Profi V3.2
Interface list 1

ADR1

U10:D — 555LA3
ADR13 12
ADR15 13
11

U16:D — 555LL1
12
13
11

U32:D — 555LE1
$\overline{WR}$ 11
12
13

U15:A — 555LL1
1
$\overline{IORQ}$ 2
3
FON

U32:C — 555LE1
8
9
10

U10:C — 555LA3
ADR14 9
$\overline{M1}$ 10
8

BC1
BDIR

U6.1 — AY-3-8912
LD0 28 D0
LD1 27 D1
LD2 26 D2
LD3 25 D3
LD4 24 D4
LD5 23 D5
LD6 22 D6
LD7 21 D7
DAC
A 5 KNA
B 4 KNB
C 1 KNC
IOA0 14
IOA1 13
IOA2 12
IOA3 11
IOA4 10
IOA5 9
IOA6 8
IOA7 7
$\overline{RESET}$ 16 RES
CLCAY 15 CLK
18 BDIR
20 BC1
+5V 19 BC2
2 TEST1
+5V 17 A8
+5V 3 +5V
GND 6 GND

U6.2 — AY-3-8910
LD0 37 D0
LD1 36 D1
LD2 35 D2
LD3 34 D3
LD4 33 D4
LD5 32 D5
LD6 31 D6
LD7 30 D7
DAC
A 4 KNA
B 3 KNB
C 38 KNC
IOA0 21
IOA1 20
IOA2 19
IOA3 18
IOA4 17
IOA5 16
IOA6 15
IOA7 14
$\overline{RESET}$ 23 RES
CLCAY 22 CLK
BDIR 27 BDIR
BC1 29 BC1
+5V 28 BC2
39 TEST1
26 TEST2
+5V 25 A8
GND 24 $\overline{A9}$
IOB0 13
IOB1 12
IOB2 11
IOB3 10
IOB4 9
IOB5 8
IOB6 7
IOB7 6
+5V 40 +5V
GND 1 GND

R20 15k
R19 15k
SOUND

R13 1k2 KNA
R14 2k7 KNB
R15 2k7 KNC
R16 1k2

C2 0,47 RIGHT
C6 0,47 LEFT

R17 2k7
R18 2k7
GND

SYS_BUS

SYS_BUS (CONN64M)

A		B	
A1	--A1	B1	TURBO
A2	LEFT	B2	RIGHT
A3	ADR14	B3	ADR15
A4	ADR12	B4	ADR13
A5	+5V	B5	DC7
A6	--A6	B6	--B6
A7	--A7	B7	--B7
A8	GND	B8	DC0
A9	GND	B9	DC1
A10	CLCAY	B10	DC2
A11	ADR0	B11	DC6
A12	ADR1	B12	DC5
A13	ADR2	B13	DC3
A14	ADR3	B14	DC4
A15	OUTIORQ	B15	INTCPU
A16	GND	B16	NMI
A17	--A17	B17	HALT
A18	--A18	B18	MREQ
A19	--A19	B19	IORQ
A20	--A20	B20	RD
A21	BUSRQ	B21	WR
A22	RESET	B22	--B22
A23	ADR7	B23	READY
A24	ADR6	B24	+12V
A25	ADR5	B25	--B25
A26	ADR4	B26	M1
A27	ROMCS	B27	REF
A28	BUSAK	B28	ADR8
A29	ADR9	B29	ADR10
A30	ADR11	B30	CP/M
A31	ROM14	B31	TR_DOS
A32	SOUND	B32	BLOK

SYS_BUS1

SYS_BUS1 (CONN64M)

A		B	
A1	--A1	B1	TURBO
A2	LEFT	B2	RIGHT
A3	ADR14	B3	ADR15
A4	ADR12	B4	ADR13
A5	+5V	B5	DC7
A6	--A6	B6	--B6
A7	--A7	B7	--B7
A8	GND	B8	DC0
A9	GND	B9	DC1
A10	CLCAY	B10	DC2
A11	ADR0	B11	DC6
A12	ADR1	B12	DC5
A13	ADR2	B13	DC3
A14	ADR3	B14	DC4
A15	OUTIORQ	B15	INTCPU
A16	GND	B16	NMI
A17	--A17	B17	HALT
A18	--A18	B18	MREQ
A19	--A19	B19	IORQ
A20	--A20	B20	RD
A21	BUSRQ	B21	WR
A22	RESET	B22	--B22
A23	ADR7	B23	READY
A24	ADR6	B24	+12V
A25	ADR5	B25	--B25
A26	ADR4	B26	M1
A27	ROMCS	B27	REF
A28	BUSAK	B28	ADR8
A29	ADR9	B29	ADR10
A30	ADR11	B30	CP/M
A31	ROM14	B31	TR_DOS
A32	SOUND	B32	BLOK

R12 — 2k7 → +5V

U8 (555LA2)
Inputs: FON (1), BLOK (2), F2 (3), F1 (4), F4 (5), F5 (6), (11), (12) → 8

U21:E (555LN1)
11 → 10

U31 (555AP6)
- RD → OE (19), T/R (1)
- DC0 (2) A0, DC1 (3) A1, DC2 (4) A2, DC3 (5) A3, DC4 (6) A4, DC5 (7) A5, DC6 (8) A6, DC7 (9) A7
- B0 (18) LD0, B1 (17) LD1, B2 (16) LD2, B3 (15) LD3, B4 (14) LD4, B5 (13) LD5, B6 (12) LD6, B7 (11) LD7

X8 (*R 10k) → +5V (1)
LD0 (2), LD1 (3), LD2 (4), LD3 (5), LD4 (6), LD5 (7), LD6 (8), LD7 (9), (10)

U2 (2764 / 27128 / 27256)
Addr	Pin			Pin	Data
ADR0	10	A0	DQ0	11	LD0
ADR1	9	A1	DQ1	12	LD1
ADR2	8	A2	DQ2	13	LD2
ADR3	7	A3	DQ3	15	LD3
ADR4	6	A4	DQ4	16	LD4
ADR5	5	A5	DQ5	17	LD5
ADR6	4	A6	DQ6	18	LD6
ADR7	3	A7	DQ7	19	LD7
ADR8	25	A8			
ADR9	24	A9			
ADR10	21	A10			
ADR11	23	A11			
ADR12	2	A12			
ADR13	26	A13			
ROM14	27	A14			
		VPP (1) → +5V			
ROM0	22	G			
ROM	20	E			

U3 (2764)
Addr	Pin			Pin	Data
ADR0	10	A0	DQ0	11	LD0
ADR1	9	A1	DQ1	12	LD1
ADR2	8	A2	DQ2	13	LD2
ADR3	7	A3	DQ3	15	LD3
ADR4	6	A4	DQ4	16	LD4
ADR5	5	A5	DQ5	17	LD5
ADR6	4	A6	DQ6	18	LD6
ADR7	3	A7	DQ7	19	LD7
ADR8	25	A8			
ADR9	24	A9			
ADR10	21	A10			
ADR11	23	A11			
ADR12	2	A12			
GND	26	NC			
		VPP (1) → +5V			
+5V	27	PGM			
ROM1	22	G			
	20	E			

Profi V3.2
Interface list 4

RCLK

$\overline{RAWR}$

U18:D
12
13   11
555LI1

WF/DE
13   U21:F   12
555LN1

C7
330

GND

U21:A
1   2
555LN1

+5V
4
U24:A
2   D $\overline{S}$ Q   5
3   CLK
$\overline{R}$ $\overline{Q}$ 6
555TM2

+5V
10
U24:B
12   D $\overline{S}$ Q   9
11   CLK
$\overline{R}$ $\overline{Q}$ 8
13
555TM2
+5V

U27
← X5 = 8 MHz
← X5 = 16 MHz
← AY-8912

OFF   ON

X3
+5V   1   *R   2 $\overline{RDATA}$
3    $\overline{TR00}$
1k   4 $\overline{WPRT}$
5    $\overline{IPF}$
6    $\overline{MOTOR}$
7
8
9
10

U20
+5V   1 $\overline{RST}$
9   CLK
3   D0   Q0   2
4   D1   Q1   5
6   D2   Q2   7
11   D3   Q3   10
13   D4   Q4   12
14   D5   Q5   15
555TM9

U23
5   A0   D0   12
6   A1   D1   11
4   A2   D2   10
3   A3   D3   9
2   A4
1   A5
15   A6
A7
13    $\overline{CS0}$
14   CS1
GND   556RT4

X5
8 / 16 MHz

U22:A
1   2
555LN1

R4
680

U22:F
13   12
555LN1

U27
1   8
2   7
3   6
4   5
FON   DIP-SW4   FON

U26
GND   2   R0(1)
GND   3   R0(2)
QA   12
QB   9
14   CKA   QC   8
1   CKB   QD   11
555IE5

U22:E
11   10
555LN1

8MHZ

4MHZ

1MHZ

Profi V3.2
Interface list 5

Kempston Joystick

X7
1 Up
2 Right
3
4 Left
5 +5V
6 Down
7 Fire

R21 10k
R11 10k
R5 10k
R10 10k
R6 10k
R9 10k
R7 10k
R8 10k
GND
+5V

U29 580VV55 (IOP)

LD0 34 D0
LD1 33 D1
LD2 32 D2
LD3 31 D3
LD4 30 D4
LD5 29 D5
LD6 28 D6
LD7 27 D7

ADR5 9 A0
ADR6 8 A1
$\overline{WR}$ 36 WR
$\overline{RD}$ 5 RD
F5 6 CS
35 RES

+5V 26 VCC
GND 7 GND

PA0 4
PA1 3
PA2 2
PA3 1
PA4 40
PA5 39
PA6 38
PA7 37
PB0 18
PB1 19
PB2 20
PB3 21
PB4 22
PB5 23
PB6 24
PB7 25
PC0 14
PC1 15
PC2 16
PC3 17
PC4 13
PC5 12
PC6 11
PC7 10

$\overline{RESET}$
U10:B 555LA3
4
5
6 RESET
GND

+5V
CB1 CB2 CB3 CB4 CB5 CB6 CB7 CB8 CB9 CB10
GND

+5V
CB11 CB12 CB13 CB14 CB15
GND

X6 CONN64M

+5V A1 60   B1 59
A2   B2
PC7 A3   PB0 B3
PC6 A4   PB1 B4
PC5 A5   PB2 B5
PC4 A6 50 PB3 B6 49
PC3 A7   PB4 B7
PC2 A8   PB5 B8
PC1 A9   PB6 B9
PC0 A10   PB7 B10
PA7 A11 40 B11 39
PA6 A12   B12
PA5 A13   B13
PA4 A14   B14
PA3 A15   B15
PA2 A16 30 +12V B16 29
PA1 A17   B17
PA0 A18   B18
A19   B19
A20   B20
A21 20 B21 19
A22   B22
A23   B23
A24   B24
A25   B25
A26 10 B26 9
A27   B27
A28   B28
A29   B29
A30 2 B30 1
A31   B31
A32   B32
GND

Power Table				
Ref Des	Device(Type)	Package	GND	+5V
U2	27256	N028	14	28
U3	2764	N028	14	28
U4	555ID10	N016	8	16
U5	556RT4	N016	8	16
U7	555LA2	N014	7	14
U8	555LA2	N014	7	14
U9	555LA3	N014	7	14
U10	555LA3	N014	7	14
U11	555IR16	N014	7	14
U12	555LN2	N014	7	14
U13	555LP8	N014	7	14
U14	555LL1	N014	7	14
U15	555LL1	N014	7	14
U16	555LL1	N014	7	14
U17	555LL1	N014	7	14
U18	555LI1	N014	7	14
U19	555TM9	N016	8	16
U20	555TM9	N016	8	16
U21	555LN1	N014	7	14
U22	555LN1	N014	7	14
U23	556RT4	N016	8	16
U24	555TM2	N014	7	14
U25	555TM2	N014	7	14
U26	555IE5	N014	10	5
U30	555LA1	N014	7	14
U31	555AP6	N020	10	20
U32	555LE1	N014	7	14

Profi V3.2
Interface list 6