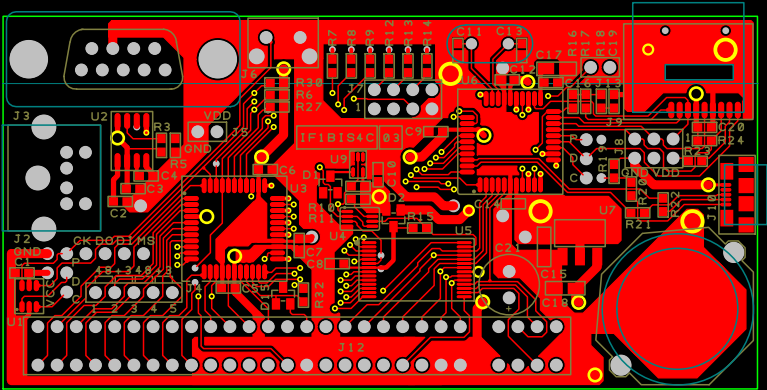
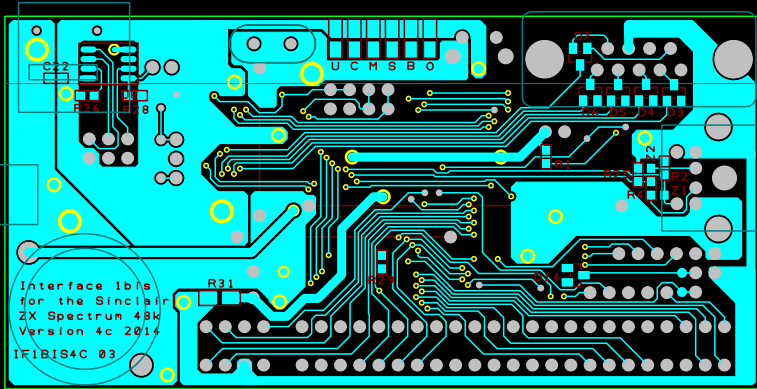
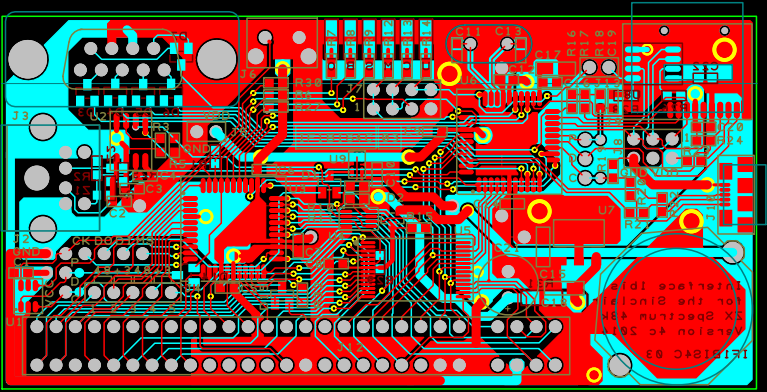


Projection Do Not Scale	Project Interface 1bis for the Sinclair ZX Spectrum 48k	
Client	Title Version 4c	Rev 2 4
Filename	Date 03-Jan-2014	Sheet of







Report File: F:\ZXS\DES\I F1b\4\c\L0T\DSP03\I F1BI S4C (Bill of materials).txt
 Report Written: Tuesday, August 23, 2016
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 Design Title:
 Created: 2012/10/19 18:07:35
 Last Saved: 2014/03/08 06:57:34
 Editing Time: 34573 min
 Units: mm (precision 3)

C1	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C2	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C3	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C4	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C5	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C6	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C7	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C8	Capacitor	ceramic chip	0603	1uF	Kemet	C0603C105K8PAC7867	461-2708
C9	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C10	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C11	Capacitor	ceramic chip	0603	22pF	Kemet	C0603C220J5GAC	264-4501
C12	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C13	Capacitor	ceramic chip	0603	22pF	Kemet	C0603C220J5GAC	264-4501
C14	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C15	Capacitor	tantalum	3216-18	10uF	Vi shay	293D106X9016A2TE3	684-3890
C16	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C17	Capacitor	tantalum	3216-18	10uF	Vi shay	293D106X9016A2TE3	684-3890
C18	Capacitor	tantalum	3216-18	10uF	Vi shay	293D106X9016A2TE3	684-3890
C19	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C20	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
C21	Capacitor	aluminum	D80-H11	470uF	RS	711-0826	711-0826
C22	Capacitor	ceramic chip	0603	100nF	Murata	GRM188F51E104ZA01D	723-5521
D1	Schottky double diode	SOT23-3	BAT54A		Fairchild	BAT54A	670-8785
D2	Schottky double diode	SOT23-3	BAT54C		NXP	BAT54C, 215	436-7789
D3	Schottky diode	SOT23-3	BAT54		NXP	BAT54, 215	436-7818
D4	Schottky diode	SOT23-3	BAT54		NXP	BAT54, 215	436-7818
D5	Schottky diode	SOT23-3	BAT54		NXP	BAT54, 215	436-7818
D6	Schottky diode	SOT23-3	BAT54		NXP	BAT54, 215	436-7818
D7	Schottky double diode	SOT23-3	BAT54A		Fairchild	BAT54A	670-8785
D8	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D9	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D10	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D11	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D12	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D13	LED	3216	Red		Kinbright	KP-3216SRC-PRV	466-3914
D14	Schottky double diode	SOT23-3	BAT54C		NXP	BAT54C, 215	436-7789
D15	Schottky double diode	SOT23-3	BAT54C		NXP	BAT54C, 215	436-7789
J2	Receptacle mini-DIN	PCB	6-way		Assmann	A-DIO-FS06/PURPLE	674-1476
J3	Plug SUB-D	PCB	9-way		TE Conn	1-1634218-2	480-3853
J4	Pin header	SIL	5-way		RS	W81103T3825RC	251-8092
J5	Pin header	SIL	2-way		RS	W81103T3825RC	251-8092
J6	Tactile switch	TH			Alps	SKHHLMA010	758-1985
J7	Pin header	DIL	8-way		Molex	90131-0124	670-3452
J8	Pin header	DIL	6-way		RS	W82106T3825RC	251-8137
J9	Receptacle micro-SDC	PCB			JAE	ST9S008V4AR1500	690-9326

J10	Receptacle micro-USB	PCB		Hi rose	ZX62-B-5PA(11)	685-0965
J12	Receptacle edge	TH	56-way	Cinch	50-31SNL-XTF	403-796
J13	Pin header	SIL	2-way	RS	W81103T3825RC	251-8092
R1	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R2	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R3	Resistor chip	0603	1k	Bourns	CR0603-JW-102GLF	740-8880
R4	Resistor chip	0603	0R	Bourns	CR0603-J/-000ELF	740-8870
R5	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R6	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R7	Resistor chip	0603	220R	Bourns	CR0603-JW-221GLF	740-8921
R8	Resistor chip	0603	220R	Bourns	CR0603-JW-221GLF	740-8921
R9	Resistor chip	0603	220R	Bourns	CR0603-JW-221GLF	740-8921
R10	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R11	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R12	Resistor chip	0603	1k	Bourns	CR0603-JW-102GLF	740-8880
R13	Resistor chip	0603	1k	Bourns	CR0603-JW-102GLF	740-8880
R14	Resistor chip	0603	1k	Bourns	CR0603-JW-102GLF	740-8880
R15	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R16	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R17	Resistor chip	0603	47k	Bourns	CR0603-JW-473GLF	740-8953
R18	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R19	Resistor chip	0603	2k	Bourns	CR0603-FX-2001ELF	740-8836
R20	Resistor chip	0603	1k	Bourns	CR0603-JW-102GLF	740-8880
R21	Resistor chip	0603	0R	Bourns	CR0603-J/-000ELF	740-8870
R22	Resistor chip	0603	0R	Bourns	CR0603-J/-000ELF	740-8870
R23	Resistor chip	0603	47k	Bourns	CR0603-JW-473GLF	740-8953
R24	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R25	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R26	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R27	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R28	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R29	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R30	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
R31	Resistor chip	1206	1R	Yageo	232271111108	461-3701
R32	Resistor chip	0603	10k	Bourns	CR0603-JW-103GLF	740-8892
U1	MCU 8-bit	SOT23-6	PI C10F322	Mi crochi p	PI C10F322-I /OT	755-9405
U2	Volt Supervisor 5V	SOIC8	TL7705	Texas	TL7705AIDRG4	662-4113
U3	CPLD 36-macrocell	TQFP44	XC9536XL10	Xilinx	XC9536XL10VQG44C	626-0652
U4	Dual 3-state buffer	DCT	74LVC2G125	Texas	74LVC2G125DCTRG4	662-6673
U5	SRAM 32Kx8	TSOP28	IS62C256AL	ISSI	IS62C256AL-45TLI	391-646
U6	MCU 8-bit	TQFP44	PI C18F47J53	Mi crochi p	PI C18F47J53-I /PT	704-7706
U7	Volt regulator 3.3V	SOT223	LD1117S33	ST	LD1117S33TR	714-0697
U8	SRAM 256Kx1	SOIC8	23K256	Mi crochi p	23K256-I /SN	666-8148
U9	Inverter ST	TSOP5	74LVC1G14	NXP	74LVC1G14GW, 125	510-392
V1	Battery retainer	TH	20mm	Keystone	3003	219-7960
Y1	Crystal	HC49S	12MHz	Ral tron	AS-12.000-18	693-6964