Socket with AR400 Silmat® Interposer
Assembly and Maintenance Instructions

Assembly of the Silmat® to the Socket:
- The socket may come with the Silmat® already assembled to the socket body.
- To install or remove the Silmat®, please proceed with the following steps.
- Blow off both sides with compressed air during assembly to remove any debris.
    - <u>Important</u>: Do not touch, rub, brush or clean the Silmat® columns.
- Install the Silmat® so the DUT leads touch the Silmat® columns on one side and the PCB pads touch the Silmat® columns on the other side.
- Gently press one of the Silmat® tooling holes over a first corresponding guide pin.
- Do the same for the tooling hole and guide pin on the opposite side.
- Gently manipulate any remaining tooling holes onto their corresponding guide pins (if applicable).
- When all tooling holes are on the guide pins, use a flat tip tweezers or similar tool to ease the Silmat® further down onto the pins, alternating opposing corners until it is seated against the socket.
- Work carefully to avoid enlarging or deforming the Silmat® tooling holes.
- Work the opposite direction to remove the Silmat®, carefully easing it off the guide pins. Do not use a sharp instrument and/or grab one corner and pull it off the guide pins because it can cause damage to the Silmat® tooling holes.

Assembly of the Socket to the PCB:
- Assure that the test site PCB pads and immediately surrounding surfaces are free of contaminants and any other residues. If necessary, clean with a brush and blow with compressed air.
- Place the socket's alignment pins into the corresponding holes in the PCB.
- Hold the socket stiffener (if applicable) on the back side of the PCB so it lines up with the mounting holes.
- Secure the socket to the PCB and stiffener (if applicable) using the mounting screws or fasteners. Assure that the socket is firmly seated and coplanar with the PCB.

Removal and Storage of the Socket:
- Remove the socket from the PCB and store with the Silmat® attached in the protective packaging provided. Do not allow multiple sockets to rub against each other.
- If the Silmat® is separate from the socket, always keep it contained and protected in the compression packages and/or small bags. This will keep the Silmat® from being touched or damaged and prevent the accumulation of dust and debris.
- If the socket remains attached to the PCB, it is recommended to store it without a DUT in the socket so the Silmat® remains unactuated during that time, which will help extend the life.

Handling and Cleaning of the Silmat® Interposer:
- Always handle the Silmat® by the outside edges and avoid touching the top and bottom of the conductive columns which should have protruding "buttons" of conductive particles.
    - <u>Important</u>: Do not touch or rub the conductive columns or the Silmat® could be damaged.
- Never use a stiff/wire brush on the Silmat®.
- Never use any alcohol or cleaning chemicals on the Silmat®. If the PCB is cleaned with chemicals, always be sure it is completely dry prior to touching the Silmat®.
- Use compressed air to blow dust/debris from the top and bottom of the Silmat® prior to use and assembly.
- If there is debris that cannot be removed by air, use a soft animal hair brush or a Post-it Note with light adhesive to gently remove the remaining debris. It may also be helpful to use a microscope and tweezers to carefully remove some contaminants.
- Note: Some loose particles from the Silmat® conductive columns are normal and do not impact functionality. If there is excessive particle dispersion, please contact Aries.