manager Quick Reference



Tool Bar



Keyboard Shortcuts (Default)

- Arrow keys — Moves pointer
- End — Moves to the end
- Enter — Accepts edit and moves to next cell
- Home — Moves to the beginning
- Tab — Moves forward through cells
- Shift + Tab — Moves backward through cells
- F1 — Help
- Alt + F4 — Component Exit
- Ctrl + C — Edit Copy
- Ctrl + K — Component Validate
- Ctrl + N — Component New
- Ctrl + O — Component Open
- Ctrl + S — Component Save
- Ctrl + U — Undo
- Ctrl + V — Edit Paste
- Ctrl + X — Edit Cut
- Ctrl + Up — Slide selection up
- Ctrl + Down — Slide selection down
- Page Up — Scroll up
- Page Down — Scroll down