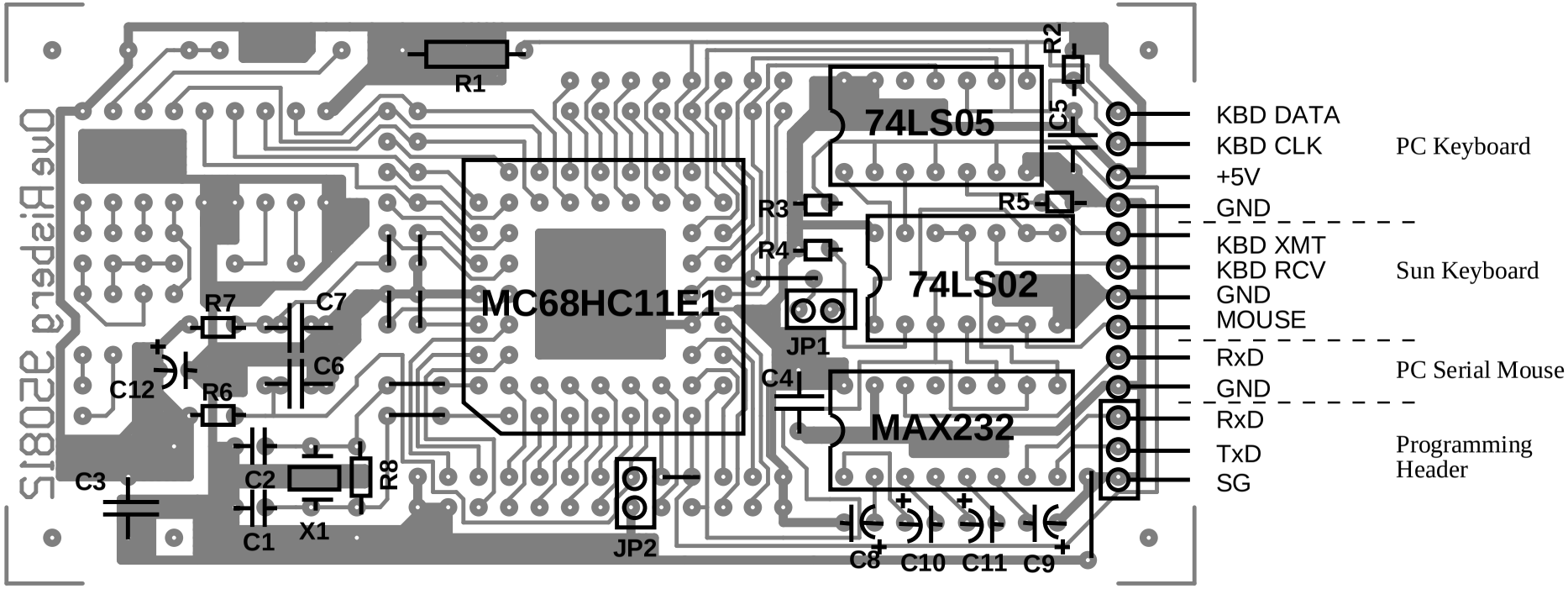
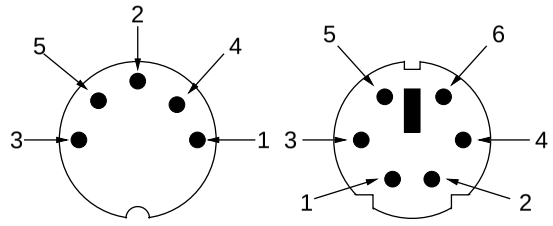
Components List

[Resistors:] (1/4 or 1/8 Watt, 1 or 2 %)	Maplin Order Code
• 10.0 kΩ × 4	M10K
• 4.7 kΩ × 2	M4K7
• 1.0 kΩ × 1	M1K
• 1.5 MΩ × 1	M1M5
Capacitors:	
• 0.1 μF × 3	RA49D
• 1.0 μF × 2	3018714 (minimum quantity is five)
• 4.7 μF × 3 (tantalium)	WW64U
• 10.0 μF × 2 (tantalium)	WW68Y
• 22.0 pF × 2	RA34M
Integrated Circuits:	
• Motorola 68HC11E1FN × 1	
• 74LS02	YF02C
• 74LS05	YF05F
• MAX232	FD92A
Miscellaneous:	
• Crystal 8MHz × 1	UJ06G
• PLCC 52 pin socket × 1	430640
• DIL 16 pin socket × 1	FZ49D
• DIL 14 pin socket × 2	FZ47B
• 0.1” pin strip × 1	JW59P
• Jumper × 1	UL71N
• Straight PCB Latch Plug 3w × 1	BX96E
Extras:	
• Mini-DIN Chasssis Socket 8 way × 1	JX12N
• Mini-DIN Chasssis Socket 6 way × 1	JX10L
• PCB Latch Housing 3-Way × 1	BX97F
• PCB Terminal for Latch Housings × 1	YW25C
• E Case A120mm × 1	PL85G
• End Plate Type A × 2	PL86T
• End Plate Screws (8) × 1	PM00A
• Pre-Sensitised Fiberglass Size1 Single sided PCB × 1	FA60Q
• M2×6mm Pozidrive Countersunk steel bolts × 1	UR86T
• M2 Steel Full Nuts × 1	LJ82D
• PS/2 Keyboard Cable M/M 2m	PQ33L

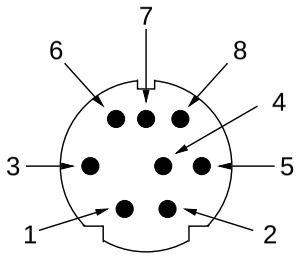
You will also need some wire (I used some spare multi-coloured ribbon cable) and solder. I used the cable of an old serial mouse to connect the programming header to the PC, otherwise you will need some cable a D connector and hood. Note that the 52pin PLCC socket and the 1.0 μF capacitors are Farnell order codes and *not* Maplin.





AT Keyboard	PS/2 Keyboard	
2	1	KBD DATA
1	5	KBD CLK
5	4	+5V
4	3	GND

Note: The +5V from the PC must be passed through to the Sun Keyboard



Sun Keyboard Connector

1	GND	5	KBD RCV
2	GND	6	KBD XMT
3	+5V	7	PWR ON
4	MOUSE	8	+5V

Programming Header

	9 Pin D	25 Pin D
RxD	2	3
TxD	3	2
SG	5	7

Components

R1-R4	= 10.0 kΩ
R5,R6	= 4.7 kΩ
R7	= 1 kΩ
R8	= 1.5 MΩ
C1,C2	= 22pF
C3-C5	= 0.1μF
C6,C7	= 1.0μF
C6,C7	= 1.0μF
C8,C9	= 10μF (tantalium)
C10-C12	= 4.7μF (tantalium)
X1	= 8MHz crystal
JP1	= Programming jumper
JP2	= Reset jumper

Ove Risberg 950812