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GT Socket User Guide

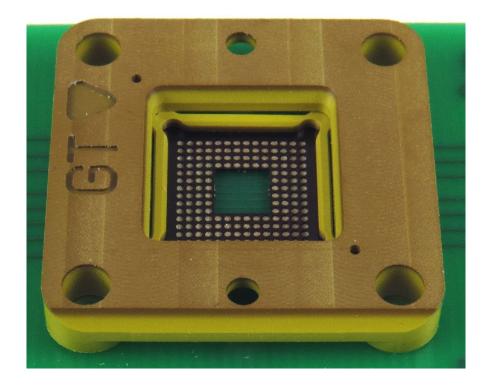


Fig 1: GT Socket

Recommended Tools

- Socket drawing (shows component layer stack-up).
- Socket hardware and Hex Keys.
- Straight edge tool or flat-tip tweezers.
- Soft animal hair brush or Post-it® Note with light adhesive for gently removing debris and contaminants from GT elastomer layer.
- Compressed air for blowing debris off contactors and PCB.

NOTE: To prevent damage to the GT *material*, it is recommended that the IC Package not be removed from the socket until it has returned to room temperature



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GT elastomer handling:

Assembly of GT elastomer to Socket:

The socket may come with GT elastomer already assembled to the socket body. To install or remove GT elastomer, please proceed with the following steps.

- o Blow off both sides with compressed air during assembly to remove any debris.
- o Important: Do not touch, rub, brush or clean conductive columns on GT elastomer.
- o Install GT elastomer so the DUT leads touch conductive columns on one side and the PCB pads touch conductive columns on the other side.
- o Gently press one of the alignment holes over a corresponding alignment pin.
- o Do the same for the alignment hole and alignment pin on the opposite side.
- o Gently manipulate any remaining alignment 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 GT elastomer down onto the pins, alternating opposing corners until it is seated against the socket.
- Work carefully to avoid enlarging or deforming GT elastomer alignment holes.
- o Work the opposite direction to remove GT elastomer, carefully easing it off alignment pins. Do not use a sharp instrument or grab one corner and pull it off the alignment pins because it can cause damage to GT elastomer's alignment holes.

Assembly of Socket to 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.
- o Place the socket's alignment pins into the corresponding holes in the PCB.
- o Hold the socket's backing plate (if applicable) on the back side of the PCB so it lines up with the mounting holes.
- Secure the socket to the PCB and the backing plate (if applicable) using the mounting screws or fasteners.
- Assure that the socket is firmly seated and coplanar with the PCB.



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Socket Removal & Storage:

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

GT elastomer Handling & Cleaning:

- o Always handle GT elastomer by the outside edges and avoid touching the top and bottom of the conductive columns which should have protruding "buttons" of conductive particles.
- o Important: Do not touch or rub the conductive columns to prevent serious
- o Never use a stiff or wire brush on GT elastomer.
- o Never use any alcohol or cleaning chemicals on GT elastomer. If the PCB is cleaned with chemicals, always be sure it is completely dry prior to touching GT elastomer.
- o Use compressed air to blow dust/debris from the top and bottom of GT elastomer prior to use and assembly.
- o If there is debris that cannot be removed by air, use a soft animal hair brush or a Post-it® Note to gently remove the remaining debris. It may also be helpful to use a microscope and tweezers to remove some contaminants with care.
- o Note: Some loose particles from GT elastomer's conductive columns are normal and do not impact functionality. If there is excessive particle dispersion, please contact Ironwood Electronics.
- In certain circumstances you may need to use Scotch removable mounting putty and Lightly press mounting putty against GT elastomer to pick up loose debris





Revisions:
A, 5-10-21, Original Release
B, 12-13-23, Fix document text errors
C, 3/22/24, added warning note to bottom of page 1