uSSD Host Test Adapter Mounting Options
Introduction

The uSSD Host Test Adapter (uSSD-TPA-H) is available for purchase in two basic forms... Un-assembled, for use where the uSSD-TPA-H will be direct-mounted to the UUT (Unit Under Test). Or fully-assembled, for use with UUT’s having Wells-CTI 156-pin TFBGA sockets. The following figures illustrate the two basic forms and present recommendations for usage and installation.

**Figure 1. The Un-Assembled uSSD Host Test Adapter (Top and Bottom View)**

This version is intended for use where the uSSD-TPA-H will be direct-mounted to the UUT.

**Figure 2. The Fully-Assembled uSSD Host Test Adapter (Top and Bottom View)**

This version is intended for use with UUT’s that are equipped with Wells-CTI 156-pin TFBGA sockets.
This version is intended for use where the uSSD-TPA-H will be direct-mounted to the UUT. The 156-pin TFBGA substrate is designed to be like any other surface mount component on the UUT. Wilder Technologies recommends installing the 156-pin substrate using normal pick-and-place and solder reflow processes while assembling a complete and new UUT assembly. The SATA plug connector is then installed upon the 156-pin substrate using a “hand-add” process. It is recommended that the SATA plug connector be perimeter bonded to the substrate following installation to provide added mechanical support.

**NOTE:** To ensure the best possible test environment, it is very important that the end-user considers the uSSD Host Test Adapter substrate as a component part of the overall Unit Under Test assembly. As such, Wilder Technologies emphasizes that the uSSD Host Test Adapter substrate be part of a new-build UUT component bill of materials and installed along with all other UUT components at the time of assembly.

Optionally, the 156-pin substrate may be added to a pre-assembled UUT with user-supplied or specified BGA rework tools, equipment, and profiles. (Note: Wilder Technologies does not offer installation services or offer referrals to outside services for BGA installation or removal.)
This version is intended for use where the uSSD-TPA-H will be direct-mounted to the UUT. The 156-pin TFBGA substrate is designed to be installed like any other surface mount component on the UUT and is shown installed. The SATA plug connector is also shown installed upon the 156-pin substrate.

Wilder Technologies recommends installing the 156-pin substrate at the same time all other surface mount components are installed on a new UUT assembly. Standard pick-and-place and reflow processes should be utilized to ensure proper attachment. The SATA plug connector would be “hand-added” to the substrate following reflow and inspection. It is recommended that the SATA plug connector be perimeter bonded to the substrate following installation to provide added mechanical support.

**NOTE:** To ensure the best possible test environment, it is very important that the end-user considers the uSSD Host Test Adapter substrate as a component part of the overall Unit Under Test assembly. As such, Wilder Technologies emphasizes that the uSSD Host Test Adapter substrate be part of a new-build UUT component bill of materials and installed along with all other UUT components at the time of assembly.
Figure 5. The Fully-Assembled uSSD Host Test Adapter (Exploded View of Installation Example)

This version is intended for use with UUT’s that are equipped with Wells-CTI 156-pin TFBGA sockets. The uSSD-TPA-H is placed into the TFBGA socket, then held in place with the Wilder supplied TFBGA Retainer. The uSSD-TPA-R Test Adapter is then connected to the uSSD Host Test Adapter through the TFBGA Retainer.
Figure 6. The Fully-Assembled uSSD Host Test Adapter (Ready-to-Test View of Installation Example)

This version is intended for use with UUT’s that are equipped with Wells-CTI 156-pin TFBGA sockets. The uSSD-TPA-H is shown installed into the TFBGA socket, then held in place with the Wilder supplied TFBGA Retainer. The uSSD-TPA-R Test Adapter is shown connected to the uSSD Host Test Adapter through the TFBGA Retainer.