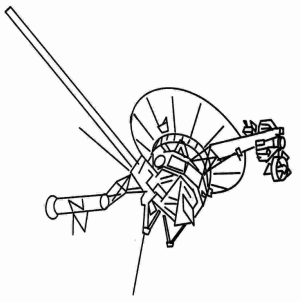
CadSoft EAGLE Scripting



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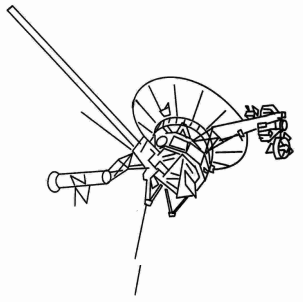
Doc. Vers. 1.3

EAGLE Scripting



The slides you will see in the following give an overview of topics addressed. You will get details and practicing in my course.

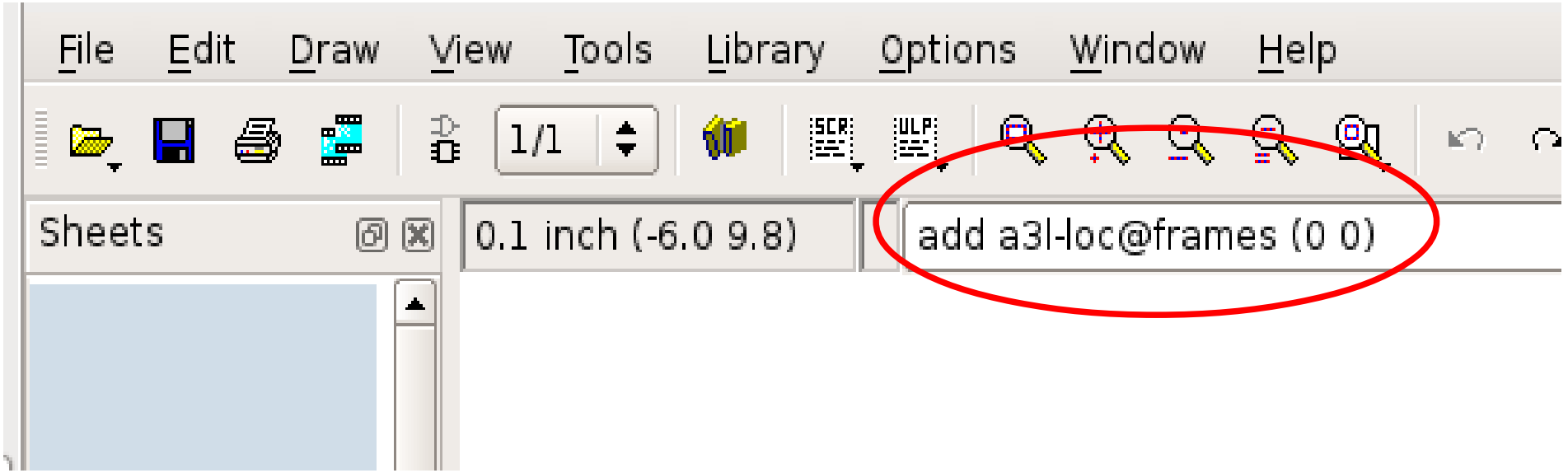
Please find more on booking and pricing here:

http://www.blunk-electronic.de/pdf/topics_EAGLE_training.pdf

Why Scripting ?

1. Comfortable EAGLE Usage
2. Save Time
3. Routine Jobs
4. Less Error Prone
5. Bases on Commandline
6. Linear Execution

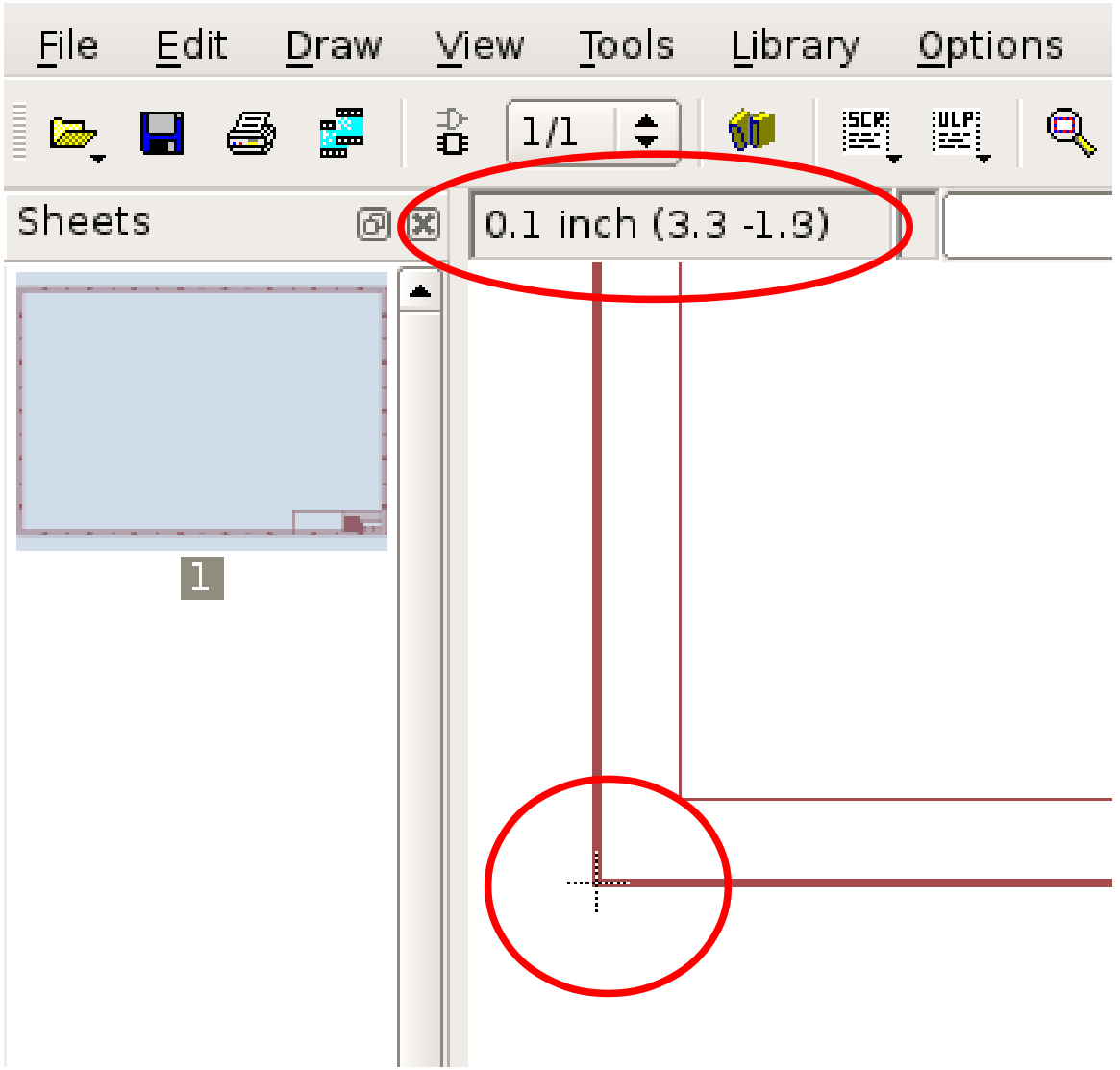
Commandline #1



add *@/home/luno/eagle/lbr/abc.lbr;
add a3l-loc@frames (0 0);

Device LBR Position

Commandline #2



Commandline #3

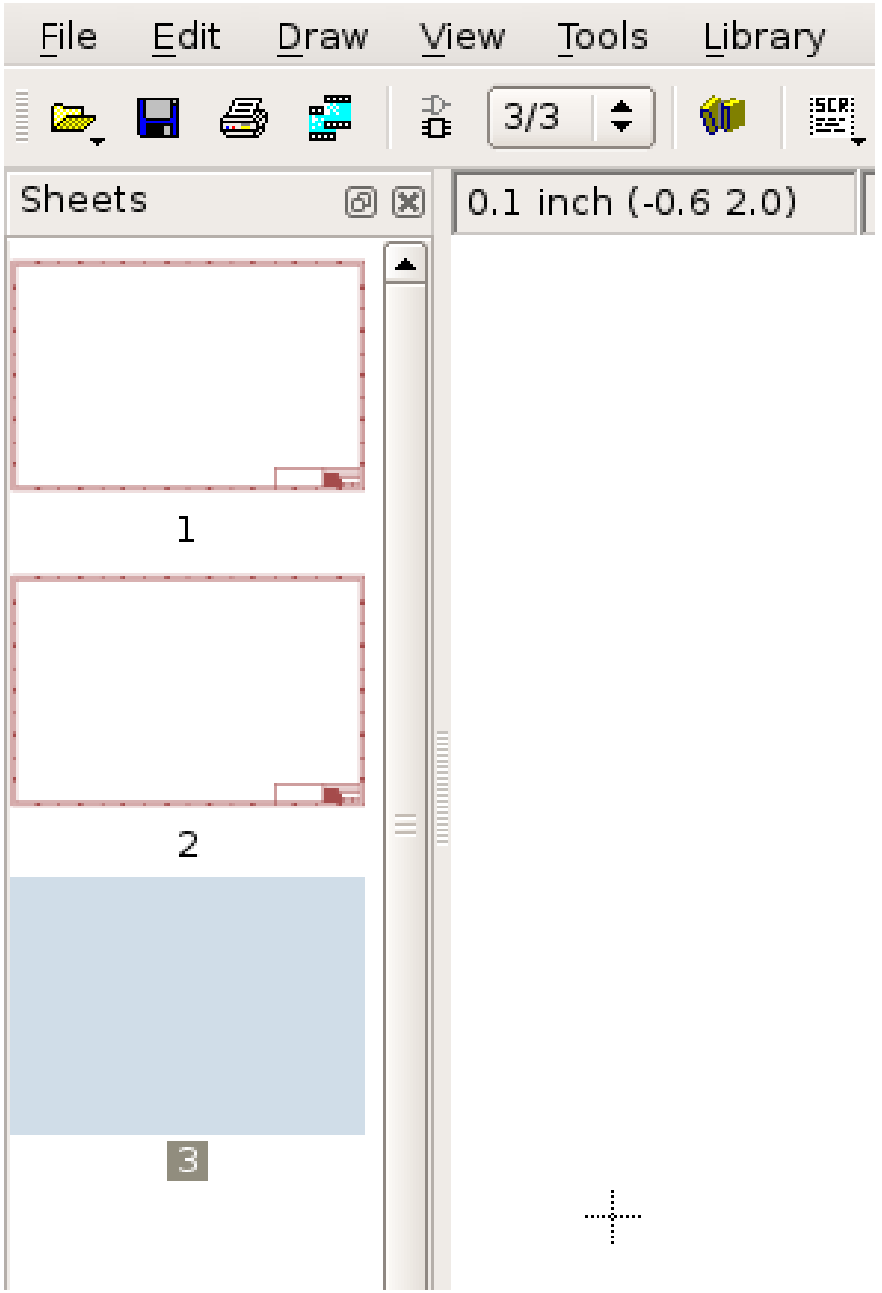
edit page : **edit .s2**

new page : **edit .s1000**

add drawing frame:

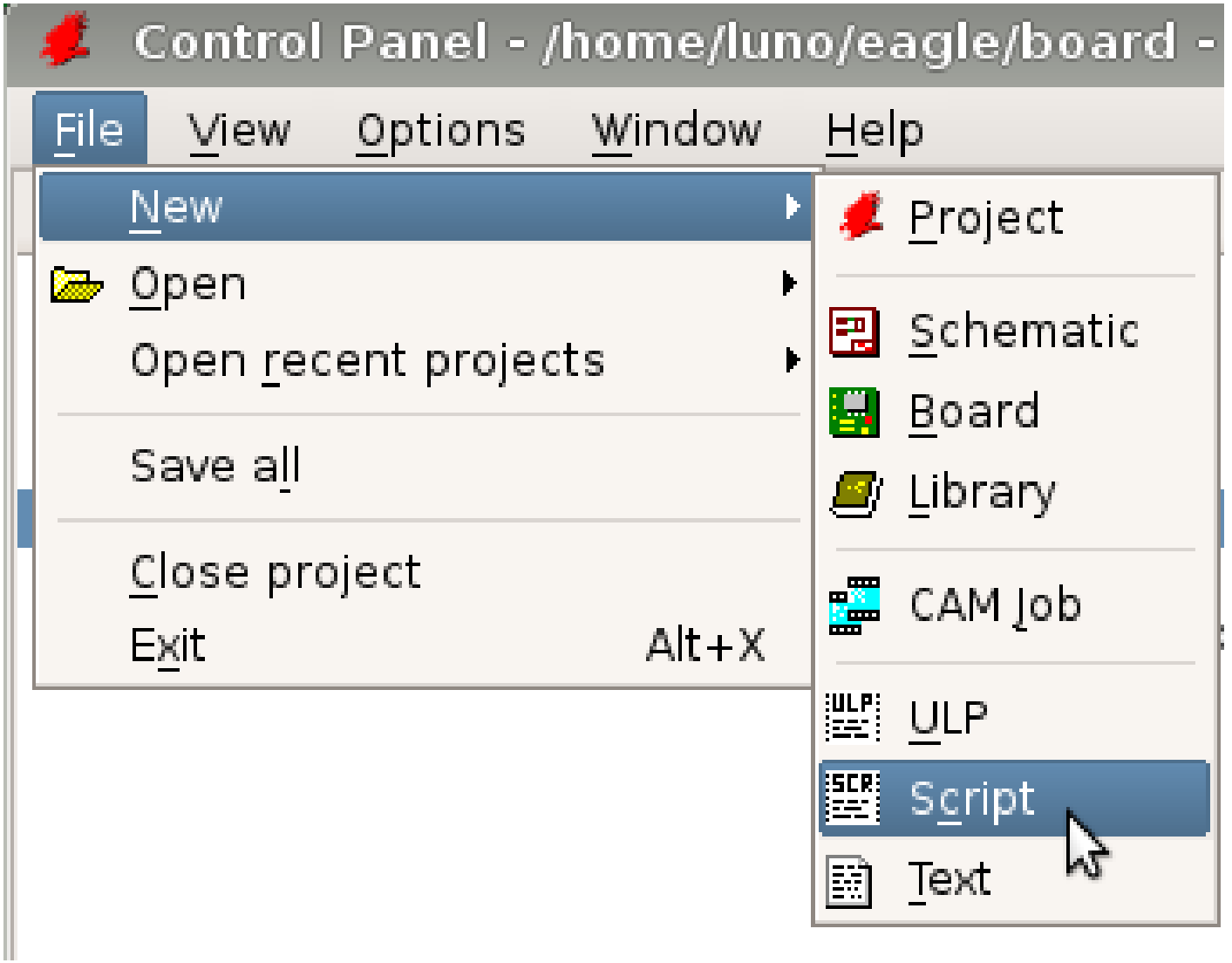
add a3l-loc@frames (0 0);

Commandline #4

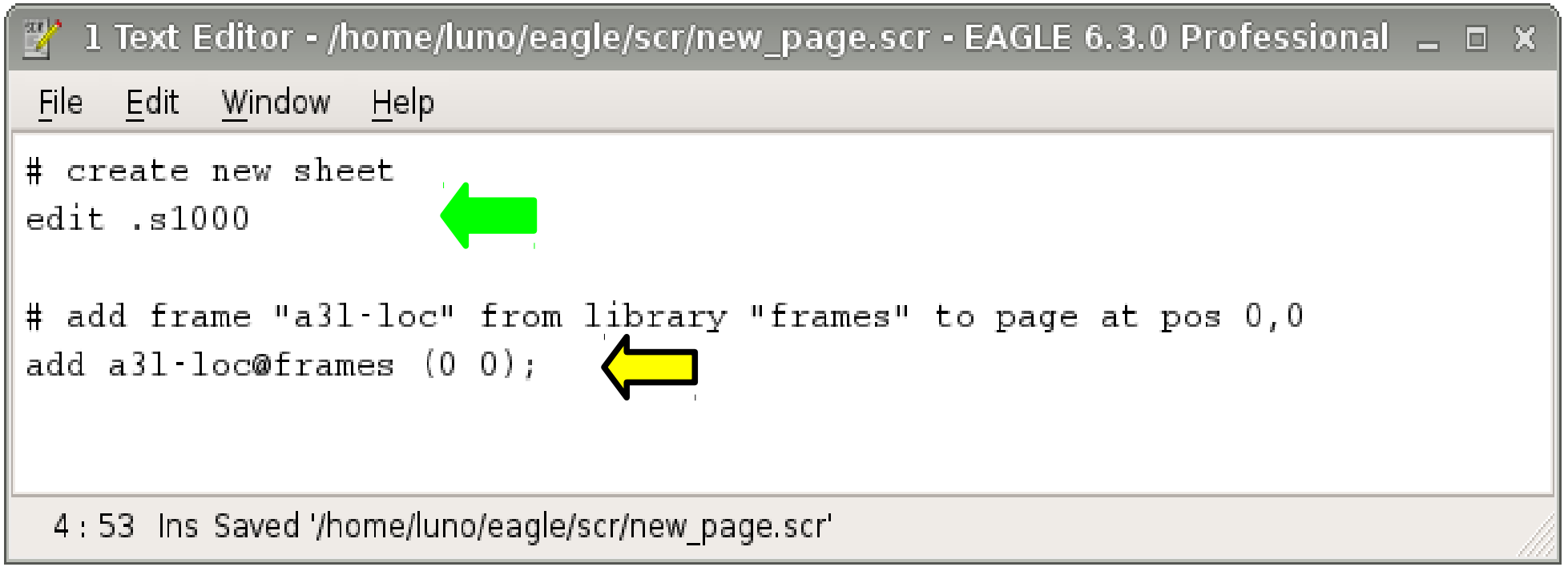


delete page : **remove .s2**

New Script

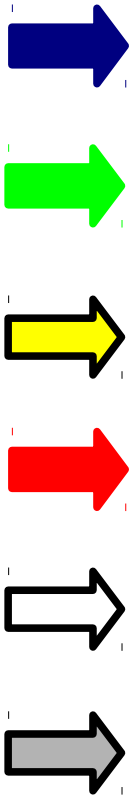

Control Panel - /home/luno/eagle/board -
File
View
Options
Window
Help
New
Open
Open recent projects
Save all
Close project
Exit
Alt+X
Project
Schematic
Board
Library
CAM Job
ULP
Script
Text

Example 1: Schematic Pages



run script : **scr new_page**

Example 2: Milling Outlines



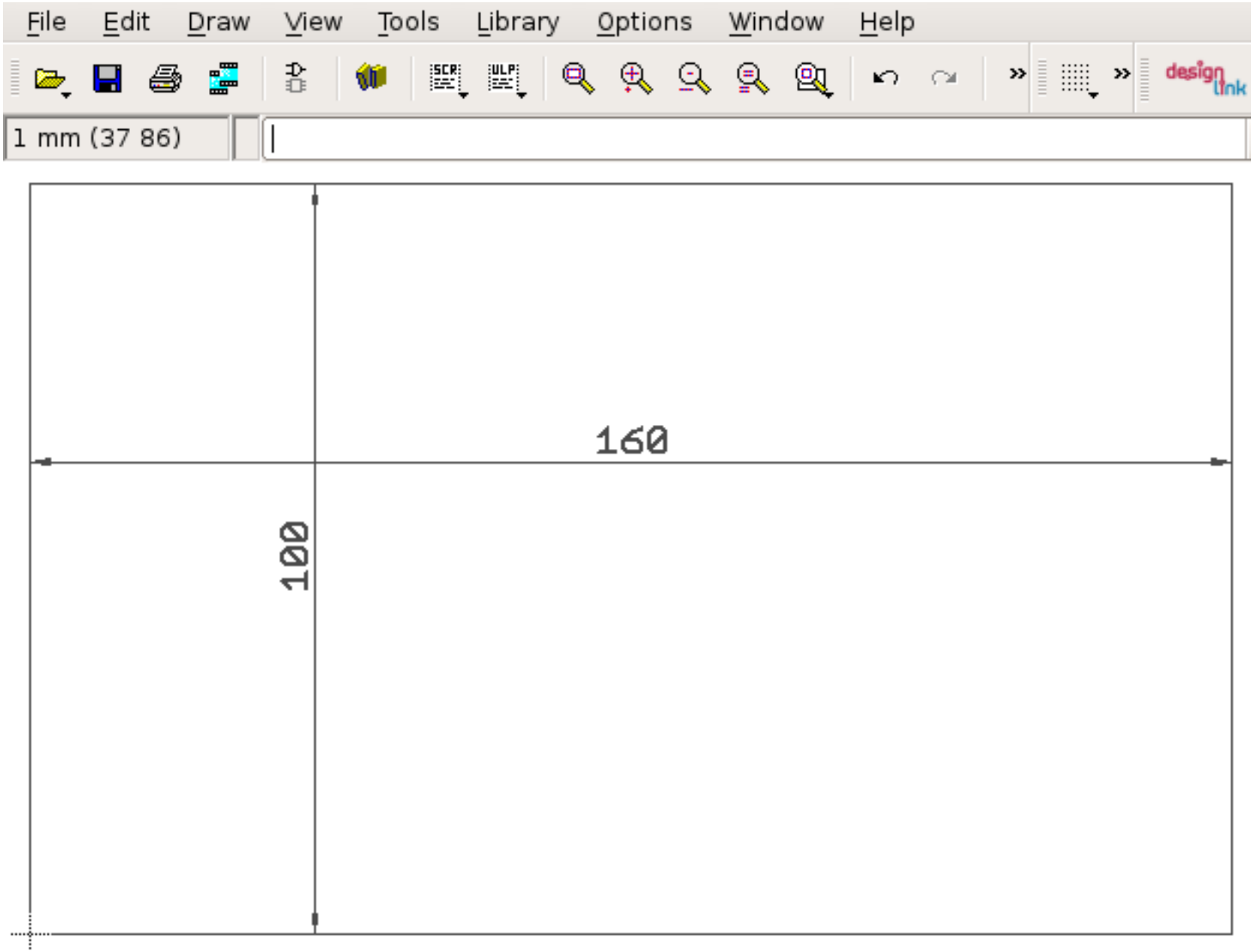
1 Text Editor - /home/luno/eagle/scr/euro_2.scr - EAGLE 6.3.0 Professional

File Edit Window Help

```
# Draws the dimension lines of a euro format board (100mm x 160mm).

# Change to board editor.
board;

# Set grid to 1mm but do not display grid.
Grid mm 1 off;

# Change to layer Dimension (#20).
Layer Dimension;

# delete default outline
del (30 0) (0 20) (160 10) (30 100);

# Draw wires first horizontal then vertical toward endpoint.
Set Wire_Bend 0;

# Draw wire of width 0 from 0,0 to 160,100 and back.
Wire 0   (0 0) (160 100) (0 0);
```

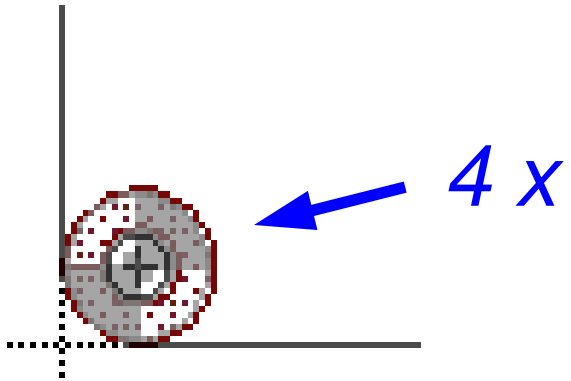
34:1 Ins

Example 2: Milling Outlines



Example 3: Mounting Holes

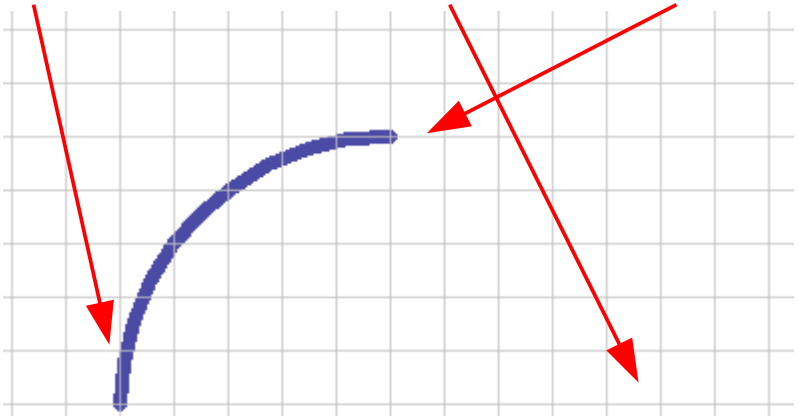
add 4,1@holes (5 5) (155 5) (155 95) (5 95);



- reference marks
- non-plated drills

Example 4: Arcs

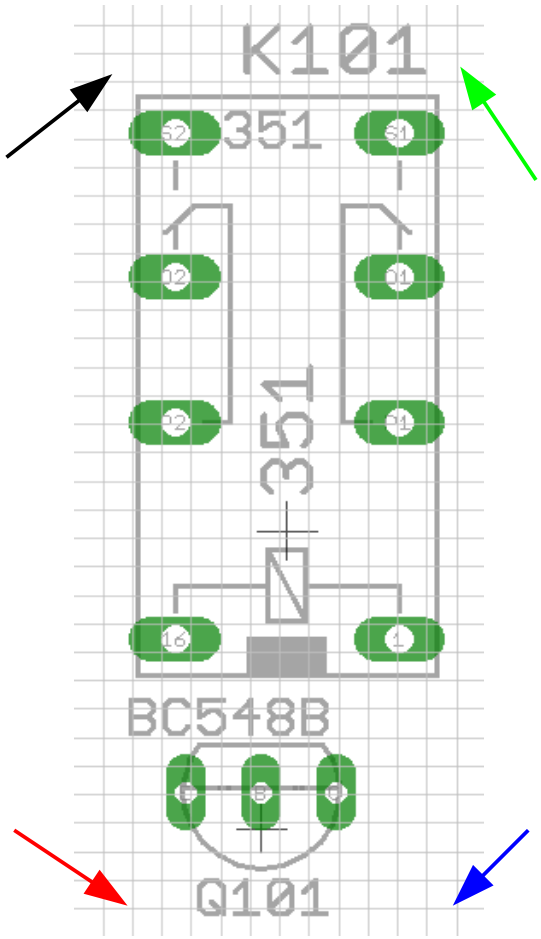
arc cw (40 30) (50 30) (45 35);



arc cw (40 20) (50 20) (50 20);

Copy a Group

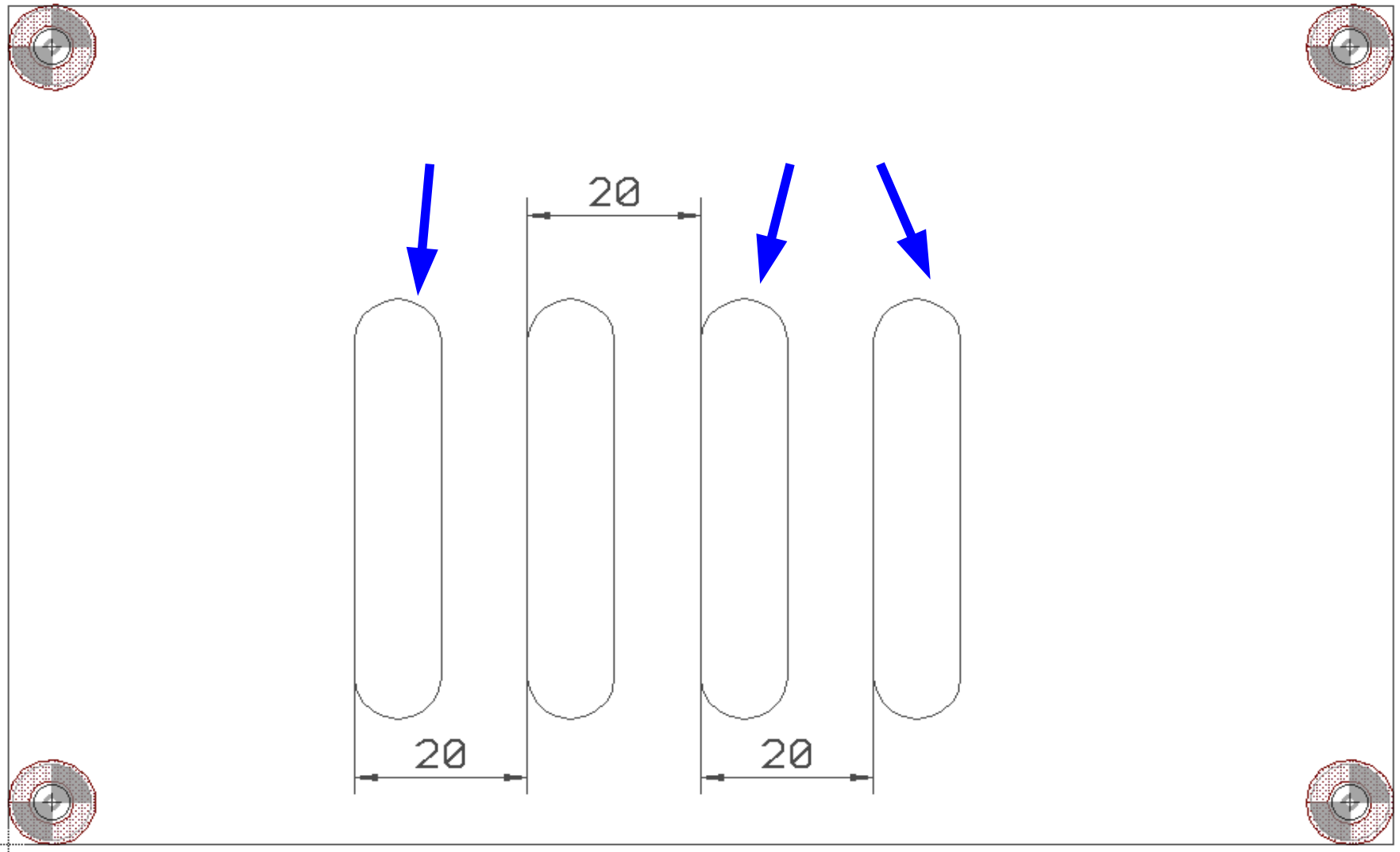
```
gro (39 14) (53 14) (53 67) (39 67) (39 14);
cut (39 14) (53 14) (53 67) (39 67) (39 14);
```




```
pas (59 14);
pas (79 14);
pas (99 14);
```

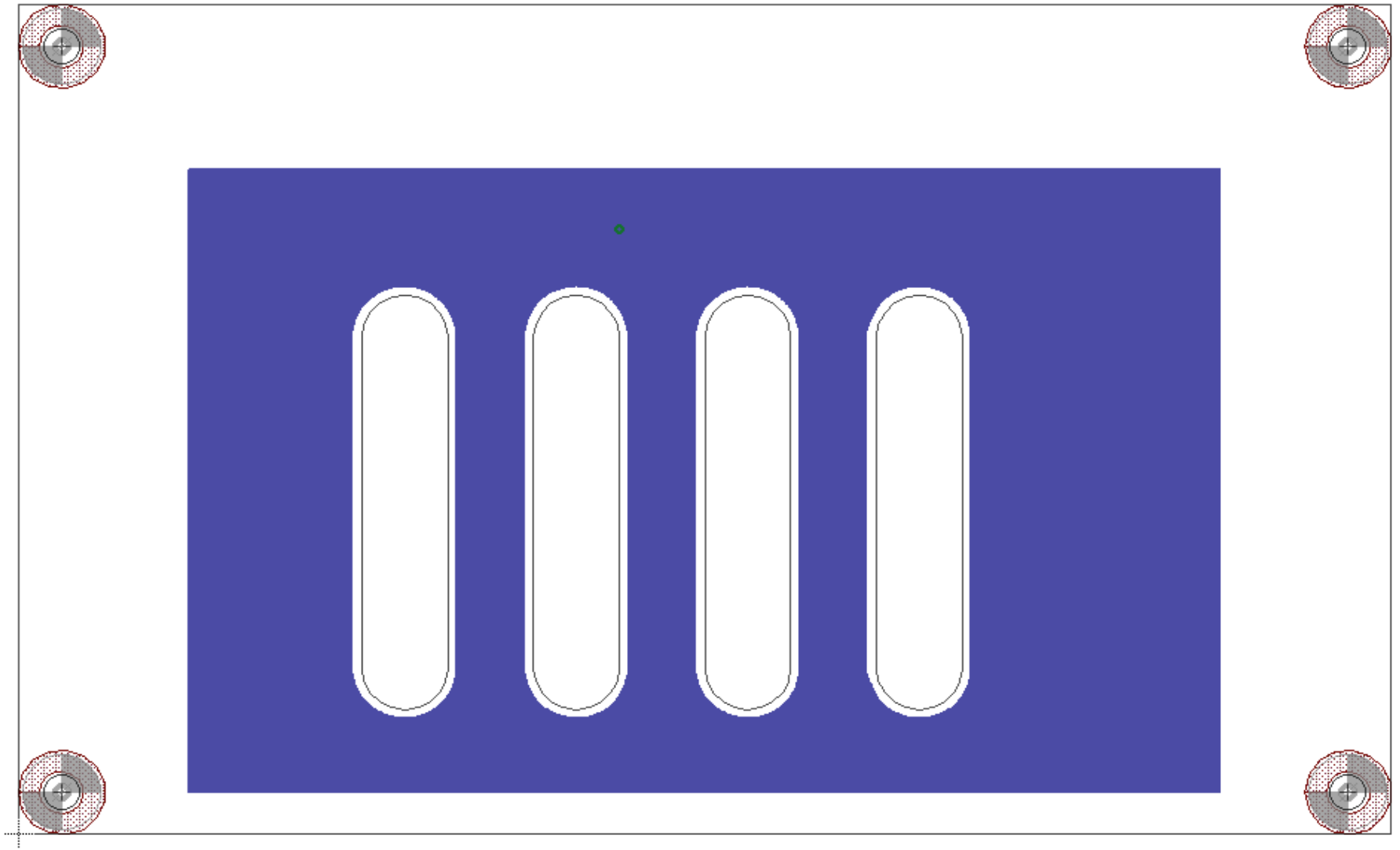
Origins matter !

Example 5: Convection Holes



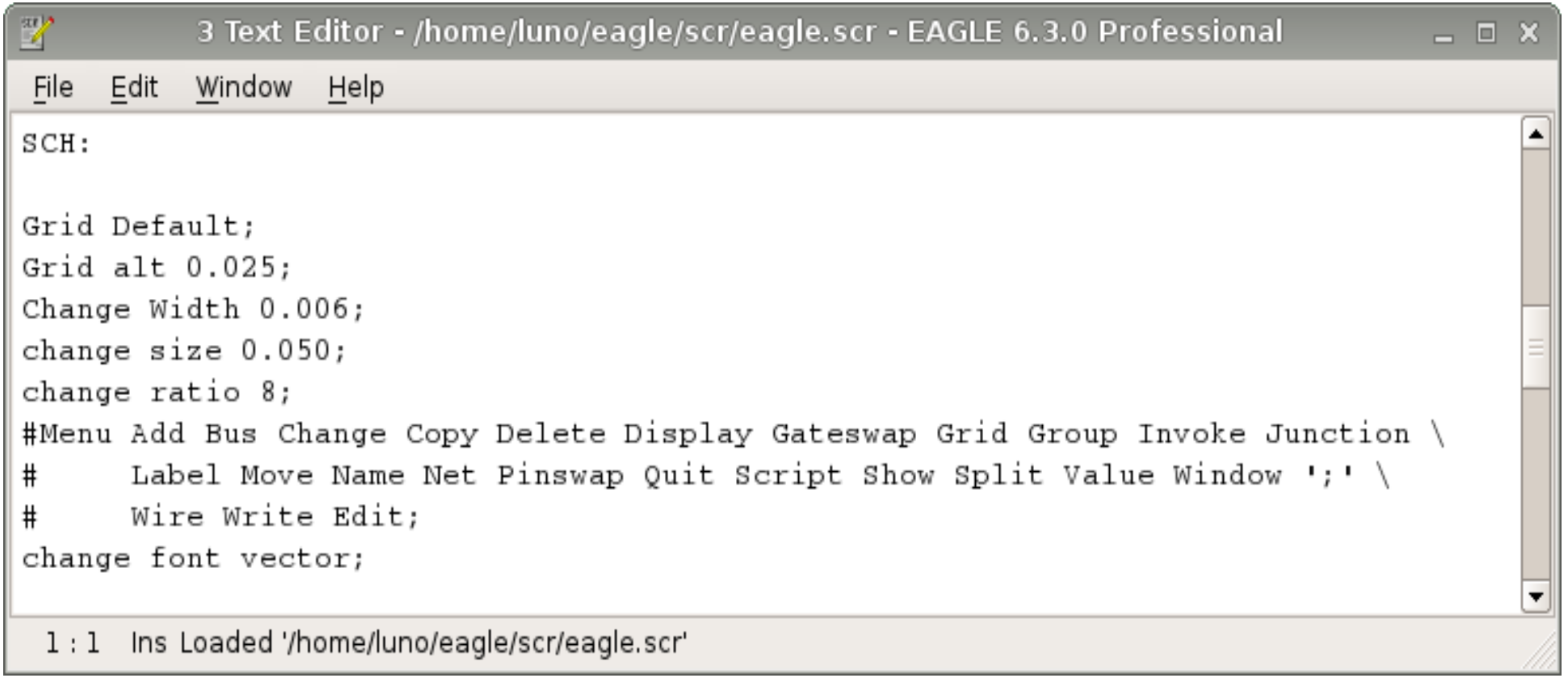
run script: **scr euro_2**

Example 6: Polygons



poly gnd (20 20) (50 20) (50 80) (20 80) (20 20);

eagle.scr #1



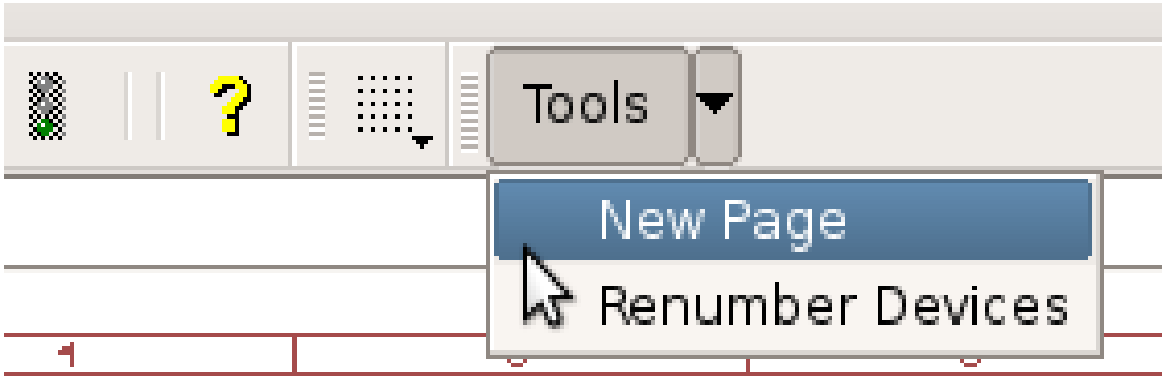
Executed on EAGLE start up automatically !

run script manually: **scr eagle.scr**

eagle.scr #2

MENU 'new_page : SCR /home/luno/eagle/scr/new_page';

eagle.scr #3




```
MENU 'Tools  {\
      New Page : SCR /home/luno/eagle/scr/new_page; | \
      Renumber Devices : RUN renumber-sheet.ulp; | \
   }';
```

menu.scr

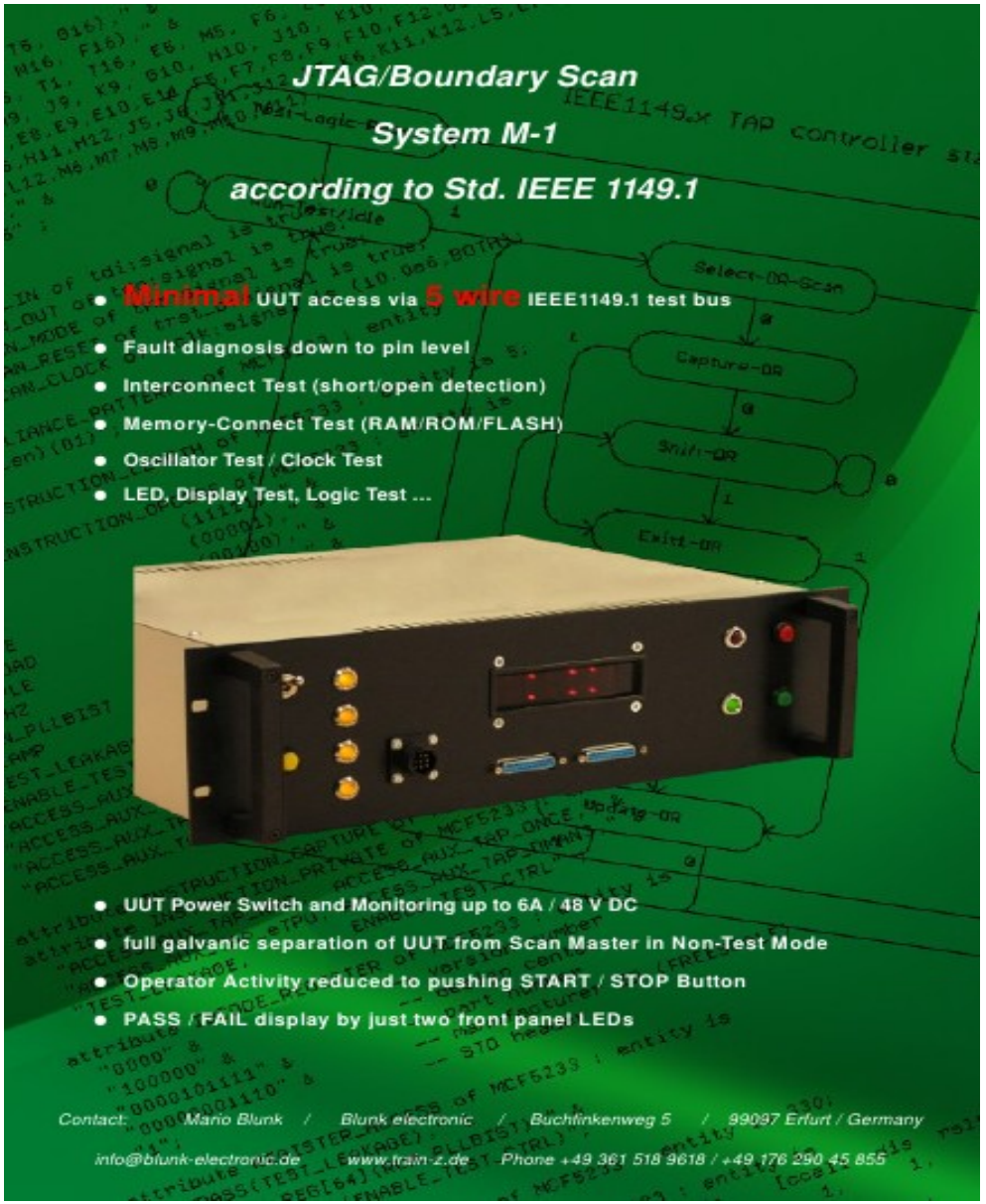
Boundary Scan System M-1

Testing Boards
without Adaptor ?

System M-1

click here !

What is Boundary Scan ?



Links #1

German PCB Houses:

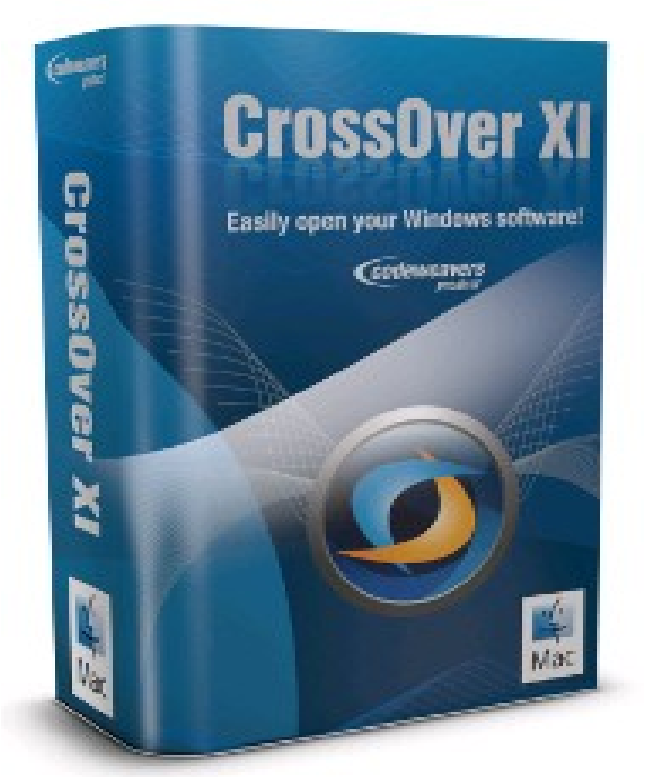
www.q-print.de (prototypes)
www.jlp.de (mass production)

PCB Assembly in Germany:

www.epsa.de
www.hasec.de
www.ertron.de

Links #2

Run Windows Software on your Linux PC !



easily open your Windows software
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http://www.codeweavers.com

Thanks for your Attention !