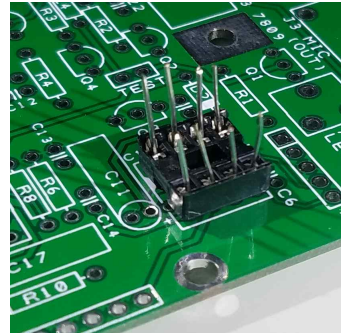
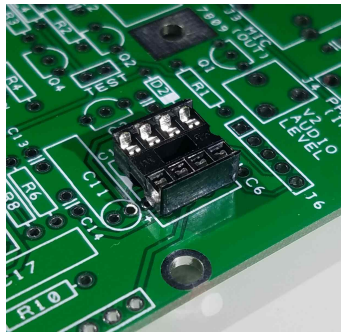


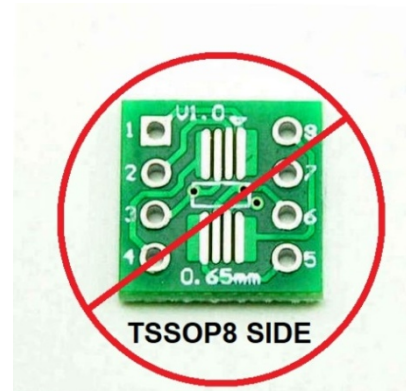
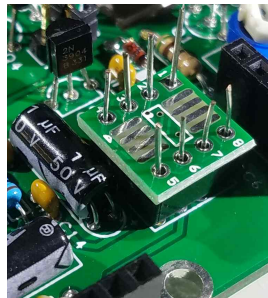
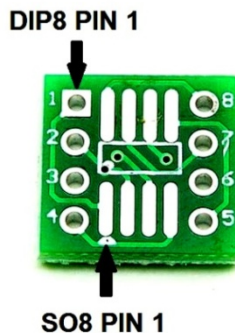
Replacing a DIP8 device with an SMD SO8 device

In the spirit of keeping our kits competitive and affordable, we are finding that some of the DIP8 style of IC's are becoming economically prohibitive or not available at all. If you need to replace one of the DIP8 IC's, it is necessary to use a small SO8 to DIP8 adapter. Detailed below is the procedure to do that.

1. Remove the DIP8 chip.
2. It is not necessary to remove the DIP8 socket.
3. Using eight trimmed resistor leads, insert them into the DIP8 socket vertically to the bottom of the socket as shown. *Be sure they extend to the bottom of the socket.*



4. Orient pin 1 of the DIP8 pattern of the adapter with pin 1 of the installed chip to be replaced, and slide the adapter onto the eight pins. Be sure you have the SO8 of the adapter side facing up.

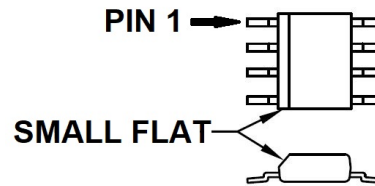
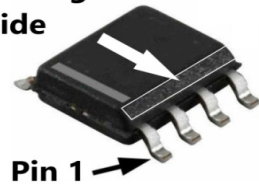


5. Solder the eight leads and trim flush.



6. It is important that pin 1 of the new smd chip matches pin 1 of the existing dip socket. Identify pin 1 of the new SO8 device using the graphic below.

**Note flat along
top and side
edge**



7. Solder the smd component onto the small adapter by wiping a thin layer of flux on the small adapter board, position the chip, carefully noting the flat along the side and top edge for the orientation of Pin 1 of the chip with pin 1 of the adapter pads, and touch a corner pin with a dry soldering iron. Once you are sure of the orientation, do the opposite corner, then you can go back and do the other pins. Add a little solder to each pin if needed. This usually is not necessary as the boards are pre-tinned with sufficient solder. Ensure there are no solder bridges between pins. Use Solder Wick[®] if necessary to remove any excess.



8. ***Double check your smd soldering by doing a continuity check with an ohm meter from each pin of the smd to the associated pin of the DIP8 adapter.***