## Apple 1 Keyboard Adapter Bill of Materials



Part	Value	Remarks	Qty	Reference	Provided
Pin header	1 x 4 pin	female vertical	1	J4	
	1 x 8 pin	male-male IC adapter header rounded pins	2	J1	
Socket 1	16 pin	double spring contact, for easy insertion	1	J2	
Resistor <sup>2</sup>	330 Ω	1/4 W - orange, orange, black, black, brown	1	R1	
Switch	Push	Tactile contact push buttons ON	1	SW1	
LED <sup>3</sup>	green	3 mm, round	1	D1	
Misc	Insultation tape	affix on the backside, see markings on PCB	1		
		Parts	8		
		Туреѕ	7		

## **Notes:**

- 1) Check the socket's orientation: pin 1 of J2 faces down.
- 2) Some provided resistor-values could differ slightly, as could their band colors, this has no effect on the working of the board.
- 3) When preferred, other LED colors can be used. Make sure to check if the value of the resistor R1 is correct for the LED being used.

## **Important:**

- Use a 16 pin IC socket (preferably a precision socket with rounded pins, but the provided J2 will do as well) as a guide to solder the 2 x 8 pin male-male pin headers perfectly right-angled (at position J1).
- After soldering, cut short the pins of SW1 to make sure they do not stand out. Solder again the soldered spots to make sure there is no break in their contacts.
- Check J1 for shorts between all keyboard pins using a multimeter in continuity mode.
- Affix the insulation tape on the solder side of the board, as indicated by the dotted rectangle. Otherwise soldered pins can come in contact with the ICs of the Apple-1.



Insulation tape