

621.396
-192

. . . , . . .

P-CAD.

2.

.

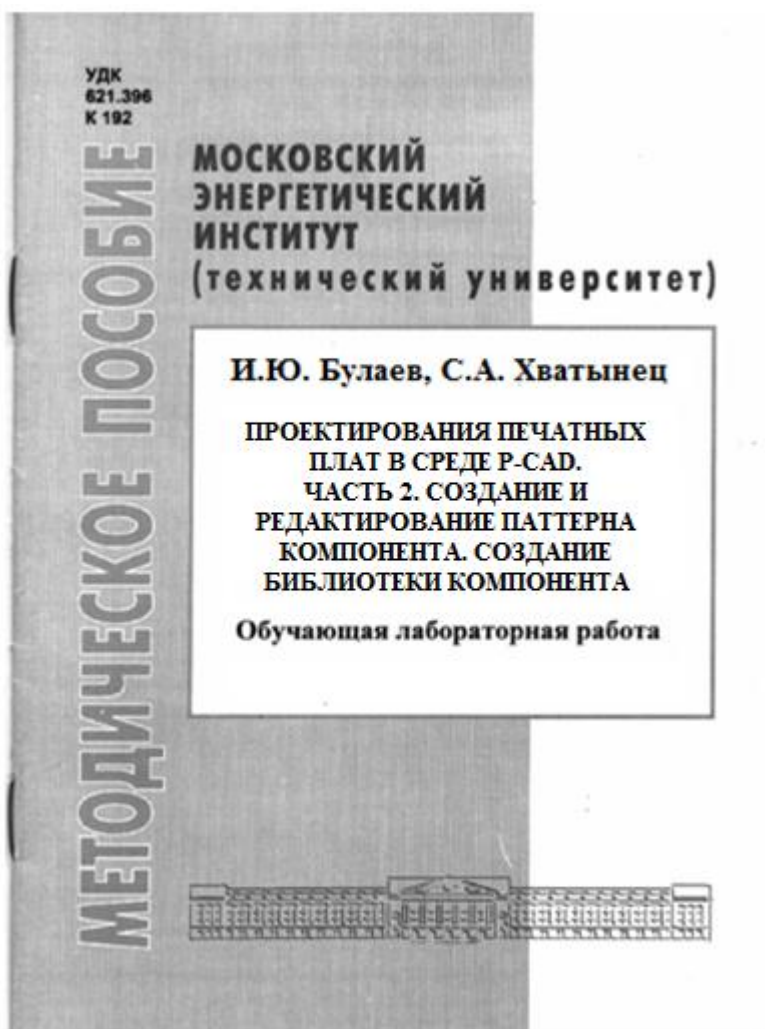
«

,

»

«

»



621.396
-192

: . . , . . .
• • ” • •
P-CAD. 2.
: . . . ó .:
, 2012, ó 16 .

« P-CAD. 2. ».
, ,
,
« »
« ».

P-CAD. 2.

« »
, « »

, 111020, , . 14
117415, , « » . 39

1.

**Pattern Editor,
Library Executive.**

2.

1.

2.

3.

3.

3.1.

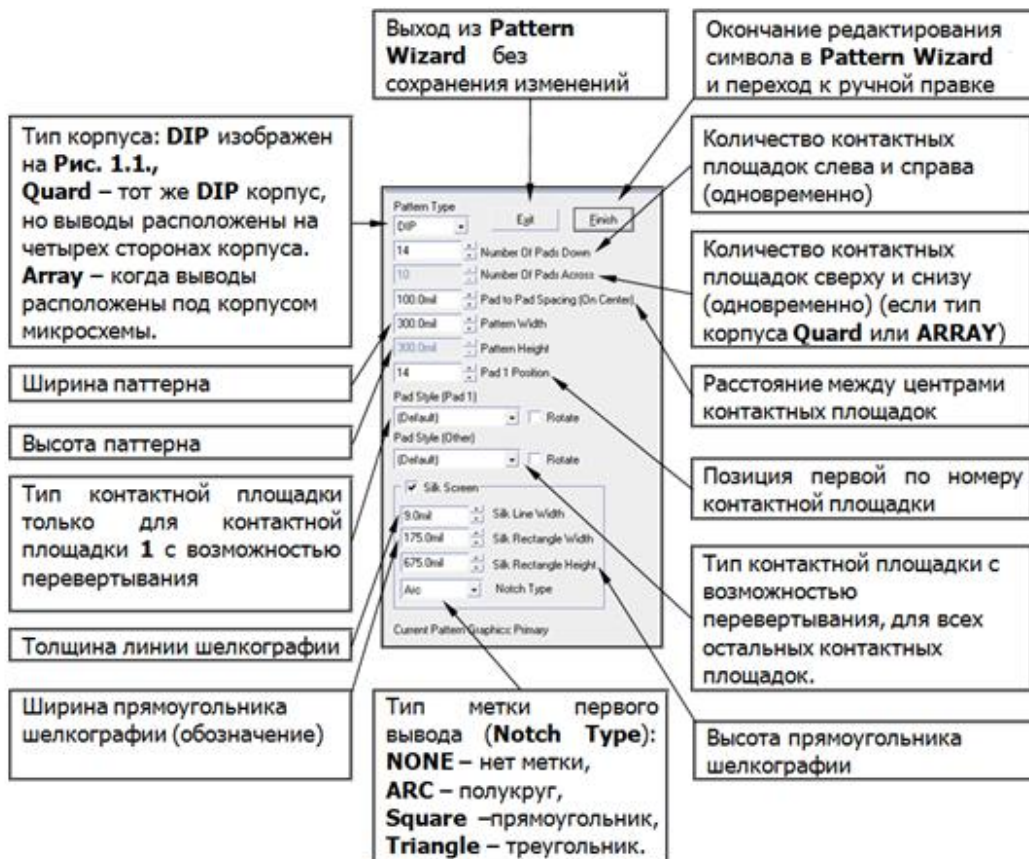
PATTERN EDITOR

б « »
(Symbol Editor) [1],

(Pattern

Editor)

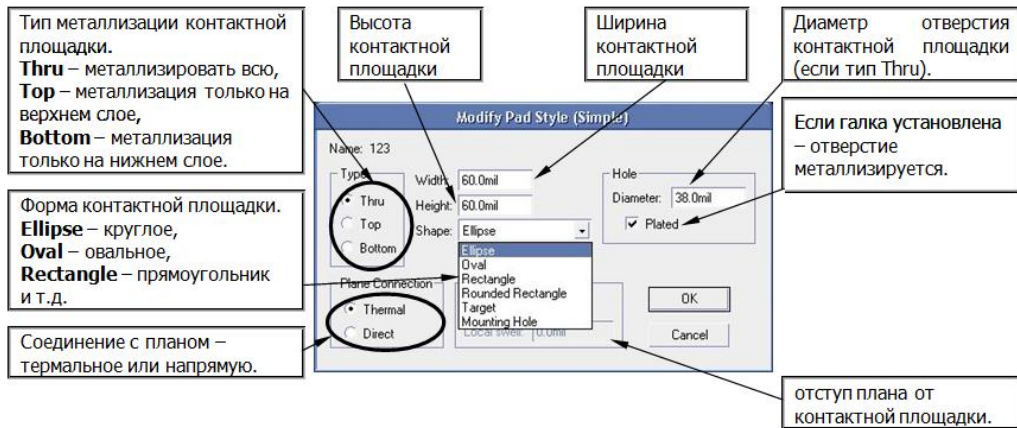
Pattern Wizard (. 1.1).



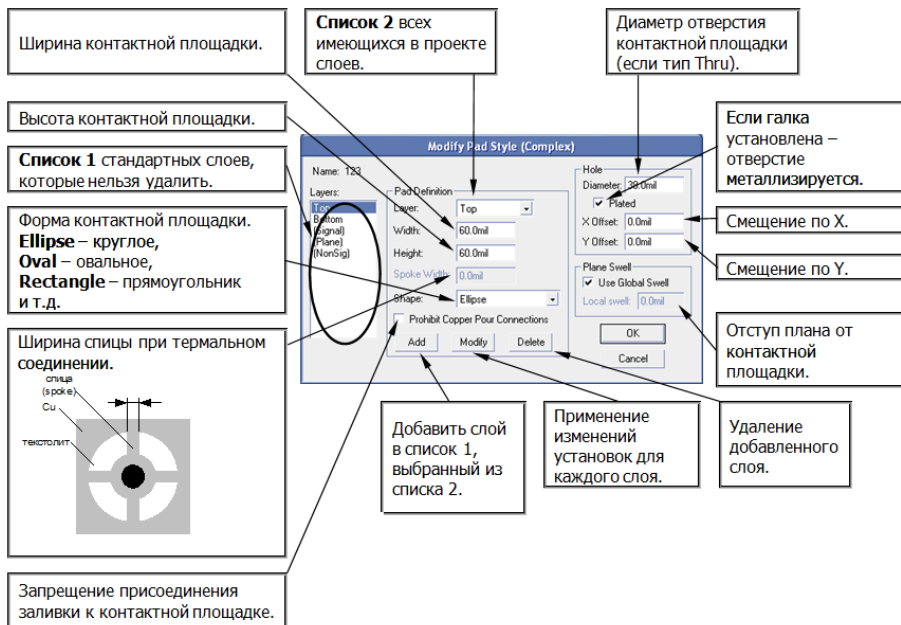
. 1.1. -

Pattern Wizard

Style -> Modify (Simple) (. 1.2).



. 1.2.



. 1.3.

1

2

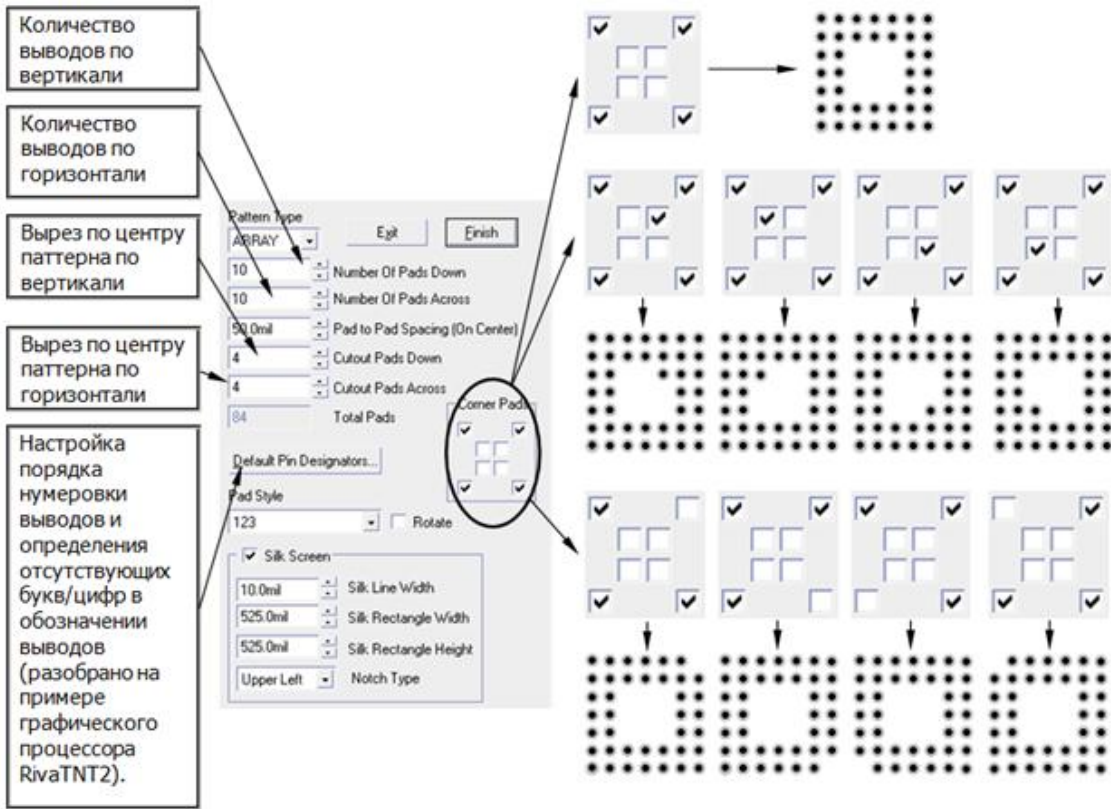
(. , add).

Modify.

1,5 (.).

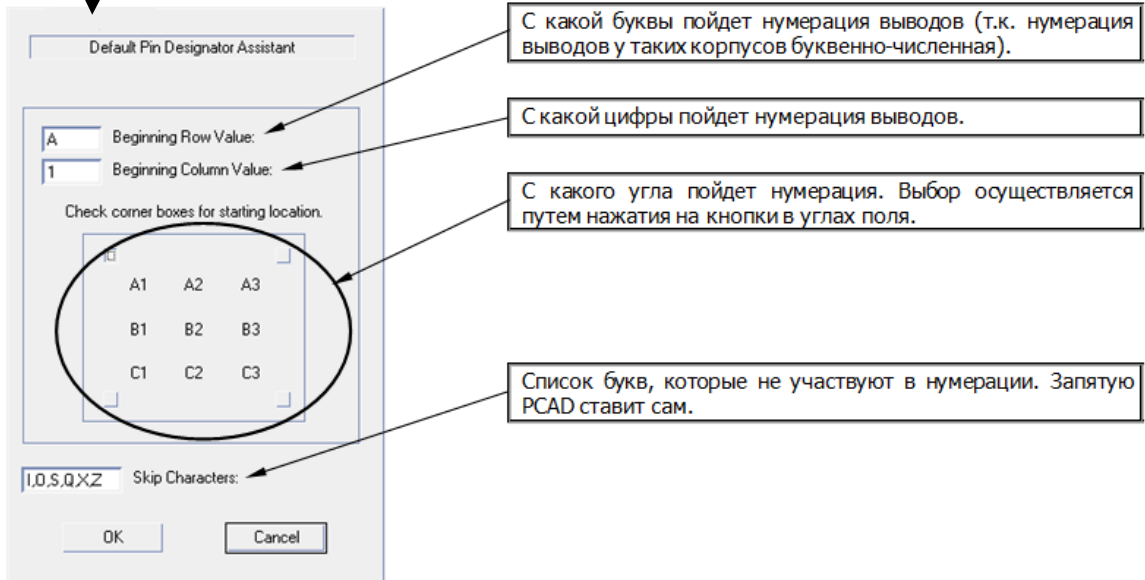
ARRAY Pattern Wizard

(. 1.4 1.5).



. 1.4. Pattern Wizard

Array.



. 1.5. Pattern Wizard

Array.

3.2.

3.2.1.

Pattern -> Pattern Wizard).
Number of Pads Down

2.

Pattern Type

Pattern Wizard (DIP).
Pad to Pad Spacing

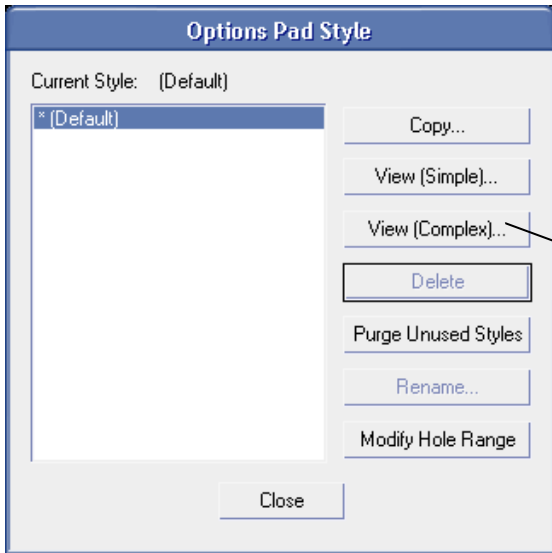
Pattern Width.

().

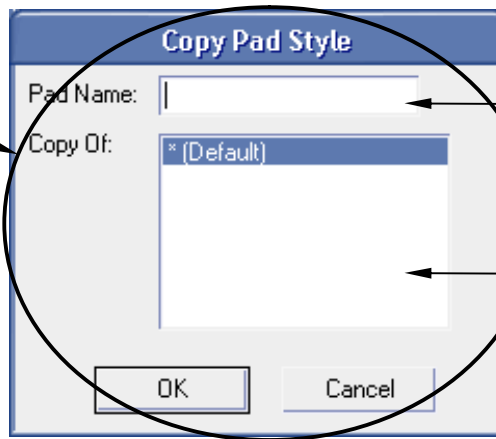
Pad 1 Position

Options -> Pad Style,

(. 1.6):



. 1.6.



. 1.7.

Default

Copy.

Pad Name

(. 1.7).

. 1.6

Default,

(. 1.7)

Default.

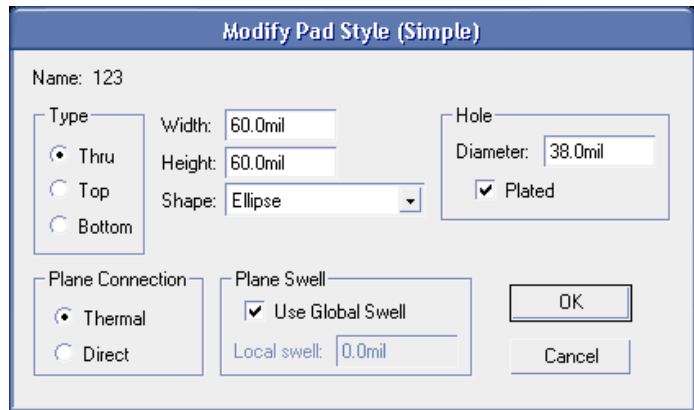
. 1.6.

Default

Modify (Simple).

(. 1.8):

1) /
DIP.
 (Type)
 Thru ().
 Width
 ()
 Height
 ()



. 1.8.

Hole -> Diameter

Plated
Plane Swell

2) (Type) Top () **(SMD).**

Shape,
Rectangle ().
Width ()
Height ()

Plane Swell ()

(Pad 1) Pad Style (Other) (. 1.6) Close. **Pad Style**

DIP

Silk Screen (1).
Silk Screen (. 1.1).

Silk Line Width
Silk Rectangle Width
Silk Rectangle Height

Notch Type

None, . .

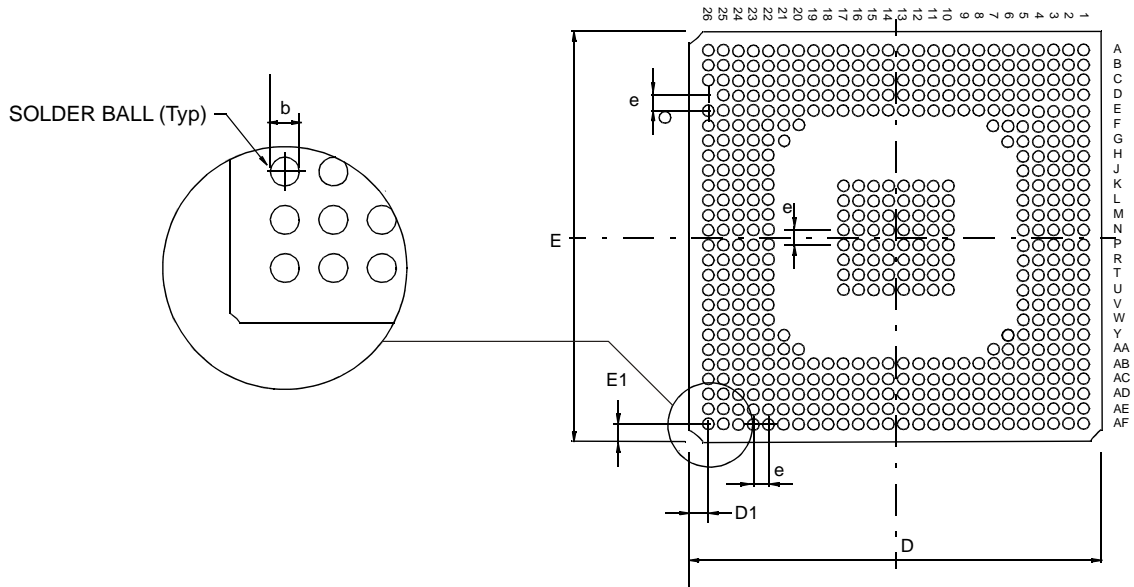
Finish.

[1].

3.2.2.

RIVA TNT2

RivaTNT2.



. 1.9.

RIVA TNT2.

1.

Ref.						
	Typ.	Min.	Max.	Typ.	Min.	Max.
A	2.33	2.20	2.50	0.092	0.087	0.098
A1	1.17	1.12	1.22	0.046	0.044	0.048
b	0.75	.	.	0.030	.	.
c	0.56	0.51	0.61	0.022	0.020	0.024
D, E	35.00	34.80	35.20	1.378	1.370	1.386
D1, E1	1.625	.	.	0.064	.	.
D2, E2	30.00	29.80	30.20	1.181	1.173	1.189
D3, E3	22.50	.	.	0.886	.	.
e	1.27	.	.	0.050	.	.

496

BGA.

Pattern Wizard.

Pattern Type

ARRAY.

Number of

Pads Down

26.

Number of Pads Across

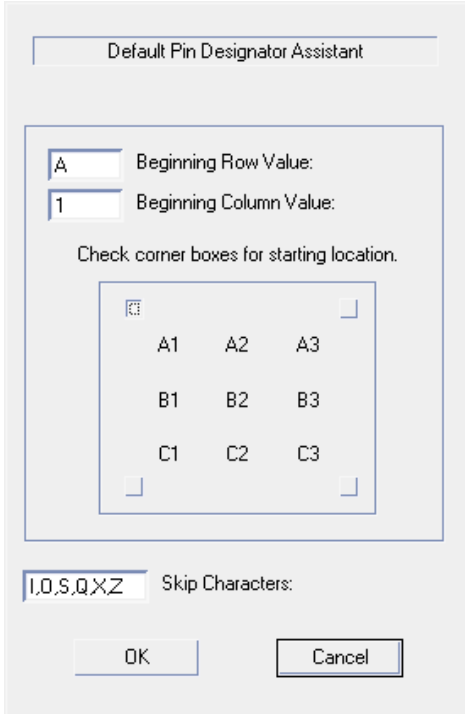
26.

Pad to Pad Spacing (

. 1.9)

50 mil (. 1). **Cutout Pads Down** **Cutout Pads Across**

Default Pin Designators (. 1.10).

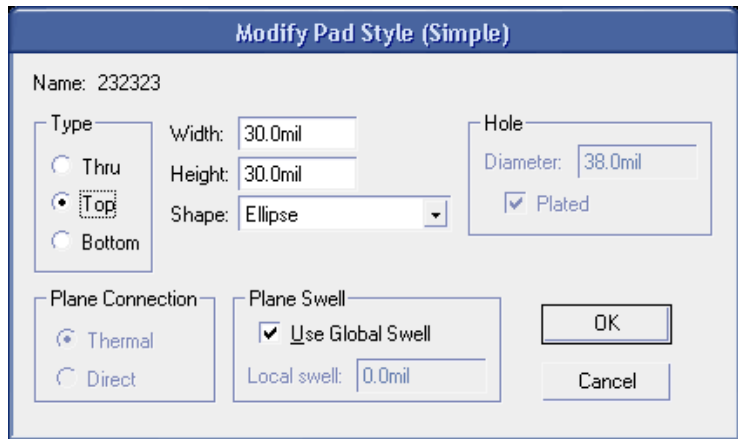


. 1.9,
 (, **RefPoint**).
 1 . .
Chek corner boxes for starting location.
 (. 1.10).

Skip Characters:

Options -> Pad Style....

b 1) 30 mil.



. 1.10.

ó 10 mil.

(**D**
 1) 1386 mil.
 (1)
 1386 mil. **Notch Type ó (Upper Left). Finish.**

. 1.11.

Ref Point

« »
100 mil 5 mil.

RefDes Type,

RefPoint.

«+»

RefPoint.

mil

50

Space

(

).

1.9.

. 1.9,

,

"

"

. 1.9



3.3.

Pattern Editor,

ó

ó

3.4.

LIBRARY EXECUTIVE

Library Executive.

Library ó> New,

Editor).

(Symbol Editor)

(Pattern

(Library Executive),

DEFAULT_LIBRARY_SET

Add Library.

Component > New.

ó

(. 1.12).

(Select Pattern),

OK.

Number of Gates

Select Symbol.

Pattern View,

Pattern Editor (

Edit

Pattern).

Symbol View,

Symbol Editor (

Edit

Symbol). Component Style ó

Homogeneous ó

. . 1, 2, 3, ... , Heterogeneous ó

. . 3, 1, 2,

Heterogeneous.

Gate Numbering ó

. Alphabetic ó

. . A, B, C,

D, ... , Numeric ó

. . 1,2,3...

Number of Gates ó

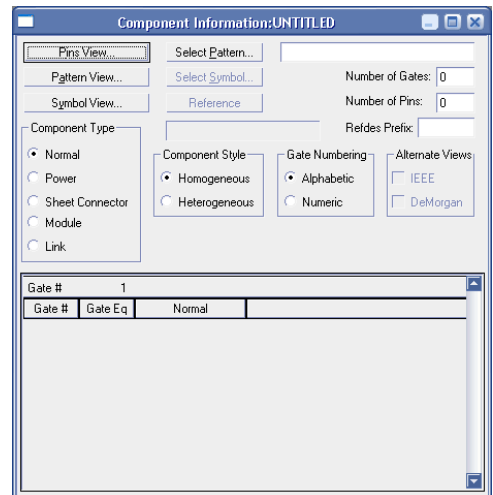
1.

Number of Pins ó

RivaTNT2

496.

Refdes Prefix ó



. 1.12.

(

R,

ó).

Gate #	Gate Eq	Normal
1	1	DIOD_1

. 1.13.

Gate #	Gate Eq	Normal
A	1	TNT2_BGA496_U9
B	2	TNT2_BGA496_U9
C	3	TNT2_BGA496_U9
D	4	TNT2_BGA496_U9

. 1.14.

TNT2

(. 1.13 ó 1.14)

Gate # ó **Alphabetic**, A, B, C, ... ,
Numeric, 1, 2, 3,
Gate Eq ó

Pin View.

Normal ó
Pins View ó

3.5.

3.5.1.

1. **Library Executive** Component ó> New.

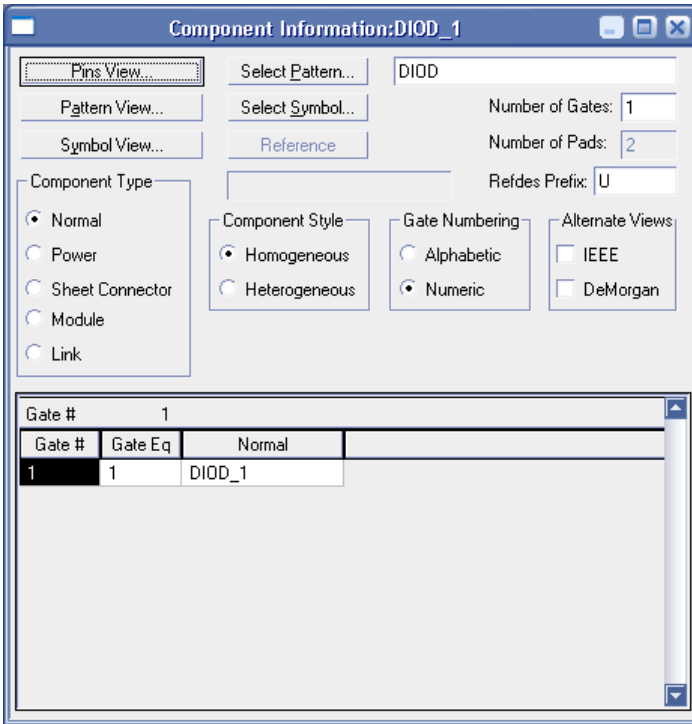
- (Select Pattern)
- (Number of Gates) = 1
- (Select Symbol)
- (Component Style) ó **Heterogeneous**, . .
- (Gate Numbering) ó **Numeric**
- (RefDes Prefix) ó **VD**

Gate # 1 (. 1.15), . . = 1.

2. **Pins View** (. 1.13).

Pad# ó
Pin Des ó : 1, 2, 3, ... A1,
A2, A3...

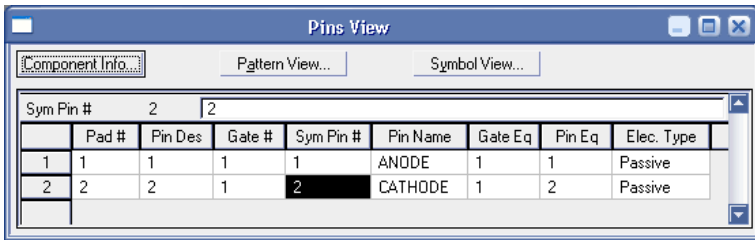
Gate# ó
Sym Pin# ó
1 (1, 56
12 ó)
2



. 1.15.

Pin Name ó

Gate Eq ó



1.16. Pins View ó

Gate Eq
Pin Eq ó Gate#.

Pad#.
Elec. Type ó

Pin Eq

Passive.

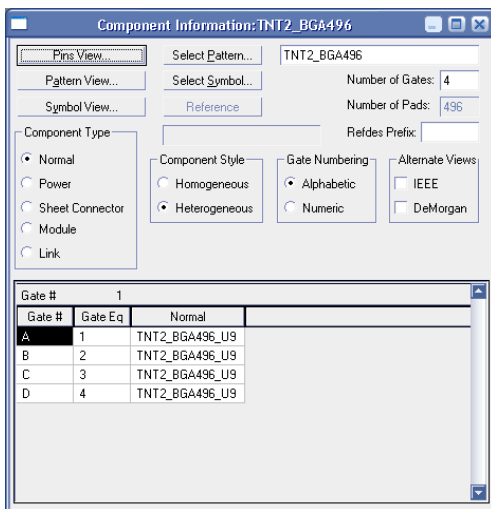
Component -> Save,

3.5.2.

RIVA TNT2

ó

RivaTNT2.



Component -> New,

Pattern).
Gates) ó 4, .. (Select Number of

1.17.

GPU TNT2

Refdes Prefix ó

1

(Component Style) ó Heterogeneous, ..

(Gate Numbering) ó (Alphabetic),

Gate#
(1, 2, 3, 4).

(, B, C, D)

NORMAL

TNT2_BGA496_U9A ()

1

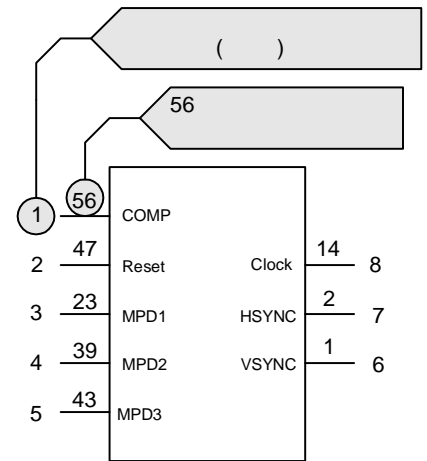
Pins View.

1.18.

Pad #	1	1						
Pad #	Pin Des	Gate #	Sym Pin #	Pin Name	Gate Eq	Pin Eq	Elec. Type	
1	A1							
2	A2							
3	A3							
4	A4							
5	A5							
6	A6							
7	A7							
8	A8							
9	A9							
10	A10							
11	A11							

. 1.18. Pins View

Pins View



. 1.19.

Excel,

Star Office

Open Office, .. P-CAD

Microsoft Office

Sun Microsystems

Pins View

Pad#

(1, 2, 3, ...).

Copy.

Paste

1

ó

(. 1.9 [1]). AE3, AE5, AF5,
 AE4, AF2, AD3, AE2, U1, V3, V4, K3, K4 . . . (. 1.18)
 2 Gate# (Pin
 Des), . Sym Pin#.
 . 1.19,
 56 ó
), 1 ó () . Sym
 Pin# () .
 56 1 (HSYNC
 (. 1.19) , Pad# 2, Sym Pin# ó 7.
 Sym Pin# , P-CAD
 Gate#
 ó P-CAD

Sym Pin#, Pin Name. Pin Name
 Gate Eq ó
 Gate#.
 Pin Eq ó
 Pad#.
 Elec. Type ó
 Passive, . . .
 (Excel,
 Star Office Sun Microsystems
 Open Office),
 Pins View. ó
 (Copy), Pins View
 (Paste).

4.

- 1.
2. **Pattern Editor**
3. **Library Executive**

5.

1. ?
2. ?
- 3.
4. ?
5. **Pattern Wizard.**
6. ?
7. ?

1. P-CAD. 1. . „ ó .: . , 2012. ó 16 . P-CAD 2001. ó .
2. . . P-CAD 2001. ó . .: ó 2002. ó 185 .
3. . . P-CAD 2000. . ó .: ô , 2001. ô 256 .
4. . . P-CAD 2001. ó .: - , 2003.
5. . . P-CAD Windows. . ó .: , 2002.
6. . . P-CAD 2006. , . ó .: - , 2007. ó 768 .
7. . . P-CAD 2004. ó .: - , ó 2006. ó 555 .
8. . . P-CAD. ó .: - , 2003. ó 224 .
9. . . P-CAD 2001. ó .: - , 2003.
10. . . P-CAD. . .: ó , 2004. ó 760 .
11. . . P-CAD. . ó .: - , ó 2003. ó 720 .