



## 8-Way Version 2 Splitter Evaluation Board Installation/Un-Installation

**Caution:** It is very extremely easy to damage the half-cut vias of the 8-Way Version 2 Splitter during installing or un-installing the splitter from the evaluation board. Only Somebody with years of surface mount re-work experience should attempt the below work.

**Note 1:** A soldering station with very fine soldering iron tips and tweezer tips is recommended. JBC “Nano” soldering station with the following tips is an example C105-108 (fine chisel tip), C105-101 (tweezer tips...two of these for the tweezers), C105-107 (fine round tip). **Tweezer Tips Are Not Shown In The Picture Below.**

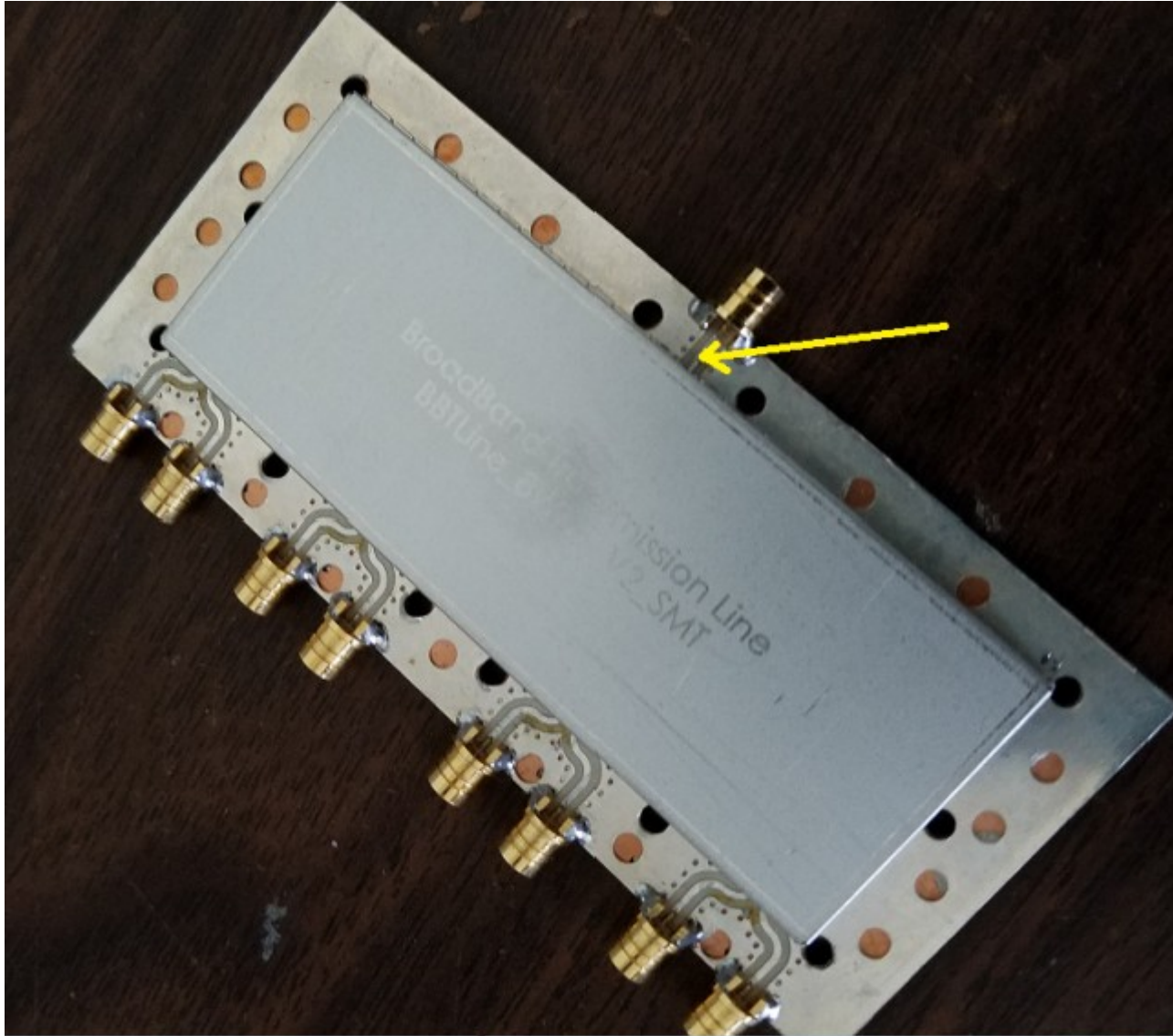


**Note 2:** For Uninstalling lead-free solder, an **elevated solder tip temperature of 390 C** is recommended.

**Note 3:** Fine ChemWik 30 mil wide soldering wick is recommended (Chem-Wik part number 2-100L is a 100 foot spool of 30 mil wide wick).

## Un-Installation Of The Splitter From The Evaluation Board

Place the soldering iron tip on the common port RF trace (just before the splitter half-cut via). While the iron is on the RF Trace, using your fingers, **very gently** lift the splitter up from the evaluation board. **Do not move the splitter too far as damage to the other half-cut vias which are still soldered to the evaluation board can occur.** Move the splitter up just enough to ensure that the splitter half-cut via is free from the RF Trace.



Please **tweezer tips** on the RF Traces (just before the half-cut vias) of the top signal pair as shown below. Using fingers, **VERY GENTLY** pull up on the top corner of the splitter. Pull up very lightly and **just enough to ensure that both half-cut vias are free from both RF traces**. **Be very careful here as it is very easy to damage the splitter half-cut vias**. Repeat the above steps for the other three pairs of signal vias until the splitter is free from the evaluation board.



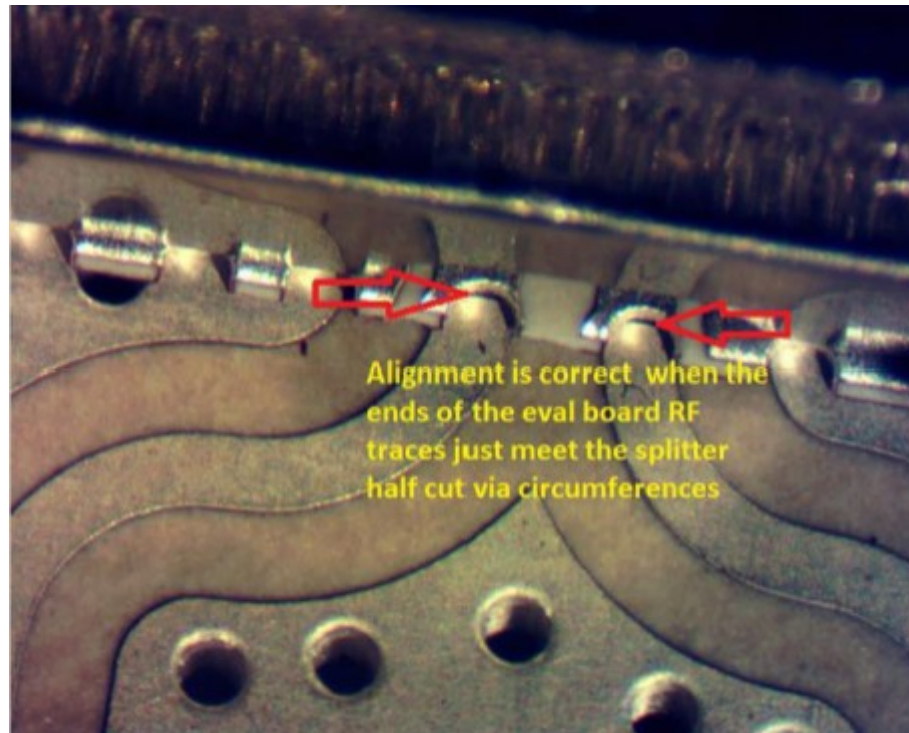
## Installation Of The Splitter On To The Evaluation Board

Clean up any excess solder on all of the RF traces using the Solder Wick. Use Isopropyl alcohol and a brush to remove any flux residue from board.

Place the Splitter on the evaluation board and carefully adjust the alignment of the splitter to the evaluation board traces.

**Alignment is successful when the circumferences of the half-cut vias are right on the edges of the RF Traces as shown below.**

**THIS ALIGNMENT MUST OCCUR FOR ALL OF THE HALF-CUT VIAS OF THE SPLITTER.**

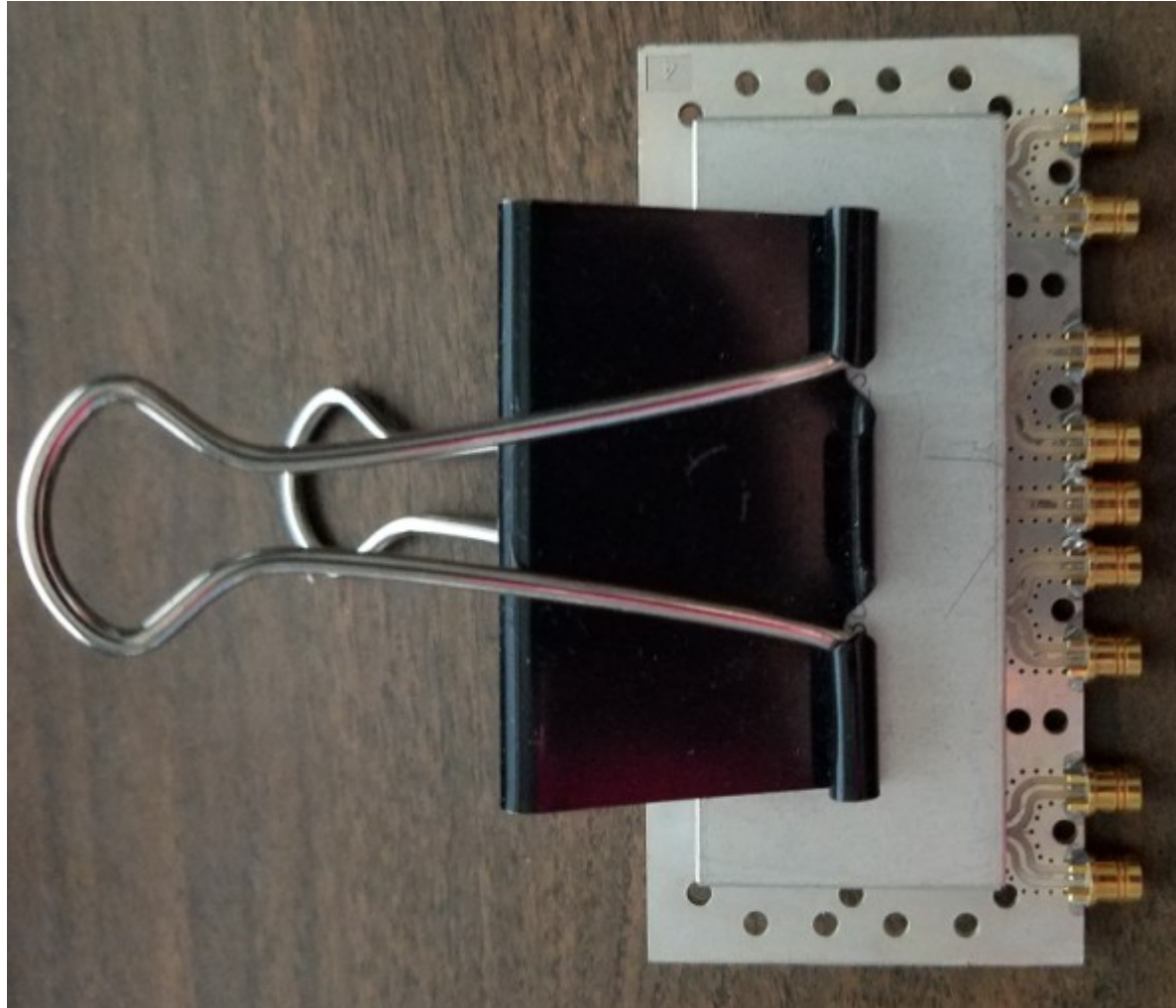




To preserve the careful alignment of the splitter half-cut vias to the evaluation board RF Traces during soldering steps, **a light clamping method** may be useful.

Below is shown a very crude but very effective clamping method to preserve the alignment while performing the soldering steps.

(The picture below shows an 8-Way Version 1 Splitter NOT a Version 2 splitter...but, the same idea applies to Version 2)



Carefully solder all of the Splitter half-cut vias to the Evaluation Board RF Traces. Ensure that any excess solder is wicked away. **The solder joints must have minimal solder for best RF Performance.**

Install the “Pressure Plate” over the splitter shield can and very slowly/randomly tighten all of the 2-56 screws/nuts - **DO NOT OVERTIGHTEN THE PRESSURE PLATE.** An even/moderate pressure over all screws will ensure good RF ground contact.