

Versatile Interface Board

RefDes	Value	Description	Notes	Supplier Part No.	Quantity
C1	22uF	Electrolytic capacitor			1
C2-8	47n	Ceramic capacitor			7
D1-3	1N4148	Small signal silicon diode			3
IC1,2	74LS138	3 to 8-line decoder			2
IC3	74LS139	dual 2 to 4-line decoder			1
IC4	INS8255	PIA			1
IC5	MC68B50	UART			1
IC6	MC14411	Baud rate generator			1
IC7	MC6522A	PIA			1
IC8	74LS244	Octal buffer			1
IC9	74LS04	Hex inverter			1
IC10	TIL112	Opto isolator			1
IC11	AD1D12A10	DC-DC converter		or TMA 0512D (RS 189-6997) with adapter board*	1
LK1		20mA Rx enable	not fitted for RS232 use		1
LK2		RS232 Rx enable	not fitted for RS232 use		1
LK3		VMA	not required		1
LK4		Interrupt select	not required		1
LK5/5a		block select	not required		1
LK6		block select	not required		1
LK7		block select	not required		1
LK8		20mA Rx float	not fitted for RS232 use		1
LK9	0.1"	Header x 7 and jumper wire	Baud rate selection		2
PL1	DIN 41612 AB 64-way	Right angle plug			1
PL2	26-way	3M right angle header	Printer port		1
PL3			wired to front panel DIN socket		
PL4	0.1"	Header 17x2	Parallel port		1
Q1,4	BC309	Transistor PNP			2
Q2,3,5,6,7	BC239	Transistor NPN			5
R1	15M	250mW resistor			1
R2,3,4,8,9,10,11,15,16,17,19,20,21	4k7	250mW resistor			13
R5,12	10k	250mW resistor			2
R6,13	1k0	250mW resistor			2
R7,14	2k2	250mW resistor			2
R18	270R	250mW resistor			1
R22	560R	250mW resistor			1
X1	1.8432MHz	Crystal (HC5u)			1
IC10	6-pin	DIL socket			1
IC9	14-pin	DIL socket			1
IC1,2,3	16-pin	DIL socket			3
IC8	20-pin	DIL socket			1
IC5,6	24-pin	DIL socket			2
IC4,7	40-pin	DIL socket			2

* requires a 6K2 resistor across the +/-12V outputs to maintain min 4mA current

Offboard Parts

	5HP 3U	Front panel with handle and fittings		Verotec 957-235349	1
		Panel brackets	or print your own	Verotec 173-12525	pair
	M2.5 x 10mm	Pan head screws			4
	M2.5	Nuts			4
	5-pin 240deg	DIN socket	Serial port		1