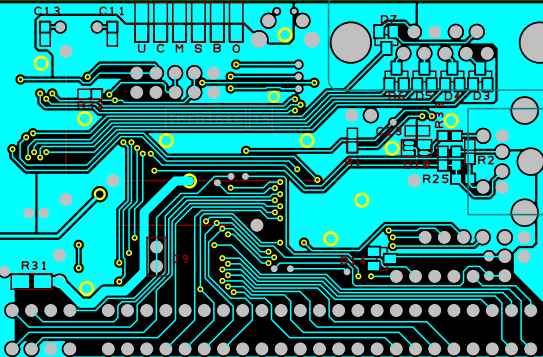
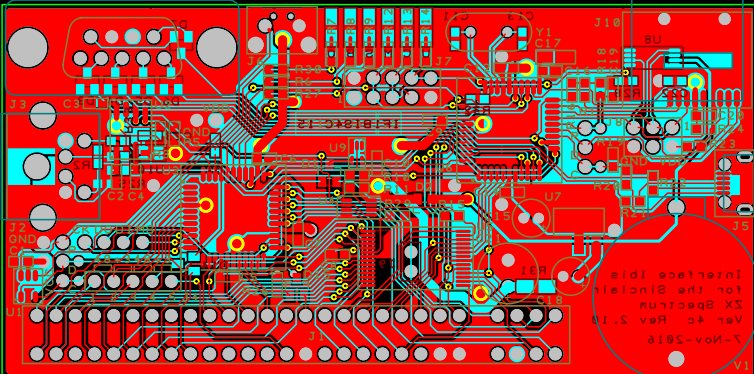


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|----------------------------|---|-----------------|
| Projection Do Not Scale | Project Interface 1bis for the Sinclair ZX Spectrum | |
| Client | Title Version 4c | Rev 2.10 |
| Filename | Date 7-Nov-2016 | Sheet 1 of 1 |

Interface 1bis
for the Sinclair
ZX Spectrum
Ver 4c Rev 2.10
7-Nov-2016



7-Nov-2016
Ver 4c Rev 2.10
ZX Spectrum
for the Sinclair
Interface Ibis



Report File: F:\ZXS\DES\IF1b\4\c\DSP\IF1BIS4C (Bill of materials).txt
 Report Written: Friday, February 10, 2017
 Project Path: F:\ZXS\DES\IF1b\4\c\DSP\IF1BIS4C.prj
 Design Path: F:\ZXS\DES\IF1b\4\c\DSP\IF1BIS4C.pcb
 Design Title:
 Created: 2012/10/19 18:07:35
 Last Saved: 2017/02/10 04:05:40
 Editing Time: 42971 min
 Units: mm (precision 3)

| | | | | | | | |
|-----|-----------------------|--------------|---------|-------|------------|---------------------|----------|
| C1 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C2 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C3 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C4 | Capacitor | ceramic chip | 0603 | 1uF | Phycomp | 2238 246 19863 | 435-1403 |
| C5 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C6 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C7 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C8 | Capacitor | ceramic chip | 0603 | 1uF | Phycomp | 2238 246 19863 | 435-1403 |
| C9 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C10 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C11 | Capacitor | ceramic chip | 0603 | 22pF | TDK | C1608C0G1H220J080AA | 788-2947 |
| C12 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C13 | Capacitor | ceramic chip | 0603 | 22pF | TDK | C1608C0G1H220J080AA | 788-2947 |
| C14 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C15 | Capacitor | aluminium | D50-P20 | 100uF | RS | 711-0930 | 711-0930 |
| C16 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C17 | Capacitor | tantalum | 3216-18 | 10uF | Vishay | T491A106K006AT | 801-5401 |
| C18 | Capacitor | aluminium | D50-P20 | 10uF | RS | 711-0911 | 711-0911 |
| C19 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C20 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C21 | Capacitor | aluminium | D80-P35 | 470uF | RS | 711-0826 | 711-0826 |
| C22 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| C23 | Capacitor | ceramic chip | 0603 | 100nF | Kemet | C0603C104Z3VACTU | 264-4646 |
| D1 | Schottky double diode | SOT23-3 | BAT54A | | ST | BAT54A | 486-4498 |
| D2 | Schottky double diode | SOT23-3 | BAT54C | | ON Semi | BAT54CLT1G | 781-3923 |
| D3 | Schottky diode | SOT23-3 | BAT54 | | Zetex | BAT54-7-F | 738-4829 |
| D4 | Schottky diode | SOT23-3 | BAT54 | | Zetex | BAT54-7-F | 738-4829 |
| D5 | Schottky diode | SOT23-3 | BAT54 | | Zetex | BAT54-7-F | 738-4829 |
| D6 | Schottky diode | SOT23-3 | BAT54 | | Zetex | BAT54-7-F | 738-4829 |
| D7 | Schottky double diode | SOT23-3 | BAT54A | | ST | BAT54A | 486-4498 |
| D8 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D9 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D10 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D11 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D12 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D13 | Light emitting diode | 3216 | Red | | Kingbright | KP-3216SRC-PRV | 466-3914 |
| D14 | Schottky double diode | SOT23-3 | BAT54C | | ON Semi | BAT54CLT1G | 781-3923 |
| D15 | Schottky double diode | SOT23-3 | BAT54C | | ON Semi | BAT54CLT1G | 781-3923 |
| J1 | Receptacle edge | TH | 56-way | | Cinch | 50-31SNL-XTF | 403-796 |
| J2 | Receptacle mini-DIN | PCB | 6-way | | TE Conn | 5749180-1 | 710-0441 |
| J3 | Plug SUB-D | PCB | 9-way | | Amphenol | L717TSEH09POL2RM5 | 691-8786 |

| | | | | | | |
|-----|----------------------|---------|-------------|-----------|-------------------|-----------|
| J4 | Pin header | SIL | 5-way | RS | W81103T3825RC | 251-8092 |
| J5 | Receptacle micro-USB | PCB | | Molex | 105017-0001 | 848-6764 |
| J6 | Tactile switch | TH | | Alps | SKHHLMA010 | 758-1985 |
| J7 | Pin header | DIL | 10-way | FCI | 77313-101-08LF | 673-7512 |
| J8 | Pin header | DIL | 6-way | RS | W82106T3825RC | 251-8137 |
| J9 | Pin header | SIL | 2-way | RS | W81102T3825RC | 251-8086 |
| J10 | Receptacle micro-SDC | PCB | | Hirose | DM3AT-SF-PEJM5 | 828-1884 |
| 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 | Vishay | CRCW06031K00FKEA | 678-9875 |
| 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 | Vishay | CRCW0603220RJNEA | 832-3152 |
| R8 | Resistor chip | 0603 | 220R | Vishay | CRCW0603220RJNEA | 832-3152 |
| R9 | Resistor chip | 0603 | 220R | Vishay | CRCW0603220RJNEA | 832-3152 |
| 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 | Vishay | CRCW06031K00FKEA | 678-9875 |
| R13 | Resistor chip | 0603 | 1k | Vishay | CRCW06031K00FKEA | 678-9875 |
| R14 | Resistor chip | 0603 | 1k | Vishay | CRCW06031K00FKEA | 678-9875 |
| 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 | Vishay | CRCW060347K0FKEA | 679-0425 |
| 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 | Vishay | CRCW06031K00FKEA | 678-9875 |
| R21 | Resistor chip | 0603 | 0R | TE Conn | CRG0603ZR | 213-1982 |
| R22 | Resistor chip | 0603 | 0R | TE Conn | CRG0603ZR | 213-1982 |
| R23 | Resistor chip | 0603 | 47k | Vishay | CRCW060347K0FKEA | 679-0425 |
| 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 |
| R33 | Resistor chip | 0603 | 220R | Vishay | CRCW0603220RJNEA | 832-3152 |
| U1 | MCU 8-bit | SOT23-6 | PIC10F320 | Microchip | PIC10F320T-I/OT | 755-9408 |
| U2 | Volt Supervisor 5V | SOIC8 | Texas | 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 | CY62256 | Cypress | CY62256NLL-55ZXI | 827-2565 |
| U6 | MCU 8-bit | TQFP44 | PIC18F46J53 | Microchip | PIC18F46J53-I/PT | 704-7700P |
| U7 | Volt regulator 3.3V | SOT223 | 1117-3.3 | ON Semi | NCP1117LPST33T3G | 802-2137 |
| U8 | SRAM 1024Kx1 | TSSOP | 23LCV1024 | Microchip | 23LCV1024-I/ST | 803-2190 |
| U9 | Inverter ST | TSOP5 | 74LVC1G14 | NXP | 74LVC1G14GW,125 | 510-392 |
| U10 | Inverter ST | TSOP5 | 74LVC1G14 | NXP | 74LVC1G14GW,125 | 510-392 |
| V1 | Coin Battery | TH | 20mm | Keystone | 3003 | 219-7960 |
| Y1 | Crystal | HC49S | 12MHz | Quantec | QCL12.0000F18B23B | 814-9425 |