A0-A15

14.18757MHz - PAL
14.31818MHz - NTSC

Y1

L34 L36 R17 L35 L33

1M

C203 22pF

C202 22pF

R18 240

+5A

R20 3k

R19 3k

U18A LS08

PHI2_BUF

REF

O2

CASINH

+5A R31 3k

+5A R21 3k

U7 ANTIC

A0 13 A1 12 A2 11 A3 10 A4 28 A5 27 A6 26 A7 25 A8 24 A9 23 A10 16 A11 22 A12 17 A13 18 A14 19 A15 20

8 REF

29 O2

7 NMI

6 RNMI

VCC 21 +5A

C30 .1

VSS 1

R/W 14

RST 36

FOO 35

AN0 2

AN1 3

AN2 5

D7 37 D6 38 D5 39 D4 40 D3 33 D2 32 D1 31 D0 30

HALT 9

OO 34

LP 4

RDY 15

FOO AN0 AN1 AN2

D0-D7

LP

U8 SALLY

+5A C31 .1

8 VCC

1 VSS

6 NMI

4 IRQ

39 O2

A15 25 A14 24 A13 23 A12 22 A11 20 A10 19 A9 18 A8 17 A7 16 A6 15 A5 14 A4 13 A3 12 A2 11 A1 10 A0 9

RDY 2

HALT 35

OO 37

SYNC 7

R/W 36

RST 40

O1 3

D7 26 D6 27 D5 28 D4 29 D3 30 D2 31 D1 32 D0 33

SO 38

VSS 21

+5A R34 3k

RDY OO HALT R/W RST O1

U6 FREDDIE

+5B C105 .1

40 VCC

20 VSS

1 CLKO

2 CLK

35 CAS

34 WRT

33 RAS

RST 39

EXTSEL 3

CASINH 4

R/W 38

OSC 37

O2 5

FA15 24 FA14 23 FA13 22 FA12 21 A13 19 A12 18 A11 17 A10 16 A9 15 A8 14 A7 13 A6 12 A5 11 A4 10 A3 9 A2 8 A1

RA0-RA8

RA7 25 RA6 26 RA5 27 RA4 28 RA3 29 RA2 30 RA1 31 RA0 32

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15

CAS WRT RAS

OSC

IRQ

R22 3k +5A

Errata: pancio@pancio.net, 2024-01-03

ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 1 of 9	

POKEY
PIA
GTIA
D0-D7
A0-A15

J4
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
D0 10 D0
D1 9 D1
D2 8 D2
D3 L D3
D4 6 D4
D5 7 D5
D6 11 D6
D7 M D7
S4 1
S5 12
RD5 14
RD4 A
CCTL 15
R/W R
O2 S
+5V 13 +5D
GND B

C18 .1

U18C LS08
8
9
10

C25 .1
+5D
+5D
R12 3k

U2 74LS138
15 D0XX
14 D1XX
13 D2XX
12 D3XX
11 D4XX
10 D5XX
9 D6XX
7 D7XX
5 E2
E3 6
A8 1 A8
A9 2 A9
A10 3 A10
E1 4

U3 PAL16L8
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
A11 1 A11
A12 2 A12
A13 3 A13
A14 4 A14
A15 5 A15
MPD 14
CI 16

+5D
C26 .1

R13 1k
R14 1k

R15
+5D
3k

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
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13
VCC 28 +5A
VSS 14
VPP 1
PGM 27 +5A
D0 11 D0
D1 12 D1
D2 13 D2
D3 15 D3
D4 16 D4
D5 17 D5
D6 18 D6
D7 19 D7
CS 20
OE 22
OS ROM

C28 .1

U4
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
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12
D0 9 D0
D1 10 D1
D2 11 D2
D3 13 D3
D4 14 D4
D5 15 D5
D6 16 D6
D7 17 D7
CS 20
VCC 24 +5A
VSS 12
BASIC

C27 .1

CASINH
REF
PB0
PB1
MPD
PB7
R/W
PHI2_BUF

Errata: pancio@pancio.net, 2024-01-03

ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV C1
Date: September 23, 2003	Sheet 2 of 9	

Errata: pancio@pancio.net, 2024-01-03

BELL
GTIA
A0-A15
FOO
AN0
AN1
AN2
D0-D7
HALT
PHI2_BUF
OSC
R/W
RD5
LP

U17
CS 32
A0 2
A1 1
A2 40
A3 39
A4 38
FOO 29
AN0 18
AN1 19
AN2 20
D0 7
D1 6
D2 5
D3 4
D4 37
D5 36
D6 35
D7 34
HALT 26
O2 30
GTIA
S3 15
VCC 27
VSS 3
LUM0 31
LUM1 22
LUM2 23
LUM3 24
CSYNC 25
COLOR 21
S0 12
S1 13
S2 14
T0 8
T1 9
T2 10
T3 11
R/W 33
OSC 28
PAL 16
CADJ 17

+5A
C42 .1
L37
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
R47 36k
R48 18k
R49 9k1
R50 4k7
R51 750
CR4
R52 2k
R53 100
Q3
R204 47
L9
MONO
COLOR

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

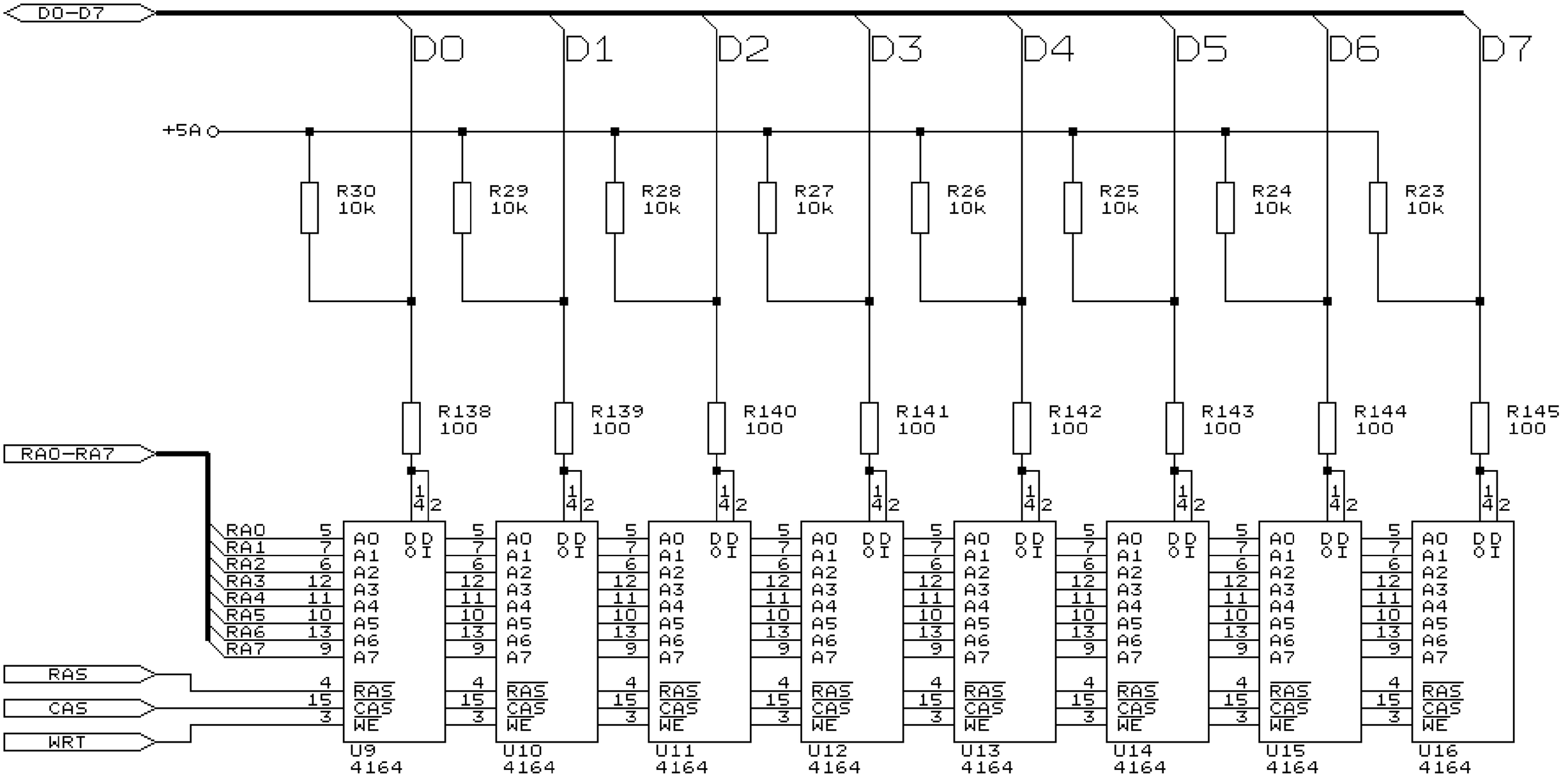
R134 470
START
R135 470
SELECT
R136 470
OPTION
R132 220
L30
TRIG 0
R133 220
L23
TRIG 1
C97 1nF
C96 1nF

PAL
R72 1k
+5V
U21 1/4 74LS74
R73 4k7
C59 22pF
Y2 4,43MHz
R71 470
R70 10k
R69 6k8
Q6 2N3904
C60 560pF

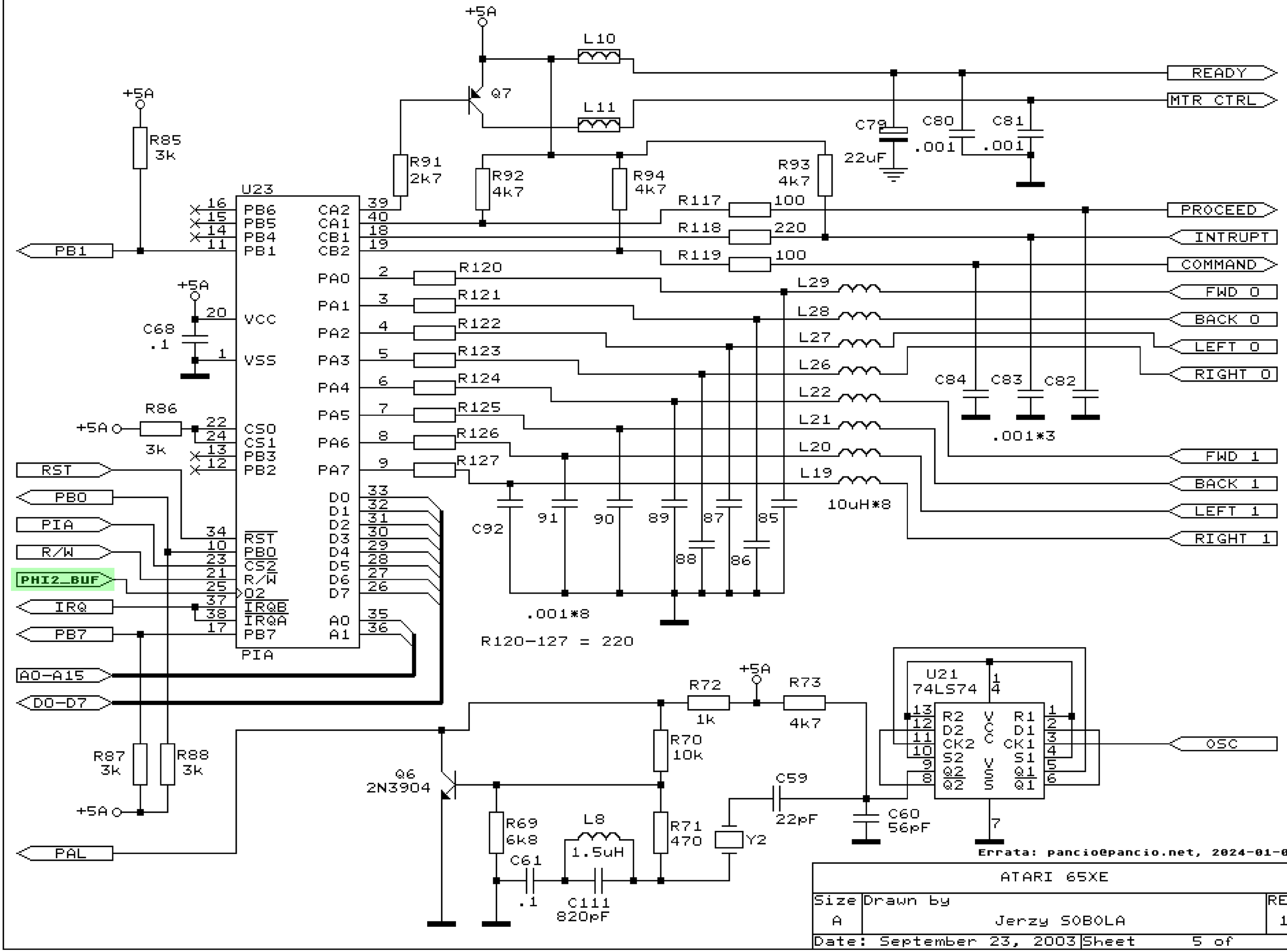
R35 33k
R36 680
CR2
R37 1k
R38 .5M
CR3
C44 68pF
Q1
C45 220pF
C46 .001*2
C47
C48 .1
C206 22pF
L8 1,5uH
C61 .1
C111 820pF

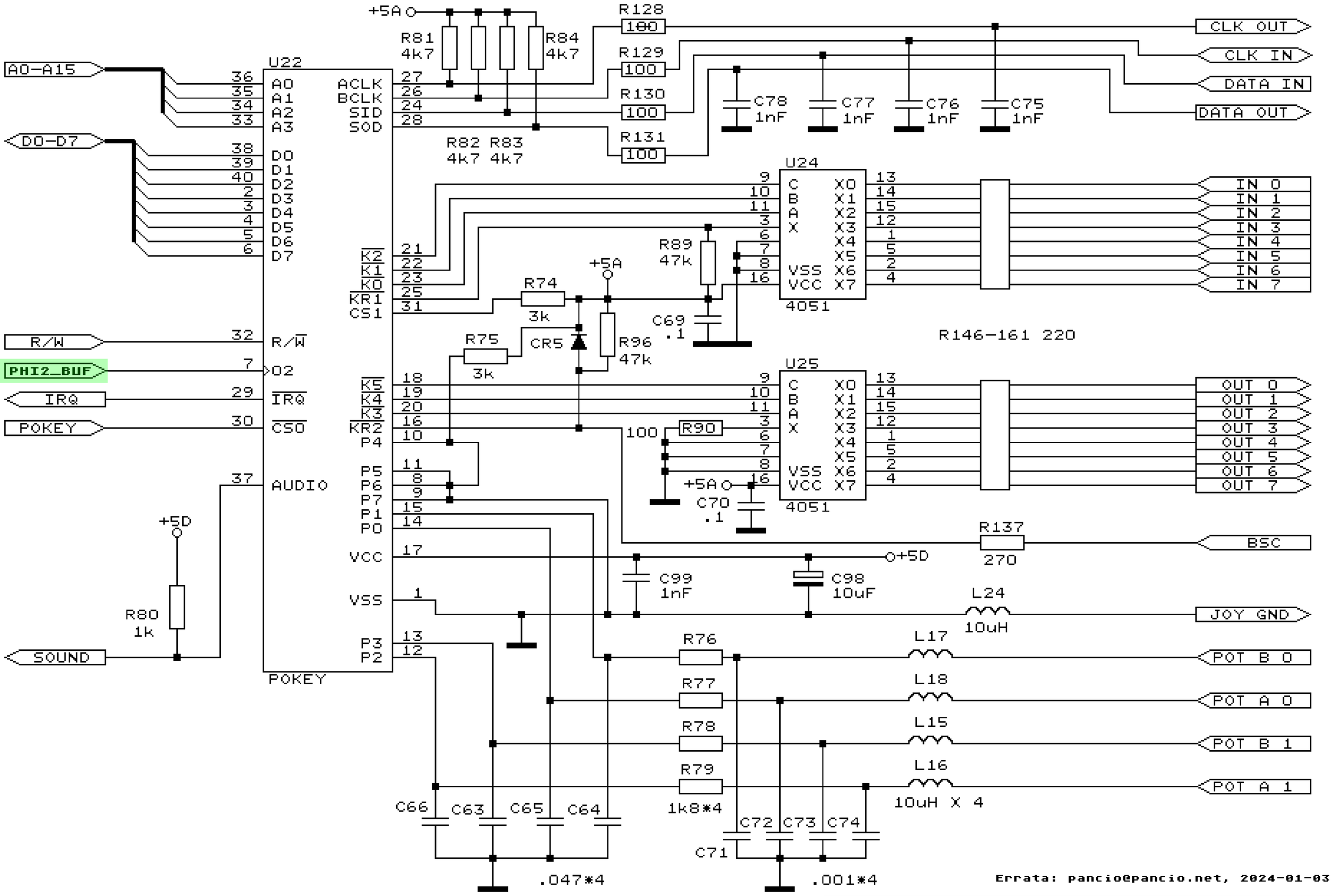
ATARI 65XE

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

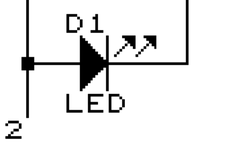


ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 4 of 9	


+5A
L10
L11
Q7
READY
MTR CTRL
R85
3k
R91
2k7
R92
4k7
R94
4k7
R93
4k7
C79
22uF
C80
.001
C81
.001
U23
PB6
PB5
PB4
PB1
CA2
CA1
CB1
CB2
PB1
R117
100
R118
220
R119
100
PROCEED
INTRUPT
COMMAND
R120
R121
R122
R123
R124
R125
R126
R127
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
L29
L28
L27
L26
L22
L21
L20
L19
FWD 0
BACK 0
LEFT 0
RIGHT 0
C84
C83
C82
.001*3
VCC
VSS
C68
.1
R86
3k
CS0
CS1
PB3
PB2
RST
PB0
R/W
PHI2_BUF
IRQ
PB7
A0-A15
D0-D7
PAL
RST
PB0
CS2
R/W
O2
IRQB
IRQA
PB7
D0
D1
D2
D3
D4
D5
D6
D7
A0
A1
PIA
FWD 1
BACK 1
LEFT 1
RIGHT 1
C92
91
90
89
88
87
86
85
10uH*8
.001*8
R120-127 = 220
R72
1k
R73
4k7
R70
10k
R71
470
R69
6k8
C61
.1
L8
1.5uH
C111
820pF
Q6
2N3904
C59
22pF
Y2
C60
56pF
U21
74LS74
OSC
R87
3k
R88
3k
Errata: pancio@pancio.net, 2024-01-03
ATARI 65XE
Size
A
Drawn by
Jerzy SOBOLA
REV
1
Date: September 23, 2003
Sheet 5 of 9


U22
A0-A15
D0-D7
R/W
PHI2_BUF
IRQ
POKEY
SOUND
AUDIO
+5D
R80
1k
A0
A1
A2
A3
D0
D1
D2
D3
D4
D5
D6
D7
R/W
O2
IRQ
CS0
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 R83
4k7 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
R89
47k
R74
3k
C69
.1
R75
3k
CR5
R96
47k
4051
R146-161 220
IN 0
IN 1
IN 2
IN 3
IN 4
IN 5
IN 6
IN 7
U25
R90
100
C70
.1
OUT 0
OUT 1
OUT 2
OUT 3
OUT 4
OUT 5
OUT 6
OUT 7
R137
270
BSC
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
Errata: pancio@pancio.net, 2024-01-03
ATARI 65XE
Size
A
Drawn by
Jerzy SOBOLA
REV
1
Date: September 23, 2003
Sheet 6 of 9

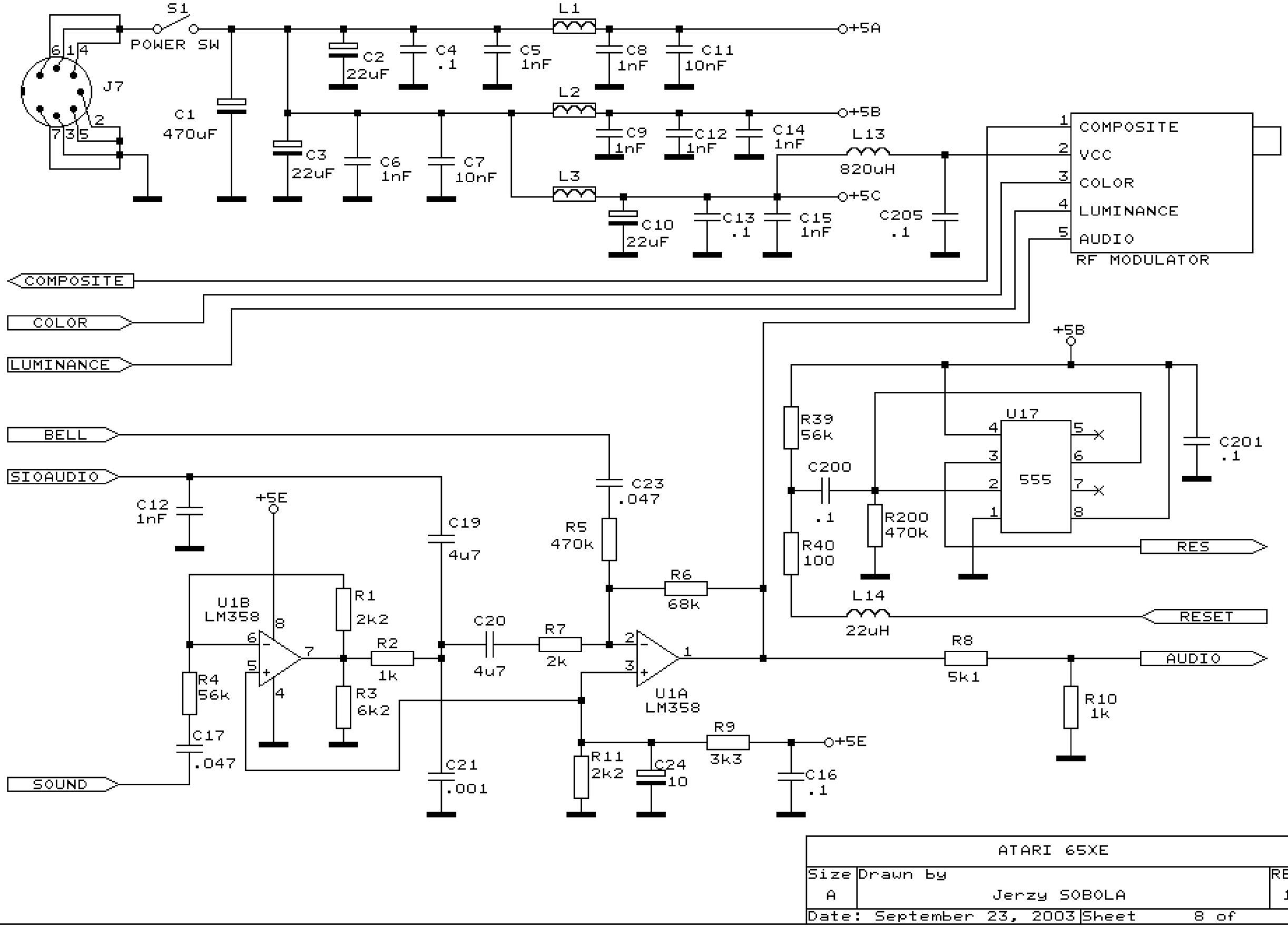
	19	4	8	9	10	11	17	16	20	21	22	23	24	2	
13	7		8	9	Ø	<	>	Del	Brk						13
14	6		5	4	3	2	1	Esc							14
12	U		I	O	P	–	=	Ret							12
15	Y		T	R	E	W	Q	Tab							15
7		J	K	L	;	+	*		Ctl						7
18		H	G	F	D	S	A	Cps							18
5	N	Spc	M	,	.	/	Inv								5
6		Hlp	B	V	C	X	Z		Sft						6
3										Str	Sel	Opt	Rst		3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



Values near lines means pin numbers of keyboard connector.

Numery przy liniach oznaczaja numery stykow w zlaczu klawiatury.

ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 7 of 9	



ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 8 of 9	

READY
L10
C80
1nF
C79
22uF
J1
INTRUPT
SIOAUDIO
PROCEED
MTR CTRL
COMMAND
DATA OUT
DATA IN
CLK OUT
CLK IN
SIO
J8
+5A
R95
1k
C93
.1
C95
10nF
+5A
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
RSC
START
SELECT
OPTION
RESET
KEYBOARD CONNECTOR
MONO
L7
COMPOSITE
J2
CHROMA
AUDIO
MONITOR
J5
FWD 1
TRIG 1
BACK 1
LEFT 1
RIGHT 1
POT A 1
POT B 1
DB9M
+5A
L12
+5D
L102
C98
1nF
J6
FWD 0
TRIG 0
BACK 0
LEFT 0
RIGHT 0
POT A 0
POT B 0
DB9M

ATARI 65XE		
Size A	Drawn by Jerzy SOBOLA	REV 1
Date: September 23, 2003	Sheet 9 of 9	