



NOTE
 KONY CRYSTAL C120-150pF; C124-20pF
 C.S.L CRYSTAL C120-10nF(10%)
 C124-22pF(5%)

NOTE

	BOTTOM (A)	TOP (B)
A14	1	A15
A11	2	A13
+5V	3	D7
+9V	4	N.C.
SLOT	5	SLOT
0V	6	D0
0V	7	D1
CPU CK	8	D2
A0	9	D6
A1	10	D5
A2	11	D3
A3	12	D4
TORQ BLK	13	JST
0V	14	NMI
NOT USED	15	HALT
NOT USED	16	MREQ
NOT USED	17	IO REQ
NOT USED	18	RD
BUSREQ	19	WR
RESET	20	-5V
A7	21	SWAT
A6	22	-12V
A5	23	-12V
A4	24	MI
ROM CS	25	RFSH
BUS ACK	26	A8
A9	27	A10
A11	28	N.C.

KEY	KB1	KB2	KEY	KB1	KB2
TRF VVIDEO	1	2	F	1	6
INV VVIDEO	1	4	EXT MODE	1	2
1	1	1	EDIT	3	6
2	1	2	A	1	1
3	1	3	S	2	2
4	1	4	D	3	3
5	1	5	F	4	4
6	1	6	G	5	5
7	1	7	H	6	6
8	1	8	J	7	7
9	1	9	K	8	8
0	1	0	L	9	9
BREAK	1	0	ENTER	1	7
DELETE	1	0	CAP SHFT L	1	6
GRAPH	1	2	CAP SHFT R	1	6
Q	1	1	Z	1	1
W	2	2	X	3	3
E	2	2	C	4	4
R	4	2	V	5	5
T	5	2	B	5	6
V	5	2	N	4	6
U	4	4	M	3	6
I	2	5	2	3	6
O	2	5	CAP SHFT R	1	6

MEMBRANE CONNECTIONS

KEY	KB1	KB2
SYM SHFT L	2	6
SYM SHFT R	2	6
SPACE BAR	1	8
SYM SHFT L	2	6
SYM SHFT R	2	6

TRANSISTOR LEAD IDENTS

LEAD VIEW

TR3	ZTX 313	TR10	BC208
TR4	ZTX 650	TR11	BC239
TR5	ZTX 213	TR12	BC239
TR6	ZTX 313	TR13	BC239
TR14	ZTX 313		



ZX Spectrum+ 128k
 Investronica model 2-1
 digital circuit
 schematic diagram
 drg.rev 2.0 05/09/2001
 analogue schematic
 drg.rev 1.0a 05/09/2001
 rendered by Ian Worsley
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