

Pseudo Gull Wing Soldering Instructions

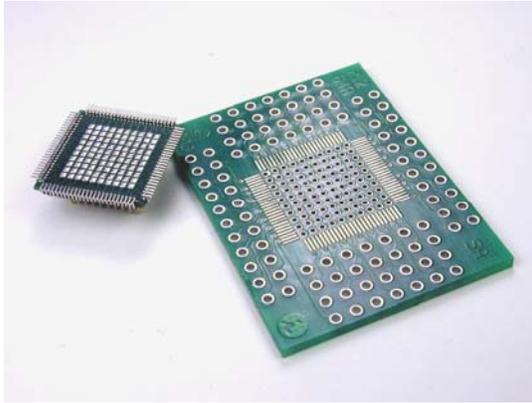


Figure 1: Target PCB/Emulator Foot

The Ironwood Electronics, Pseudo Gull Wing surface mount feet are designed to solder to standard gull wing surface mount land patterns. Because the feet do not fully emulate the physical characteristics of a gull wing package, the methods used to solder it to a target PCB are different. The recommended method detailed below has produced very good results.

A Pseudo Gull Wing surface mount emulator foot and target PCB with surface mount land pattern are shown in Figure 1.

1. Place a small amount of tack flux (water soluble or no-clean) on two opposing corner pads of the target PCB land pattern as shown in Figure 2.

2. Place the foot onto the land pattern noting orientation (pin 1 location) and align it to the pads with the aid of a microscope as shown in Figure 2. Handle the adapter by the top pin array or PCB corners (if pins are not present).

3. While holding the foot in place by pressing down gently, solder two opposing corner leads to their pads using Sn63/Pb37 solder wire and a very fine tipped soldering iron. Verify the lead to pad alignment with a microscope after soldering.

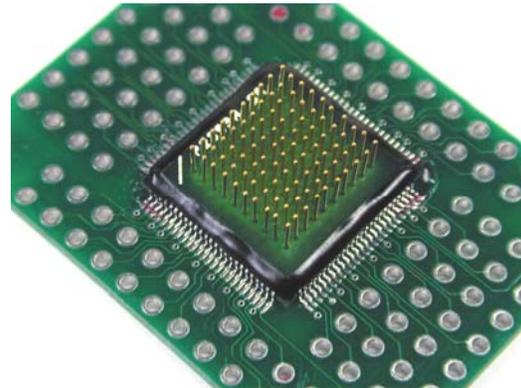


Figure 2: Align the Foot to PCB

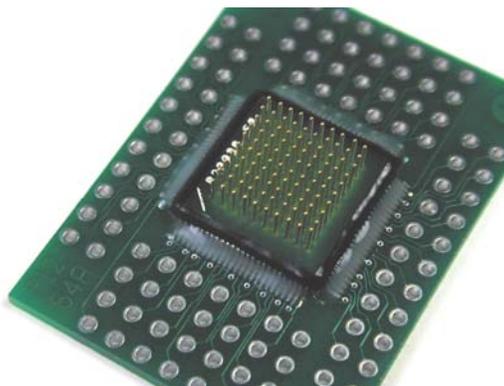


Figure 3: Applying Flux

4. Apply supplemental flux (water soluble or no-clean) to the lead/pad area along each side of the foot as shown in Figure 3.



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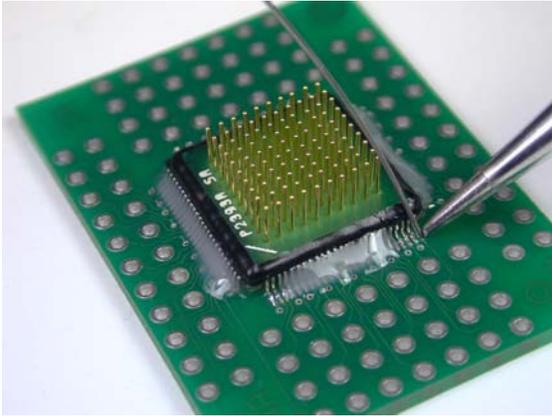


Figure 4: Soldering Process

Remove solder bridges using fluxed solder wick.

5. Using a microscope, individually solder each lead of the foot to their pads using solder sparingly. See soldering process in Figure 4. Excess solder will collect on the inboard end of the leads underneath the foot potentially causing solder bridges to occur between adjacent legs. Caution must be used when touching the soldering iron tip to the emulator foot leads to avoid excessive heat, heating time and pressure, which may damage the adaptor or target board pads.

6. After soldering, inspect the foot for proper fillets and solder bridges using a microscope.

7. Clean the foot thoroughly using an aqueous cleaning system and inspect for proper solder connections as shown in Figure 5.

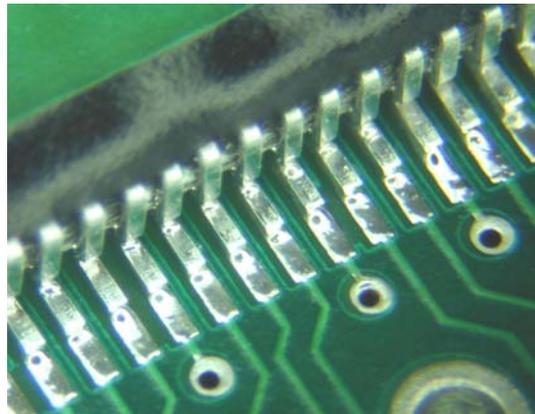


Figure 5: Solder Connections