5 The Concept of the EAGLE User Interface

Internally, EAGLE has been set up in such a way, that any action is initiated by a command string. Normally the user activates these commands by clicking on menu items or toolbar icons. Values are normally entered into appropriate fields.

The knowledge of the internal command language is not necessary to successfully design schematics and boards with EAGLE. However, this concept offers further possibilities which make EAGLE a very flexible tool: Any command, for instance, can be entered in text format via the command line or can be read from a file. Furthermore, command strings can be assigned individually to function keys (ASSIGN command). This enables the user e.g. to execute command sequences with a key stroke or a few mouse clicks (see SCRIPT command).

This tutorial uses a simplified notation for various actions in EAGLE which is explained in the following examples.

Selecting Menu Items

The character \Rightarrow means, that a menu selection is to be made. For example \Rightarrow File/Save

means: click the File menu with the left mouse button and next click Save.

Mouse Click

Actions to be carried out with a click of the left mouse button are represented with a dot. For example:

MOVE and F1

means: click the MOVE command with the left mouse button and then press the function key F1.

Actions to be carried out with a double click of the left mouse button are represented with two dots. For example

•• linear.lbr

means: select *linear.lbr* with a double click of the left mouse button from the menu.

Some commands have special functions in combination with the *Shift*, *Ctrl*, and *Alt* key. Please see detailed information in the command reference of the help function.

Several Input Alternatives

EAGLE commands can be entered via keyboard, by clicking icons or by clicking menu items.

The following actions, for example, will execute the MOVE command:

- Clicking the icon
- Typing MOVE in the command line, followed by the *Enter* key
- Pressing the function key F7 which is assigned to the MOVE command
- Selecting the menu item $\Rightarrow Edit/Move$

In this tutorial we will mainly work with the toolbars. For the sake of clarity the commands are show as text:

MOVE

means: click the MOVE icon



Use of Key Combinations

A + character indicates that the first key is held down while pressing the second key. For example:

```
Alt+F2
```

The Alt key is held down while pressing F2, then release both keys.

Command and Parameter Input via the Command Line

Actions which need to be terminated with the Enter (i.e. return) key are symbolized with the character \leftarrow . For example

```
USE ←
```

means: type USE and next press the *Enter* key.

Anything that is to be typed exactly as it appears, will appear in the text as follows:

```
CHANGE WIDTH 0.024 ←
```

Normally EAGLE does not differentiate between upper and lower case characters. Therefore you can enter the above command as

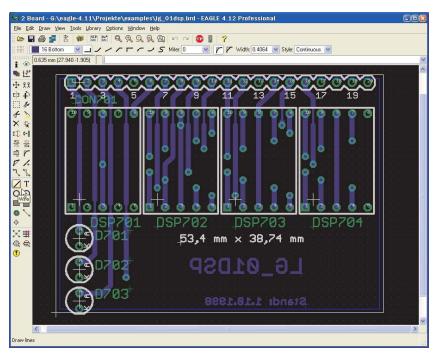
```
change width 0.024 \leftarrow
```

You may abbreviate the key words. The above input may therefore be simplified to

cha wid 0.024 ←

In this tutorial, however, the full commands are used.

The following figures show which commands are activated with the various toolbar icons. Additional help is offered by the Bubble Help text which appears as soon as the mouse cursor is positioned on an icon for a certain time. This text shows the command name.

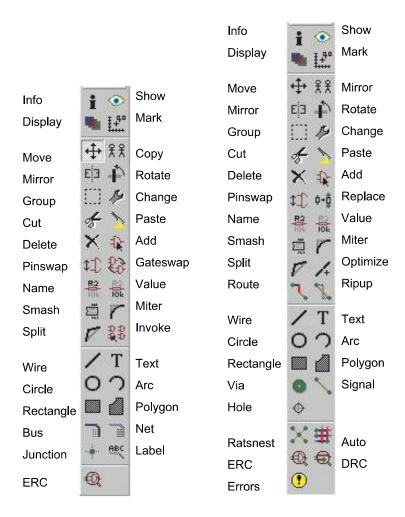


The Layout Editor window

From top to bottom: title with information about EAGLE version and edition, menu bar, action toolbar, dynamic parameter toolbar and coordinates display with command line.

On the left the command toolbar. The Bubble Help text describes the WIRE icon. The status bar below shows a short description of the current command.

The toolbars can be displayed/hidden in the *Options/User interface* menu. Additionally one has the possibility to use a text menu instead of the shown command toolbar.



Command toolbar of the Schematic Editor (left) and the Layout Editor (right)