

GND

MAH		LABA	DD1	LABI		1 4				Цеп	XS1 Ib Kohtakt	_
MA11 153 VA8 154	1/00	ьмо А	CPLD	LABI	1/00	197 196	R0 R1	+5V		Цеп	+5V	+
	I/O1				I/O1	196	AY_CLK	+5V		2	+5V +5V	-
MA9 159 VA13 160	I/O2				1/02	195	CSYNC	GND		3	GND	-
MA8 161	1/03				1/03	193	SD_CS	CLK28		4	CLK28	1
VRAM_WR 162	I/O4 I/O5				I/O4 I/O5	192	SD_DI	EPM_CLR		- 5	I/CLR	7
MA13 163	1/06			1/0	6/TDO	189		RAM2_WR MA15		- 6	RAM2_W	R
MA14 164	1/07				1/07	188	SD_SCLK	MA18		7	MA15	
RAM1_WR 166	1/08				1/08	187	SD_DO	RAM1_WR		- 8	MA18	
MA16 167	1/09							MA13		9	RAM1_W	2
	<b>—</b>	LAB B		LAB J		-		MA8		11	IVIATO	-
VA6 141 VA11 144	1/00	LABB		LABJ	1/00	27	27	MA9		12	140 10	-
VA11 144 VA7 145	I/O1				I/O1	26 25	TAPE_IN	MA11		13	1411 10	-
RAM2_OE 146	I/O2				1/02	24	24	RAM2_OE		14		F
VA12 147	I/O3 I/O4				I/O3 I/O4	22	TAPE_OUT	RAM1_OE		15		
VA9 148	1/05				I/O4	21	21	MA10 MD7		16		
VA14 149	1/06				1/06	20	ROM_OE	MD6		17	14101	
MA4 150	1/07				1/07	19	19	MD5		18	IVIDO	
MA3 151	1/08				1/08	18	AY_BC1	MD4		19 20	IVIDO	-
					1/09	17	MAPCOND	MD3		21	IVID4	-
MREQ 109		LAB C		LAB K		38	BLK_ZXBUS	ĪŌRQ		22	IVIDO	-
VD3 110	I/O0				I/O0 I/O1	37	A2	D1		23		7
MD2 111	VO2				1/02	36	ROMCS_ZXBUS	D7		24		٦
VD4 112	1/03				1/03	35	D3	A0 M1		25	AU	
MD3 113	1/04				1/04	34	RS_ZXBUS	BUSREQ		26	M1	
VD5 114	1/05			1	1/05	33	D6	BUSACK		27	BUSREQ	4
VD2 115	1/06				1/06	31	RDR_ZXBUS	RD		28	DOUAGIK	4
MD4 117	V07			1/0	7/TCK	30	DEFEC	GND		30	IND	$\dashv$
VD1 118	I/O8			1	I/O8	29	BEEPER	GND		31	GIND	$\dashv$
	l				1/09	28	HALI	WR		32	OND	$\dashv$
M1 92	I/On	LAB D		LAB L	1/00	78	A9	WAIT		33	****	$\exists$
RFSH 93	I/O0			1	I/O0 I/O1	77	KB2	RESET		34	RESET	_
A0 95	VO1				I/O1 I/O2	76	A8	RFSH D2		35	RFSH	1
D2 96	1/03				1/03	73	КВ3	D2 D0		36	102	_]
D7 97	1/04				1/04	71	A15	INT		37	D0	4
D0 98	I/O5				1/05	70	KB4	MREQ		38		4
D1 99	1/06				1/06	69	A14 TURRO	MD2		39	IVINEQ	$\dashv$
MD1 100 INT 101	V07				1/07	68	TURBO A13	MD1		41	IVIDZ	$\dashv$
INI 101 IORQ 102	1/08			1	1/08	66	SPECIAL	MD0		42	IVIDI	$\dashv$
102	I/O9				1/09		U. LUINL	MAO		43	IVIDO	7
MA18 168	1/00	LAB E		LAB M	1/00	4	ROM_WR	MA1		44		1
MA17 169	I/O1				1/01	3	ROM_A16	MA2 MA3		45	MA2	
MA15 170	1/02				1/02	206	В0	MA4		46	IVIAU	
MA12 171	1/03				1/03	205	AY_BDIR	MA5		47	IVIVAT	4
MA7 172	I/O4			1	I/O4	204	B2	MA6		48	140 10	4
MA6 173	I/O5			1	1/05	203	B1	MA7		49 50	IVIAU	$\dashv$
MA5 175	1/06				1/06	202	G2 G1	MA12		51	IVIPAT	$\dashv$
1 <u>76</u> ROM_A18 177	1/07/1	TDI		1	1/07	201 199	G1 G0	MA14		52	IVIATZ	$\dashv$
RAM2_WR 178	1/08				1/08	199	R2	MA16		53	IVIZATE	$\dashv$
	I/O9				1/09		.,4	MA17		54	148 110	╛
MA2 130	1/00	LAB F		LAB N	1/00	16	16	ROM_A18		- 55	ROM_A18	,
MD6 131	1/01				I/O1	15	15	CLKX EPM_OE1		56	OLIVA	
VA2 132	1/02				1/02	13	CF_CS0	GND		57	I/OL1	
MD7 133	1/03				1/03	12	12	+5V		58	UNID	4
VA3 135	I/O4				I/O4	11	11 ROM_A17	+5V		59 60	1.01	-
VA10 136 VA4 137	I/O5				1/05	10	ROM_A17 ROM_A15				+5V PBD-60_IGP	
VA4 137 MA10 138	1/06				1/06	8	ROM_ATS	ł			XS2	
VA5 139	1/07				1/07	7	ROM_A14	•		Цеп		$\neg$
RAM1_OE 140	I/O8				1/08			12		1	$\overline{}$	_
	109							19		2		
VD6 119	1/00	LAB G		LAB O	1/00	49	BTN_NMI	21 24		3		
VD0 120	VO1				1/01	48	A12	26		4		
MD5 121	1/02				1/02	47	A7	HALT		5		_
VA0 122	I/O3			1	1/03	46	A6	RDR_ZXBUS	_	6 7	HALT	1
VD7 123	I/O4				I/O4	45	CLK_CPU	RS_ZXBUS		8	RDR_ZXB	_
VA1 124 MD0 126	I/O5				1/05	43	A5 A4	ROMCS_ZXBUS		9	RS_ZXBU ROMCS_2	
MD0 126	1/06	-		1	1/06	43	A3	BLK_ZXBUS		10		
MA0 128	I/O7/1	MS			I/O7 I/O8	39	IORQGE_ZXBUS	IORQGE_ZXBUS		- 11	DEIT_EXE	
MA1 129	1/08				1100			TODOS_ZXBUS		12	IODOS_Z	
	L = 5					1		DOS_ZXBUS F_ZXBUS		13	DOS_ZXB	3US
KB0 79	1/00	LAB H		LAB P	1/00	65	A11	CLK_ZXBUS	-	14	I _ZABOO	
A10 80	I/O1			1	I/O1	64	64 NMI	NMI	_	15	OLIV_EXE	บร
KB1 81	I/O2			1	1/02	62	NMI	64		16		$\dashv$
RD 86 WR 87	I/O3				1/03	60	D5 A1	16		18		$\dashv$
WR 87 BUSACK 88	I/O4				1/04	59	D4	15		19		7
WAIT 89	I/O5 I/O6				I/O5 I/O6	58	IODOS_ZXBUS	11		20		_
BUSREQ 90	1/06				1/06	57	F_ZXBUS			PBD	D-20_IGP1	_
RESET 91	1/08				1/08	56	DOS_ZXBUS	J	D	D2		
					1/09	55	CLK_ZXBUS	VA0 10	SF	RAM	DO 11	\
	<u> </u>			<u> </u>		1	`	VA1 9	A0		10	
EPM_OE1 183	VOE1			G	NDINT	75		VA1 9	A1 A2	- 1	D1 12 D2 13	
CLK28 184	I/CLK			1	NDINT	82		VA3 7	A2 A3		D2 15 D3 15	٧
CLKX 181 EPM CLR 182		/CLK2			NDINT	180		VA4 6	A3 A4	- 1	D3 16	VI
EPM_CLR 182	I/CLR	.			NDINT	185		VA5 5	A5		D5 17	١
	l				ONDIO	14		VA6 4	A6	- 1	D6 18	١
74	1/00-				SNDIO	32		VA7 3	A7		D7 19	٧
	VCCII			1	SNDIO	40		VA8 25	A8			
83	VCCII	- 1			SNDIO	50		VA9 24	A9			
83 179	VCCII				SNDIO	72		VA10 21	A10			
	VCCI	- 1			SNDIO	84		VA11 23	A11			
179	, vool	- 1			SNDIO	94		VA12 2 VA13 26	A12			
179 186	VCCI			1	SNDIO	108		VA13 26 VA14 1	A13			
179 186 5	VCCIO	0 1			SNDIO	116		GND 20	A14 CS			
179 186 5 23 41 63	l			1 9					1 25 T			
179 186 5 23 41 63	VCCI	o			SNDIO	134		VRAM_WR 27 I	7			
179 186 5 23 41 63 85	VCCIO	0			GNDIO GNDIO	142			WR			
179 186 5 23 41 63 85 107	VCCK VCCK	0 0		0		142 152		$\overline{}$	7			
179 186 5 23 41 63 85 107 125	VCCK VCCK VCCK VCCK	0 0 0 0 0 0		(	GNDIO GNDIO GNDIO	142 152 174			WR OE	C256AN		
179 186 5 23 41 63 85 107	VCCK VCCK VCCK	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			GNDIO GNDIO	142 152			WR OE	C256AN	ı	

GND SD\_SCLK SD\_CS AY\_CLK G0 G2 B2 B0 ROM\_WR ROM\_A17 ROM\_A14 MAPCOND 8 27 D5 D4 17 D5
18 D4
19 A1
20 A3
21 A5
22 A6
22 A6
23 A12
24 A11
25 A13
26 A14
27 A15
28 A8
29 A9
30 A10
31 KB0
31 KB0
32 KB1
33 KB2
34 KB3
35 KB4
37 TURBO
37 SPECIAL
38 BTN NMI
39 A7
40 CLK CPU
41 A4 A1 A3 A5 A6 A12 A11 A13 A14 A15 A8 A9
A10
KB0
KB1
KB2
KB3
KB4
TURBO
SPECIAL
BTN\_NMI
A7 CLK\_CPU
A4
A2
D3
D6
BEEPER 41 A4 42 A2 43 D3 44 D6 45 BEEPER 46 TAPE\_IN 47 TAPE\_OUT 48 ROM\_OE TAPE\_IN TAPE\_OUT ROM\_OE 48 ROM\_OE

49 AY\_BC1

50 ROM\_A15

51 ROM\_A16

52 AY\_BDIR

53 B1

54 G1

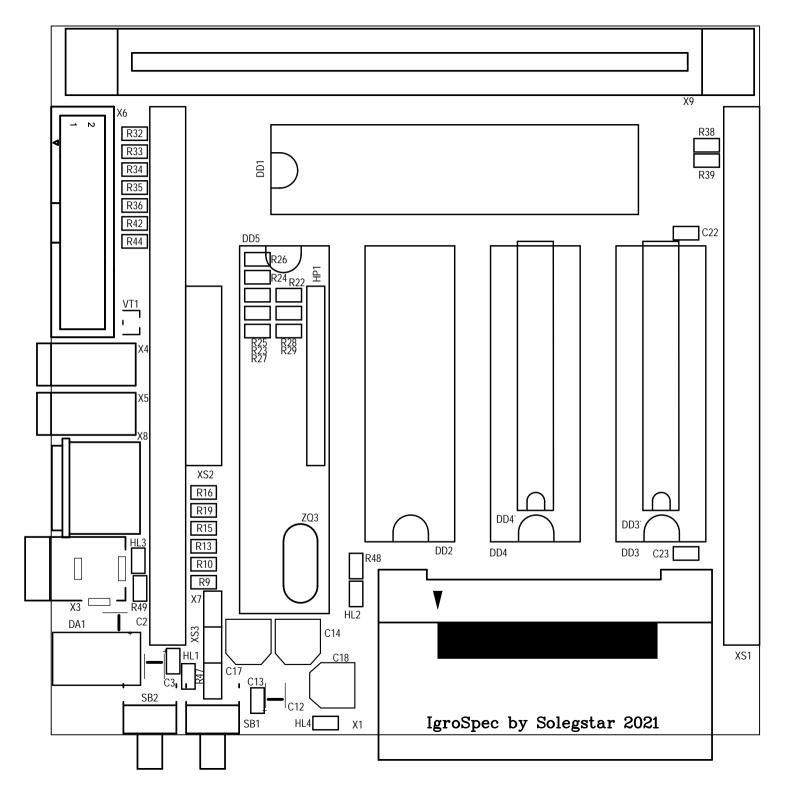
55 R2

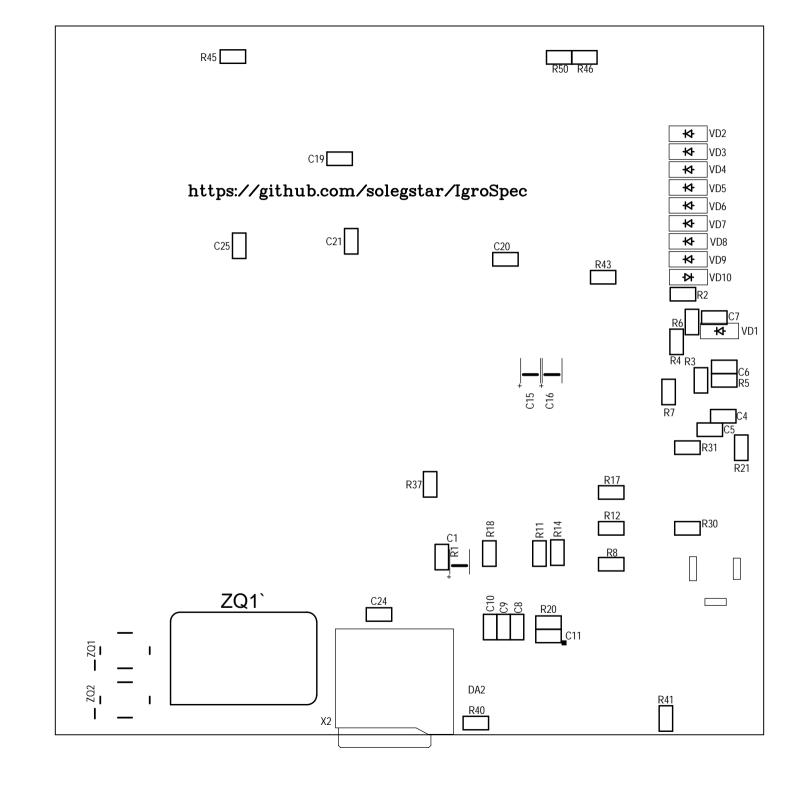
56 R1

57 CSYNC

58 SD\_DI

59 SD\_DO AY\_BC1 ROM\_A15 ROM\_A16 AY\_BDIR
B1
G1
R2
R1
CSYNC SD\_DI SD\_DO 59 SD\_DO 60 GND PBD-60\_IGP GND





Поз. Обозначение	Корпус	Номинал	Кол-во
C11	CC0805	10pF	1
C14, C17, C18	C_POL_SMD	220uF	3
C1-C3, C12, C15, C16	C-TANTAL-B	10uF	6
C4, C8-C10, C13, C19-C25	CC0805	100nF	12
C5	CC0805	3.3nF	1
C6, C7	CC0805	10nF	2
DA1	DPAK	LD1117-33	1
DA2	AD724	AD724	1
DD1	PDIP40	Z80	1
DD2	PDIP32W	AM29F040	1
DD3, DD4	PDIP32W	HM628512ALP	2
DD3`, DD4`	PDIP28	IS61C256AN	2
DD5	PDIP40	YM2149F	1
HL1-HL4	CC0805	LED_SMD_0805	4
HP1	NR9	10k	1
R1	RR0805	47k	1
R10, R13, R17	RR0805	2k	3
R11, R14, R18, R21, R30, R31	RR0805	75	6
R2	RR0805	2k2	1
R20	RR0805	4m7	1
R22, R23	RR0805	1k2	2
R24-R27	RR0805	2k7	4
R28, R29	RR0805	15k	2
R3	RR0805	33k	1
R4, R6, R7, R32-R39, R41	RR0805	10k	12
R5, R8, R15, R19	RR0805	510	4
R9, R12, R16, R40, R42-R50	RR0805	1k	13
SB1, SB2	TS-AXPV-130	TS-AXPV-130	2
VD1-VD10	LL4148(SOD80)	LL4148(SOD80)	10
VT1	SOT23	BC847	1
X1	CF-50P	CF-50P	1
X2	MICRO_SD	MICRO_SD	1
X3	DC_PLUGS	DS-210	1
X4, X5	PJ-320A	PJ-320A	2
Х6	BH20	BH20	1
X7	PLD_6_IGP1	PLD_6	1
X8	MDIN4	MDIN4	1
Х9	ZX-BUS	ZX-BUS	1
XS1, XS3	PBD-60_IGP	PBD-60_IGP	2
XS2	PBD-20_IGP	PBD-20_IGP1	1
ZQ1	QSMD7X5	28MHZ	1
ZQ2	QSMD7X5	XMHZ	1
ZQ3	HC49U_VERT	4.43MHZ	1