A0-A15

CLK
14.18757MHz - PAL
14.31818MHz - NTSC

OUT
GND
+5A
R20 3k
R19 3k
U18A LS08

U7
ANTIC
VCC
VSS
C30 .1
R/W
RST
FOO
AN0
AN1
AN2
D7
D6
D5
D4
D3
D2
D1
D0
REF
BO2
NMI
RNMI
HALT
00
LP
RDY
U18B LS08

BO2
REF
02
CASINH
EXTSEL
R31 3k
R30 3k
R21 3k

U8
VCC
VSS
C31 .1
RDY
HALT
NMI
IRQ
02
SYNC
R/W
RST
01
SO

R34 3k

U6
+5B
C29 .1
VSS
RST
EXTSEL
CASINH
R/W
OSC
02
CLK0
CLK
CAS16K
CAS
WRT
RAS
LE
OE
RA7
RA6
RA5
RA4
RA3
RA2
RA1
RA0
FA15
FA14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
FREDDIE
SALLY

CAS
WRT
RAS
RA0-RA8
OSC
IRQ
FA14
FA15

R22 3k

FOO
AN0
AN1
AN2
D0-D7
LP
RDY
00
HALT
R/W
RST
01

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: August 26, 2007	Sheet 1 of 9	

POKEY
PIA
GTIA
D0-D7
A0-A15

J4A
A0 5 A0
A1 4 A1
A2 3 A2
A3 2 A3
A4 C A4
A5 D A5
A6 E A6
A7 F A7
A8 H A8
A9 J A9
A10 P A10
A11 N A11
A12 K A12
10 D0
9 D1
8 D2
L D3
6 D4
7 D5
11 D6
M D7
1 S4
12 S5
14 RD5
A RD4
15 CCTL
R R/W
S B02
13 +5V
B GND

+5D
C18 .1

U18C LS08
8
9
10

+5D
C25 .1
16
8
R12 3k
6

U2 74LS138
15 D0XX
14 D1XX
13 D2XX
12 D3XX
11 D4XX
10 D5XX
9 D6XX
7 D7XX
5 E2
E3
A8
A9
A10
E1
1 A8
2 A9
3 A10
4

U3 PAL16L8 MMU
9 REN
11 REF
19 S4
12 S5
8 RD5
7 RD4
20 VCC
10 VSS
6 MAP
IO 17
BE 18
OS 15
BASIC 13
1 A11
2 A12
3 A13
4 A14
5 A15
CI 16
MPD 14

+5D
C26 .1

R13 1k
R14 1k
R15 3k
+5D

PB7
D1XX
R/W
B02

U5
A0 10
A1 9
A2 8
A3 7
A4 6
A5 5
A6 4
A7 3
A8 25
A9 24
A10 21
A11 23
A12 2
A13 26
20 CS
22 OE
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
VCC
VSS
VPP
PGM
D0
D1
D2
D3
D4
D5
D6
D7
28
14
1
27
+5A
+5A
C28 .1
11 D0
12 D1
13 D2
15 D3
16 D4
17 D5
18 D6
19 D7
OS ROM

U130
A0 8
A1 7
A2 6
A3 5
A4 4
A5 3
A6 2
A7 1
A8 23
A9 22
A10 19
A11 18
A12 21
20 CS
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
CS
D0
D1
D2
D3
D4
D5
D6
D7
VCC
VSS
9 D0
10 D1
11 D2
13 D3
14 D4
15 D5
16 D6
17 D7
24
12
+5A
C27 .1
BASIC130

REF
PB0
PB1
CASINH
MPD

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV C1
Date: August 26, 2007	Sheet 2 of 9	

BELL
GTIA
A0-A15
U17
CS
A0
A1
A2
A3
A4
FOO
AN0
AN1
AN2
D0
D1
D2
D3
D4
D5
D6
D7
D0-D7
HALT
O2
GTIA
S3
VCC
VSS
LUM0
LUM1
LUM2
LUM3
CSYNC
COLOR
S0
S1
S2
T0
T1
T2
T3
R/W
OSC
PAL
CADJ
+5A
C42
.1
L5
820uH
C50
10uF
R43
R42
R44
R41
1k
R45
1k
U20
4050
R46
1k6
C51
.1
R116
51
36k
R47
18k
R48
9k1
R49
4k7
R50
CR4
R51
750
R52
2k
R53
100
Q3
R204
47
L9
MONO
COLOR
+5C
L6
100uH
R201
6k8
Q2
2N3904
R202
180
R205
150
L31
CHROMA
R134
470
START
R135
470
SELECT
R136
470
OPTION
R132
220
L30
TRIG 0
R133
220
L23
TRIG 1
C97
1nF
C96
1nF
1/2
1/3
U18D
1/1
LS08
L37*
Bead or 470R
OSC
R/W
RD5
LP
+5A
+9V
R35
33k
R36
680
CR2
R37
1k
R38
.5M
W2
C44
68pF
O1
Q1
CR3
C45
220pF
C46
.001*2
C47
C48
.1
C206
22pF
When L37 = 470R /
C206 is not mounted.

ATARI 130XE - NTSC		
Size A	Drawn by Jerzy SOBOLA	REV D
Date: April 12, 2009	Sheet 3 of 9	

BELL
GTIA
A0-A15
FOO
AN0
AN1
AN2
D0-D7
HALT
O2
OSC
R/W
RD5
LP

U17
GTIA
CS
A0
A1
A2
A3
A4
FOO
AN0
AN1
AN2
D0
D1
D2
D3
D4
D5
D6
D7
HALT
O2
S3
VCC
VSS
LUM0
LUM1
LUM2
LUM3
CSYNC
COLOR
S0
S1
S2
T0
T1
T2
T3
R/W
OSC
PAL
CADJ

+5A
C42 .1
L37* Bead or 470R

U18D 1/1 LS08
1/2 1/3

R41 1k
R42
R43
R44
R45 1k
L5 820uH
C50 10uF
R46 1k6
C51 .1
R116 51

U20 4050
36k R47
18k R48
9k1 R49
4k7 R50
750 R51
CR4
R52 2k
R53 100
Q3
R204 47
L9
MONO

R33 3k3
L6 100uH
COLOR

L6 100uH
R201 6k8
+5C
Q2 2N3904
R202 180
R205 150
L31
CHROMA

R134 470
START
R135 470
SELECT
R136 470
OPTION
R132 220
L30
TRIG 0
R133 220
L23
TRIG 1
C97 1nF
C96 1nF

PAL
R72 1k
+5V

U21 1/4 74LS74
R1 D1 CK1 S1 Q1 Q1
R2 D2 CK2 S2 Q2 Q2
VCC VSS

R73 4k7
C59 22pF
Y2 4,43MHz
R71 470
R70 10k
R69 6k8
Q6 2N3904
C60 560pF

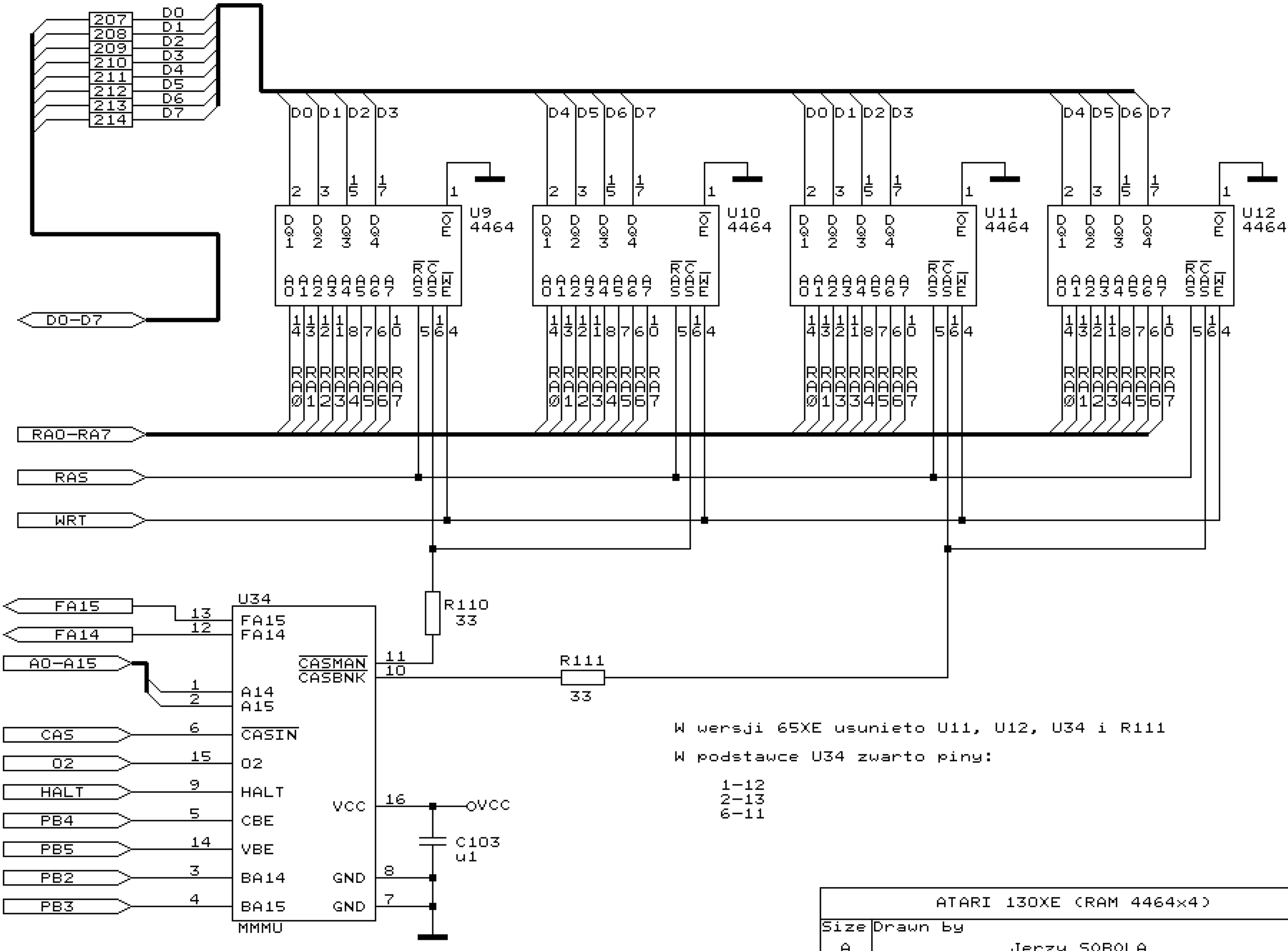
L8 1,5uH
C111 820pF
C61 .1
C206 22pF

+5A
R35 33k
R36 680
CR2
R37 1k
+9V
R38 .5M
CR3
C44 68pF
Q1
C45 220pF
C46 .001*2
C47
C48 .1
O1

When L37 = 470R / C206 is not mounted.

ATARI 130XE

Size	Drawn by	REV
A	Jerzy SOBOLA	D
Date: April 12, 2009	Sheet 3 of 9	



W wersji 65XE usunieto U11, U12, U34 i R111

W podstawce U34 zwarto piny:

1-12
2-13
6-11

ATARI 130XE (RAM 4464x4)		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 4a of 9	

DO-D7

RAO-RA7

RAS

WRT

D0 D1 D2 D3 D4 D5 D6 D7

U9 U10 U11 U12 U13 U14 U15 U16

U26 U27 U28 U29 U30 U31 U32 U33

RA0 RA1 RA2 RA3 RA4 RA5 RA6 RA7

A0 A1 A2 A3 A4 A5 A6 A7

D0 D1 D2 D3 D4 D5 D6 D7

RAS CAS WE

U34

PAL16L8

FA15 FA14 A14 A15 CASIN O2 HALT CBE VBE BA14 BA15 LHALT

CASMAN CASBNK NC VCC GND

R110 33

R111 33

C103 u1

U35

74LS95

SER A B C D MODE CLK1-L CLK2-R

QA QB QC QD VCC GND

C101 u1

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: August 26, 2007	Sheet 4b of 9	

D0-D7

RA0-RA7

RAS

WRT

D0 D1 D2 D3 D4 D5 D6 D7

RA0 RA1 RA2 RA3 RA4 RA5 RA6 RA7

A0 A1 A2 A3 A4 A5 A6 A7 D D O I

U9 U10 U11 U12 U13 U14 U15 U16

U26 U27 U28 U29 U30 U31 U32 U33

RAS CAS WE

U34

FA15 FA14 A0-A15

A14 A15

CAS O2 HALT CBE VBE BA14 BA15

VCC GND

MMMU

R110 33

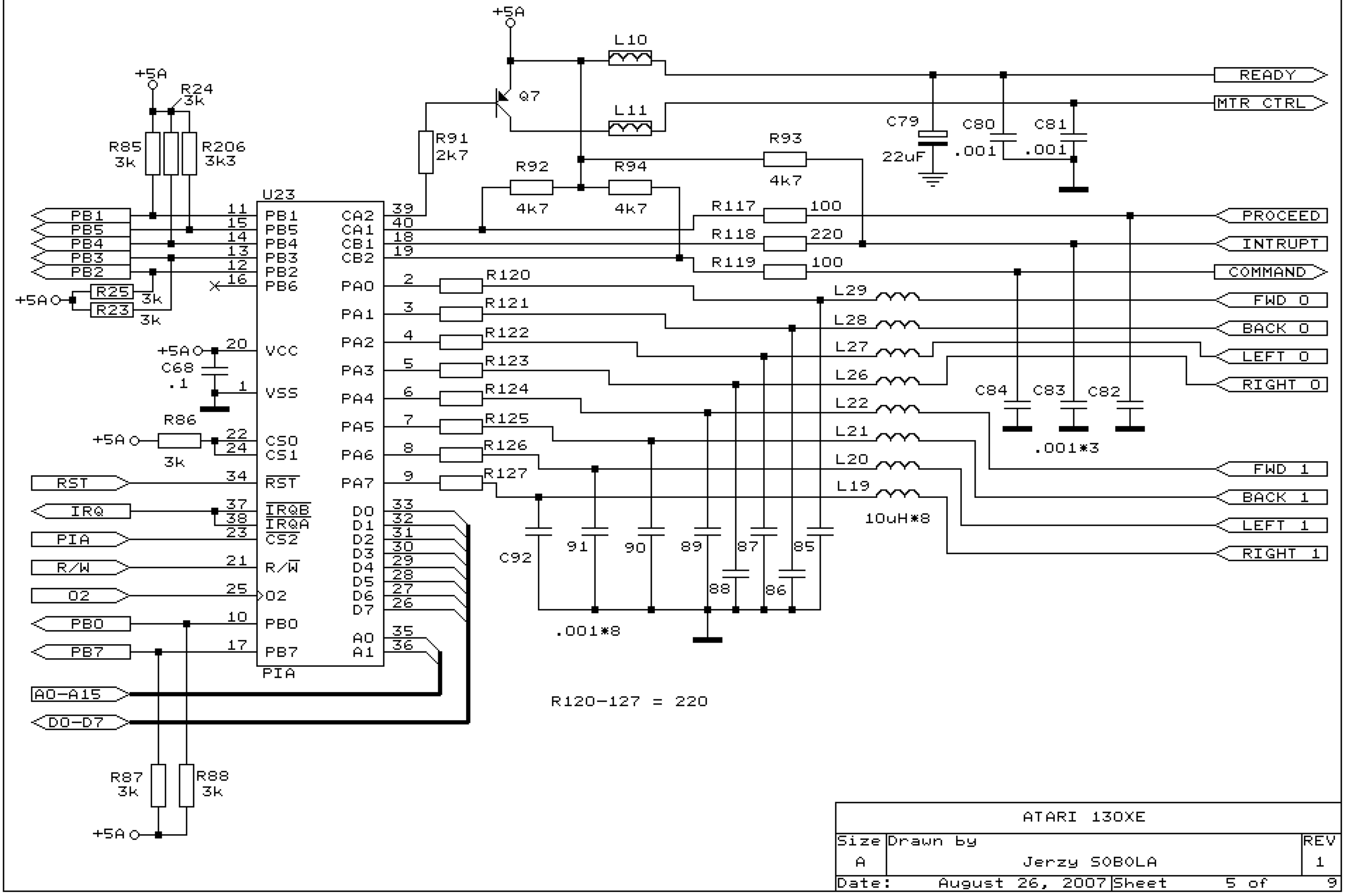
R111 33

CASMAN CASBNK

C103 u1

OVCC

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 4 of 9	

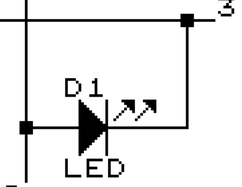


ATARI 130XE		
Size: A	Drawn by: Jerzy SOBOLA	REV: 1
Date: August 26, 2007	Sheet 5 of 9	

A0-A15
D0-D7
R/W
O2
IRQ
POKEY
R80
1k
+5D
SOUND
U22
A0
A1
A2
A3
D0
D1
D2
D3
D4
D5
D6
D7
R/W
O2
IRQ
CS0
AUDIO
ACLK
BCLK
SID
SOD
K2
K1
K0
KR1
CS1
K5
K4
K3
KR2
P4
P5
P6
P7
P1
P0
VCC
VSS
P3
P2
POKEY
+5A
R81 4k7
R84 4k7
R82 4k7
R83 4k7
R128 100
R129 100
R130 100
R131 100
C78 1nF
C77 1nF
C76 1nF
C75 1nF
CLK OUT
CLK IN
DATA IN
DATA OUT
U24
C
B
A
X
VSS
VCC
X0
X1
X2
X3
X4
X5
X6
X7
4051
R89 47k
R74 3k
R75 3k
CR5
R96 47k
C69 .1
IN 0
IN 1
IN 2
IN 3
IN 4
IN 5
IN 6
IN 7
R146-161 220
U25
R90 100
C70 .1
OUT 0
OUT 1
OUT 2
OUT 3
OUT 4
OUT 5
OUT 6
OUT 7
W1
R137 270
BSC
+5D
C99 1nF
C98 10uF
L24 10uH
JOY GND
R76
R77
R78
R79 1k8*4
L17
L18
L15
L16 10uH X 4
POT B 0
POT A 0
POT B 1
POT A 1
C66
C63
C65
C64
.047*4
C72
C73
C74
C71
.001*4

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: August 26, 2007	Sheet 6 of 9	

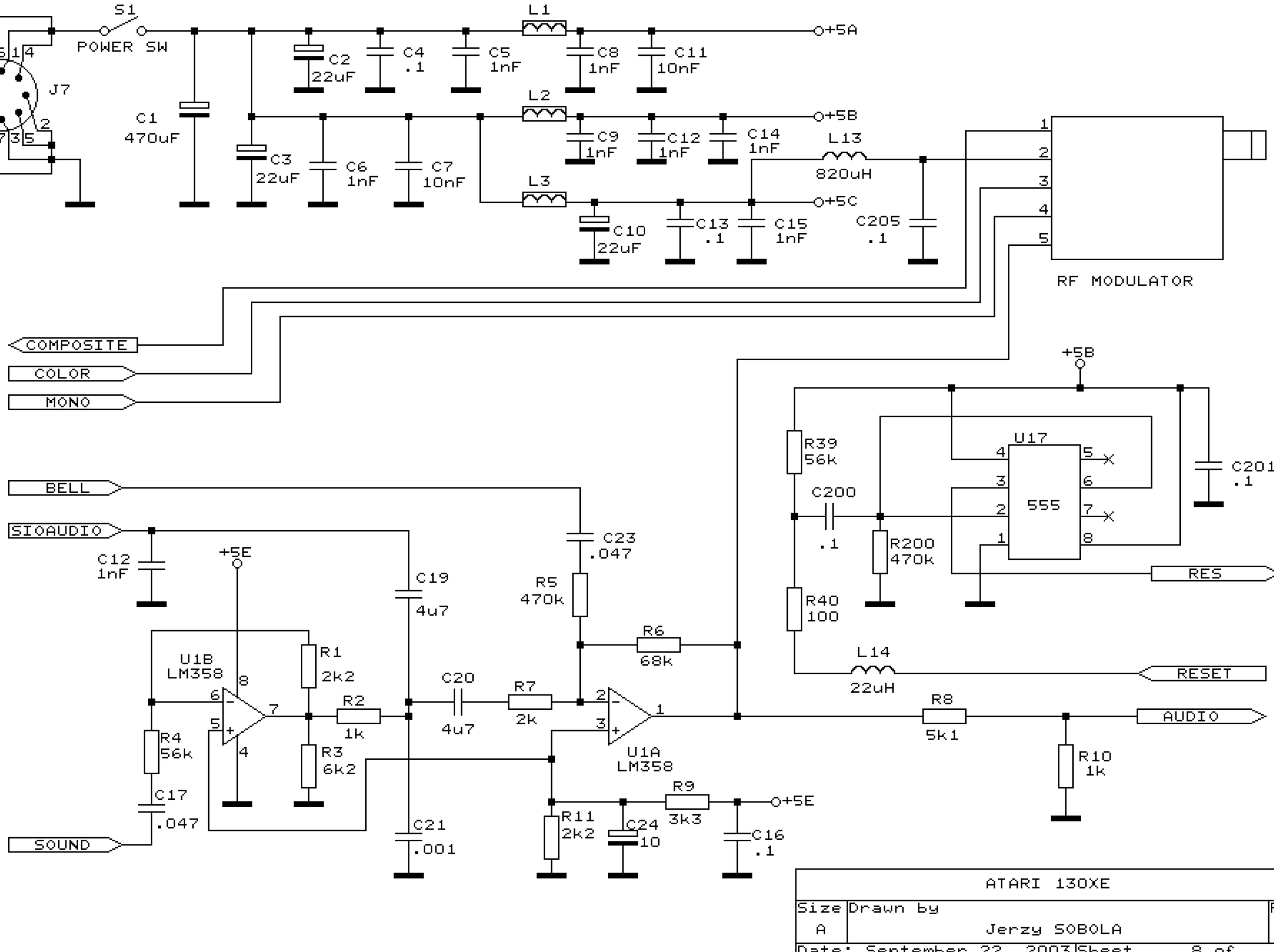
	19	4	8	9	10	11	17	16	20	21	22	23	24	2	
13	7		8	9	Ø	<	>	Del	Brk						13
14	6		5	4	3	2	1	Esc							14
12	U		I	O	P	–	=	Ret							12
15	Y		T	R	E	W	Q	Tab							15
7		J	K	L	;	+	*		Ctl						7
18		H	G	F	D	S	A	Cps							18
5	N	Spc	M	,	.	/	Inv								5
6		Hlp	B	V	C	X	Z		Sft						6
3										Str	Sel	Opt	Rst		3



Values near lines means pin numbers of keyboard connector.

Numery przy liniach oznaczaja numery stykow w zlaczu klawiatury.

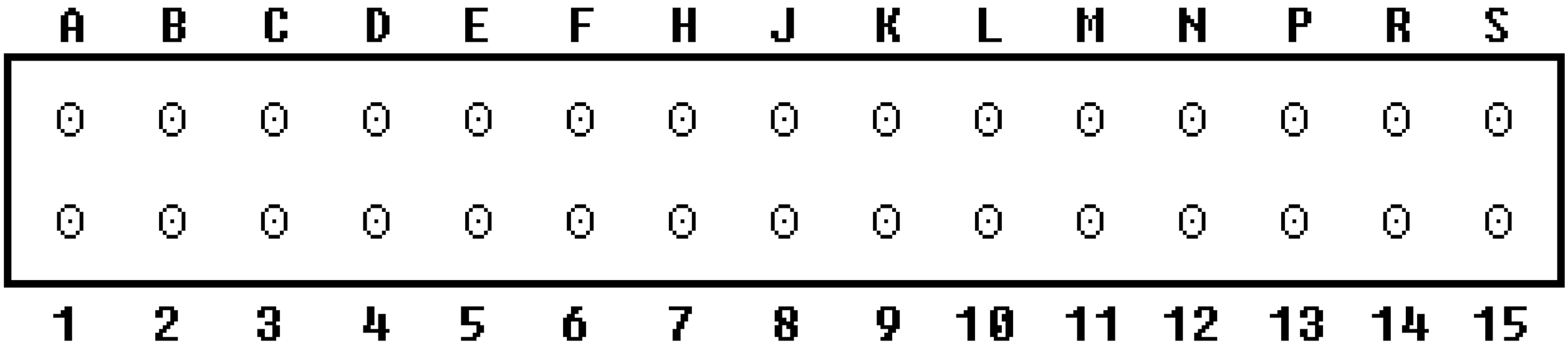
ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 7 of 9	



ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 22, 2003	Sheet 8 of 9	

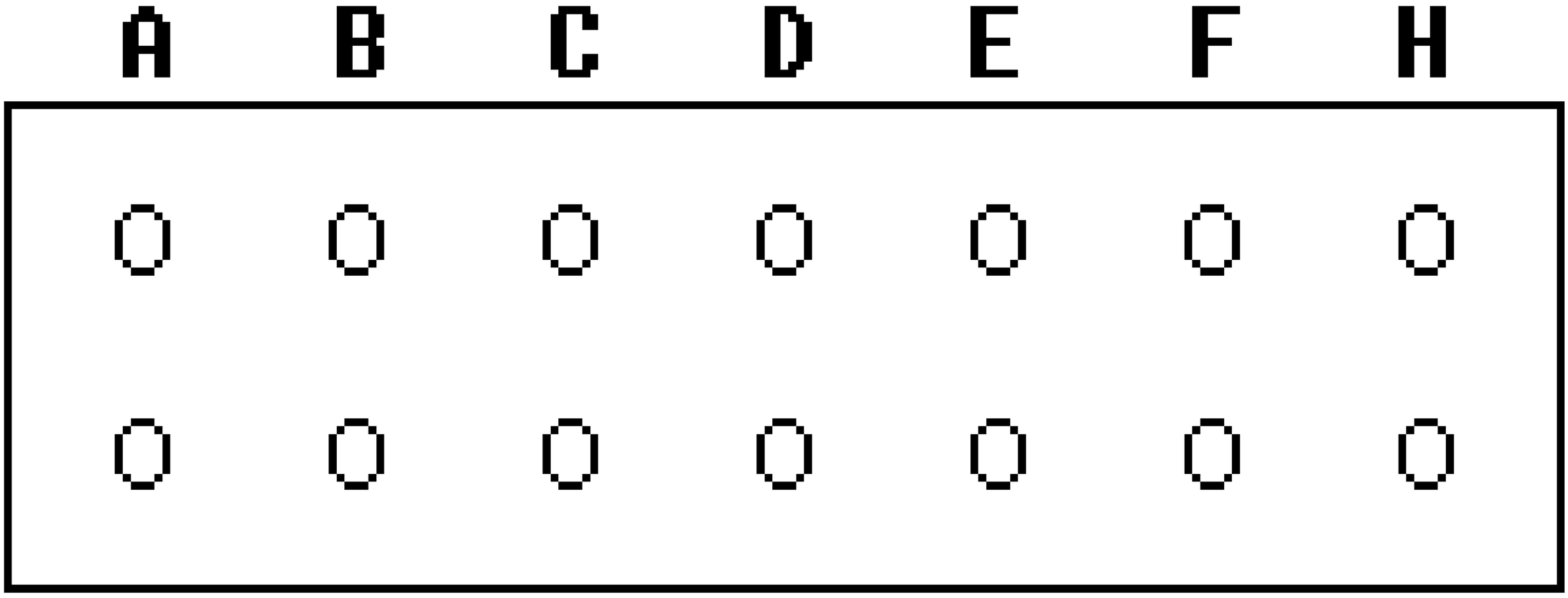
L10
+5A
C79
22uF
C80
1nF
J1
INTRUPT
SIOAUDIO
PROCEED
MTR CTRL
COMMAND
DATA OUT
DATA IN
CLK OUT
CLK IN
SIO
A0-A15
J4B
A13
A14
A15
NC
REF
IRQ
HALT
RST
D1XX
EXTSEL
MPD
AUD
VCC
GND
+5A
EXPANSION
J?
R95
1k
C93
.1
C95
10nF
IN 6
OUT 3
OUT 5
OUT 7
IN 2
IN 7
IN 5
IN 1
OUT 6
OUT 1
OUT 4
OUT 2
IN 3
IN 0
OUT 0
IN 4
BSC
START
SELECT
OPTION
RESET
KEYBXE
KEYBOARD CONNECTOR
J5
FWD 1
TRIG 1
BACK 1
LEFT 1
RIGHT 1
POT A 1
POT B 1
JOY0
L12
L102
C98
1nF
J6
FWD 0
TRIG 0
BACK 0
LEFT 0
RIGHT 0
POT A 0
POT B 0
JOY1
COMP LUM
COMPOSITE
CHROMA
AUDIO
J2
MONITOR

ATARI 130XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 9 of 9	



1.	$\overline{\text{S4}}$	A.	RD4
2.	A3	B.	GND
3.	A2	C.	A4
4.	A1	D.	A5
5.	A0	E.	A6
6.	D4	F.	A7
7.	D5	H.	A8
8.	D2	J.	A9
9.	D1	K.	A12
10.	D0	L.	D3
11.	D6	M.	D7
12.	$\overline{\text{S5}}$	N.	A11
13.	+5V	P.	A10
14.	RD5	R.	R/$\overline{\text{W}}$
15.	$\overline{\text{CCTL}}$	S.	B02

ATARI
XL / XE



1. $\overline{\text{EXSEL}}$
2. $\overline{\text{RST}}$
3. $\overline{\text{DIXX}}$
4. $\overline{\text{MPD}}$
5. Audio
6. $\overline{\text{REF}}$
7. +5V

A. Reserved
B. $\overline{\text{IRQ}}$
C. $\overline{\text{HALT}}$
D. A13
E. A14
F. A15
H. GND