

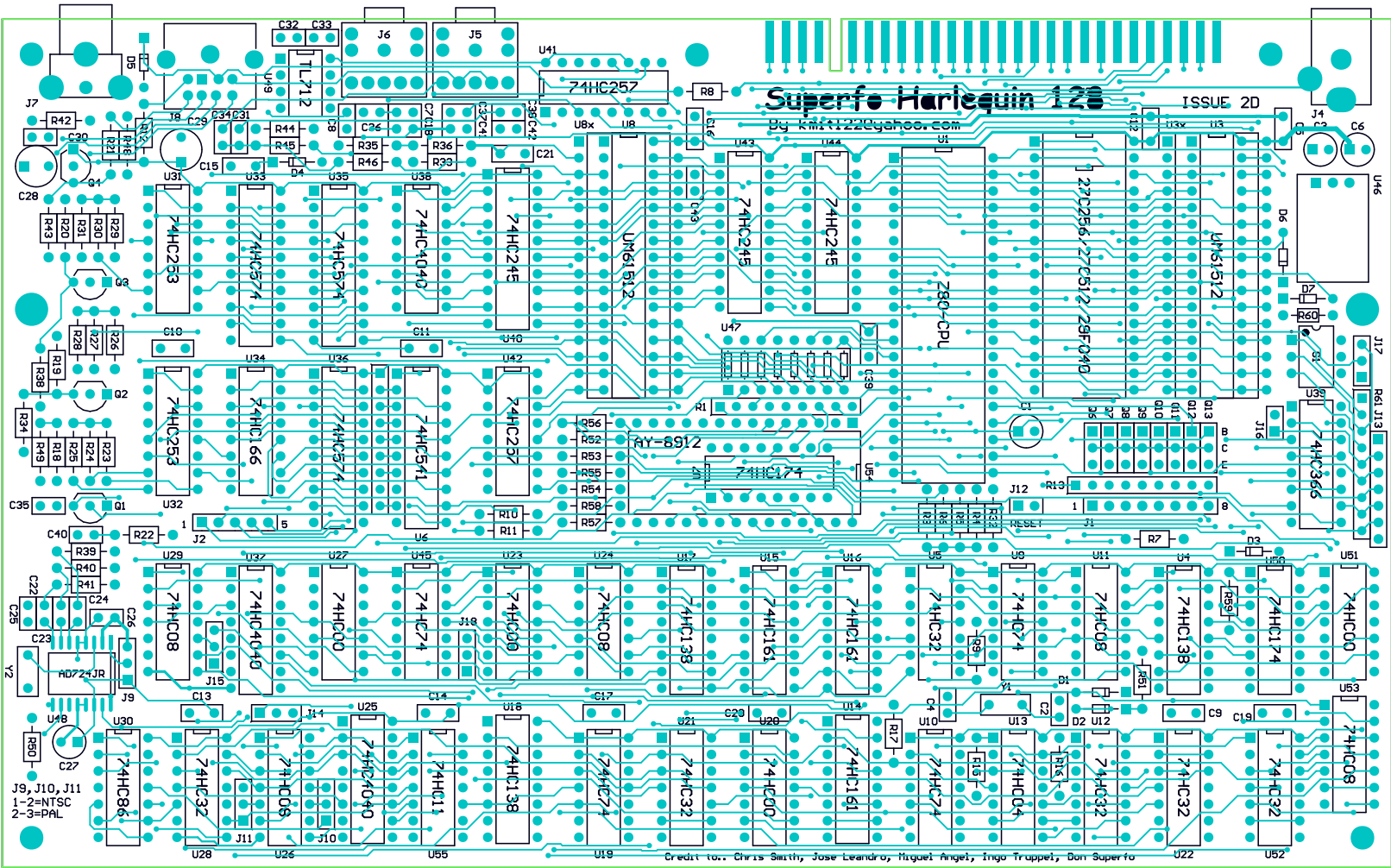
J14, J15 Y1
 1-3 = 48K 74HC00 20,0000000 + 48K 74HC00
 1-3 = 120K 74HC00 20,0000000 + 120K 74HC00
 J9, J10, J11 Y2
 1-3 = 48K
 1-3 = 120K
 1-3 = 48K

25 Spectrum Supporter Hardware 128K
 25
 25
 25

Superfo Harlequin 128

ISSUE 2D

大友 11220yoh00_0m



Credit to: Chris Smith, Jose Leandro, Miguel Angel, Ingo Trappet, Don Superfo

J9, J10, J11
1=NTSC
2=PAL

Comment	Designator	Quantity	Comment	Designator	Quantity
10uF	C1, C3, C27	3	9.1K	R52, R55	2
27pF	C2, C4	1	4.7M	R50	1
10pF	C25, C40	2	2.2M	R15	1
0.1uF	C5, C9, C10, C11, C12, C13, C14, C15, C16, C17, C19, C20	12	Z80-CPU	U1	1
0.1uF	C7, C8, C21, C22, C23, C24, C26, C30, C31, C33, C34, C39	12	27C256/27C512/29F040	U2	1
22uF	C6	1	UM61512 or KM681000 or HM628128	U3, U8	2
1nF	C18, C32	2	74HC138	U4, U17, U18	3
220uF	C28, C29	2	74HC32	U5, U12, U21, U22, U28, U52	6
3.3nF	C35, C36	2	74HC541	U6	1
0.47uF	C37, C38	2	74HC174	U7, U50	2
2.2nF	C41, C42	2	74HC74	U9, U10, U19, U45	4
180pF	C43 (option)	1	74HC08	U11, U24, U26, U29, U53	5
1N4740A	D4	1	74HCU04 or 74HC04	U13	1
1N4742A	D5	1	74HC161	U14, U15, U16	3
1N4148	D1, D2, D3	3	74HC00	U20, U23, U27, U51	4
RCPT 8	J1	1	74HC4040	U25, U37, U38	3
RCPT 5	J2	1	74HC86	U30	1
DC JACK	J4	1	74HC253	U31, U32	2
AUDIO JACK	J5	1	74HC574	U33, U35, U36	3
EAR/MIC JACK	J6	1	74HC166	U34	1
VIDEO JACK	J7	1	74HC245	U40, U43, U44	3
Mini-DIN 8	J8	1	74HC257	U41, U42	2
Header 3x1	J9, J10, J11, J14, J15, J16, J17, J18	4	OKI-78SR-5 or RECOM R-78E5.0-1.0	U46	1
BC547 or BC548	Q1, Q2, Q3, Q4	4	470 * 8 Network Resistor (DIP)	U47	1
2SA1175 or 2SA1309A	Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13	8	AD724JR	U48	1
10k * 8 Network Resistor (SIP)	R1, R2	2	TL712	U49	1
10k	R3, R4, R5, R6, R10, R11, R22, R36, R51	9	AY-3-8912	U54	1
470	R7, R9, R32, R59	4	74HC11	U55	1
150	R8	1	28.375MHz	Y1	1
270	R12, R18, R48	3	4.433MHz	Y2	1
4.7k * 8 Network Resistor (SIP)	R13	1	DIP SWITCH 3 DIGIT	S1	
4k7	R17	1	SOCKET 8 PIN		1
68	R19, R20, R21, R34, R38, R43	6	SOCKET 14 PIN		21
18K	R23, R26, R29	3	SOCKET 16 PIN		16
3.9K	R24, R27, R30	3	SOCKET 20 PIN		7
2.2K	R25, R28, R31	3	SOCKET 28 PIN		2
33K	R33	1	SOCKET 32 PIN (300mil or 600mil)		2
12K	R35	1	SOCKET 40 PIN		1
75	R39, R40, R41, R42	4	Joystick Interface		
15K	R53, R54	2	74HC366 or 74HCT366 or 74LS366	U39	1
1K	R16, R56, R57, R58	4	10K	R60	1
47K	R45	1	10K * 8 Network Resistor (SIP)	R61	1
2.7K	R49	1	1N4148	D6, D7	2
150K	R44, R46	2	Header 7x1	J13	1

Note: U47 can be separate 470 Ohm resistors. No need to install J9, J10, J11, J14, J15 it set to PAL by default. U13 should be 74HCU04. U14, U15 and U16 brand ST will work better than others

U2 is 27C256 programed with 128K/+2 ROM or 27C512 programmed with +2A/+3/+3E ROM.

J17 jump 1-2 for 27C256/27C512, jum 2-3 for 29F040, J18 jump 1-2 for 27C256, jum 2-3 for 27C512 or 29F040

J16 jump 1-2 for disable Joystick Interface, S1 select ROM Bank when U2 is 29F040, total 8 bank 64K for each bank