

zorro2

COLLABORATORS

	<i>TITLE :</i> zorro2		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

zorro2

1.1 ZORRO-II

A2000	ZORROII	Pin	Remark
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all data & adresses are buffered

the author

BUGS

```
@{ "GND" link "gnd" }
```

1

```
@{ "GND" link "gnd" }
```

2

```
@{ "GND" link "GND" }
```

3

```
@{ "GND" link "GND" }
```

4

```
@{ "+5V" link "+5V" }
```

5

```
@{ "+5V" link "+5V" }
```

6

(470 μ F to ground 4)

```
@{ "_own" link "_own" }
```

7

(buster, 41)

```
@{ "-5V" link "-5V" }
```

8

```
@{ "_slavex" link "_slavex" }
```

9

(buster, 12+X)

```
@{ "+12V" link "+12V" }
```

10

```
@{ "_cfgout" link "_cfgout" }
```

11

```
@{ "_cfginx" link "_cfginx" }
```

12

X indicates portnr.

```
@{ "GND" link "GND" }
```

13

```
@{ "_c3" link "_c3"}
14
@{ "CDAC" link "CDAC"}
15
@{ "_c1" link "_c1"}
16
@{ "_ovr" link "_ovr"}
17
@{ "XRDY" link "XRDY"}
18
@{ "_int2" link "_int2"}
19
@{ "-12V" link "-12V"}
20
@{ "A5" link "adressleitung"}
@{ "_int6" link "_int6"}
@{ "A6" link "Adressleitung"}
21
22
23
@{ "A4" link "Adressleitung"}
24
@{ "GND" link "GND"}
25
@{ "A3" link "Adressleitung"}
26
@{ "A2" link "Adressleitung"}
27
@{ "A7" link "Adressleitung"}
28
@{ "A1" link "Adressleitung"}
29
@{ "A8" link "Adressleitung"}
30
@{ "FC0" link "FC"}
31
@{ "A9" link "Adressleitung"}
32
@{ "FC1" link "FC"}
33
@{ "A10" link "Adressleitung"}
34
@{ "FC2" link "FC"}
35
@{ "A11" link "Adressleitung"}
36
@{ "GND" link "GND"}
37
@{ "A12" link "Adressleitung"}
38
@{ "A13" link "Adressleitung"}
39
@{ "_eint7" link "_eintx"}
40
@{ "A14" link "Adressleitung"}
41
@{ "_eint5" link "_eintx"}
42
@{ "A15" link "Adressleitung"}
```

```

43
@{ "_eint4" link "_eintx"}
44
@{ "A16" link "Adressleitung"}
45
@{ "_beer" link "_beer"}
46
@{ "A17" link "Adressleitung"}
47
@{ "_vpa" link "_vpa"}
48
@{ "GND" link "GND"}
49
@{ "E" link "E"}
50
@{ "VMA" link "VMA"}
51
@{ "A18" link "Adressleitung"}
52
@{ "_rst" link "_rst"}
53
@{ "A19" link "Adressleitung"}
54
@{ "_hlt" link "_hlt"}
@{ "A20" link "Adressleitung"}
55
56
@{ "A22" link "Adressleitung"}
57
@{ "A21" link "Adressleitung"}
58
@{ "A23" link "Adressleitung"}
59
@{ "_brx" link "_brx"}
60
@{ "GND" link "GND"}
61
@{ "_bgack" link "_bgack"}
62
@{ "D15" link "Datenleitung"}
63
@{ "_bgx" link "_bgx"}
64
@{ "D14" link "Datenleitung"}
65
@{ "_dtack" link "_dtack"}
66
@{ "D13" link "Datenleitung"}
67
@{ "READ" link "READ"}
68
(buster, 35)
@{ "D12" link "Datenleitung"}
69
@{ "_lds" link "_lds"}
70
@{ "D11" link "Datenleitung"}
71
@{ "_uds" link "_uds"}
72

```

```
@{ "GND" link "GND"}
73
@{ "_as" link "_as"}
74
@{ "D0" link "Datenleitung"}
75
@{ "D10" link "Datenleitung"}
76
@{ "D1" link "Datenleitung"}
77
@{ "D9" link "Datenleitung"}
78
@{ "D2" link "Datenleitung"}
79
@{ "D8" link "Datenleitung"}
80
@{ "D3" link "Datenleitung"}
81
@{ "D7" link "Datenleitung"}
82
@{ "D4" link "Datenleitung"}
83
@{ "D6" link "Datenleitung"}
84
@{ "GND" link "GND"}
85
@{ "D5" link "Datenleitung"}
86
@{ "GND" link "GND"}
87
@{ "GND" link "GND"}
88
@{ "GND" link "GND"}
89
@{ "GND" link "GND"}
90
@{ "GND" link "GND"}
91
@{ "7M" link "7M"}
92
        system clock
@{ "DOE" link "DOE"}
93
@{ "_busrst" link "_busrst"}
94
@{ "_cbg" link "_cbg"}
95
@{ "_eintx" link "_eintx"}
96
@{ "???" link "unknown"}
96
        nc ?
@{ "???" link "unknown"}
97
        nc ?
@{ "GND" link "GND"}
99
```



```
@{ "GND" link "GND"}  
100
```

1.2 gnd

nothing special, just 0V

1.3 +5v

+5 voltage to feed some ic`s

1.4 _own

a line who esnd in BUSTER pin 41, because of my lack of a propper description i have no idea what it does. Do you have ? Then fill this gap.

1.5 -5v

Direkt from the Powersurply ?

1.6 _slavex

x is a number from 1-5 and indicates the slot where this signal occured.
a line who esnd in BUSTER pin 12ff, because of my lack of a propper description i have no idea what it does. Do you have ? Then fill this gap.

1.7 +12v

from the powersurply

1.8 _cfgout

for the autoconfig its mixed with _copcfg from MMU-port via a chain of 74LS32.
Used for Autoconfig.

1.9 _cginx

x is a number from 1-5 and indicates the slot where this signal occurred. Used for Autoconfig.

1.10 _c3

an other
takt
Its a _c1 but moved by 1/2 ¶

1.11 cdac

a 7M
takt
but moved 1/2 ¶

7M 1111000011110000111100001111
CDAC 1100001111000011110000111100

REPLACE WITCH PICTURE

1.12 _c1

$3.58 \text{ MHz} = 7\text{M} / 2 + \text{Pi}/2$
takt
7M 1111000011110000111100001111
c1 0000111111110000000011111111

REPLACE WITCH PICTURE

1.13 7m

system
takt
NTSC and PAL have a little bit
different speed.

1.14 `_ovr`

this is one of GARY's pins (29).
Used for Autoconfig.

1.15 `xrdy`

this is one of GARY's pins (31).
Used for Autoconfig.

1.16 `_int2`

Its connected to PAULA. causes an interrupt 2.

1.17 `_eintx`

x=1,4,5,7
runs trough a 74ls08 (inverter,U802) then to 74ls148
(demultiplexer,U804) and ends in `_IPLx`.

1.18 `-12v`

from powersurply

1.19 `_cbr`

BUSTERstuff pin 28

1.20 `_cbg`

BUSTERstuff pin 27

1.21 `doe`

BUSTERstuff pin 47

1.22 **_busrst**

reset for peripherie

1.23 **ipl**

interruptplanes

1.24 **fc**

function code lines, all driven by a 74ls245 (U605)

1.25 **_as**

adress-strobe, is driven by a 74ls245 (U605)
Input is there AS

1.26 **_beer**

buserror

1.27 **_bg**

busgrant

1.28 **_bgack**

busgrant acknowlegde

1.29 **_brx**

x indicates which slot
busrequest

1.30 **_lds**

lower data strobe, is driven by a 74ls245 (U605)

1.31 `_rst`

reset, but beware power-up reset isnt just `_rst` !

1.32 `read`

this line is r/w, is driven by a 74ls245 (U605)

1.33 `_uds`

`_upper data strobe`, is driven by a 74ls245 (U605)

1.34 `vma`

valid memory adress

1.35 `_vpa`

valid peripheral adress

1.36 `adressleitung`

One of the processor adresslines. all lines of adress&data-bus are driven by a couple of 74LS245 (U600/601/602).

1.37 `datenleitung`

One of the processor datalines. all lines of adress&data-bus are driven by a couple of 74LS245 (U603/604).

1.38 `unknown`

no idea what happens here. nc,gnd or what ?

1.39 `e`

It's a special feather of the 68000. Its 1/10th of the systemtakt. You may need it for synchron-peripherie.
