

**PROCEDURE, PACKAGING OF ATE  
HARDWARE FOR SHIPMENT**

|                     |                                |                         |                |
|---------------------|--------------------------------|-------------------------|----------------|
| Engineer: John Hite | Date: 03/01/18                 | Released: TTPEG ATE PCB | Date: 03/01/18 |
| Code Ident 01295    | Document number <b>6613502</b> | Rev <b>B</b>            | Sheet 1 of 6   |

## 1. PURPOSE

- 1.1. This document defines the procedure for packing ATE hardware for any shipment where you are using a courier to transport ATE hardware.

## 2. BACKGROUND

- 2.1. The storage cases are not designed to protect the board during shipping; they are designed to protect the ATE board during movement within a factory/office/lab environment. When these storage cases have been used for delivery via a courier service the ATE boards are exposed to high impact shock and exterior case damage or penetration. Many ATE boards have been received at vendors or factory sites with damage that occurred during shipping.

## 3. SCOPE

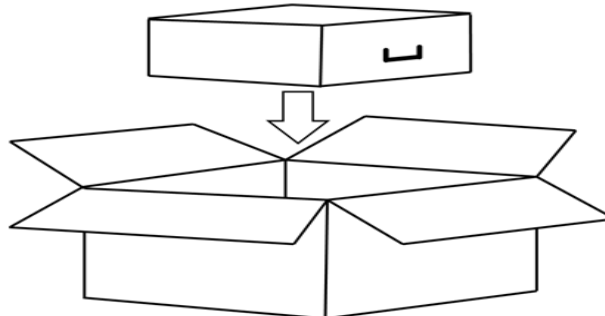
- 3.1. The scope of this document includes all ATE hardware shipments. This overpack is required for all Final Test Loadboards and Probe Cards regardless of whether or not they are already placed in a black plastic ESD storage case or an Aluminum case.

## 4. DEFINITIONS

- 4.1. ATE – Automated Test Equipment
- 4.2. PCB – Printed Circuit Board
- 4.3. ESD – Electrostatic discharge
- 4.4. Dunnage - Material used to secure cargo during transportation
- 4.5. Overpack - An enclosure used to contain one or more packages and to form one handling unit for convenience of handling and stowage

## 5. REQUIREMENT

- 5.1. All ATE PCB Hardware must be packed in overpack boxes to insure the contents are not damaged during transport. This overpack is required for all Final Test Loadboards and Probe Cards regardless of whether or not they are already placed in a black plastic ESD storage case or an Aluminum case. This PCB hardware is considered a fragile assembly and must be packaged for shipping properly in cartons that will protect them from being damaged during shipping.



Overpack Example

5.2. Overpack boxes for single storage cases are available from the TI Stockroom. These boxes are designed to support the specific ESD or Aluminum Case with the proper foam dunnage material.

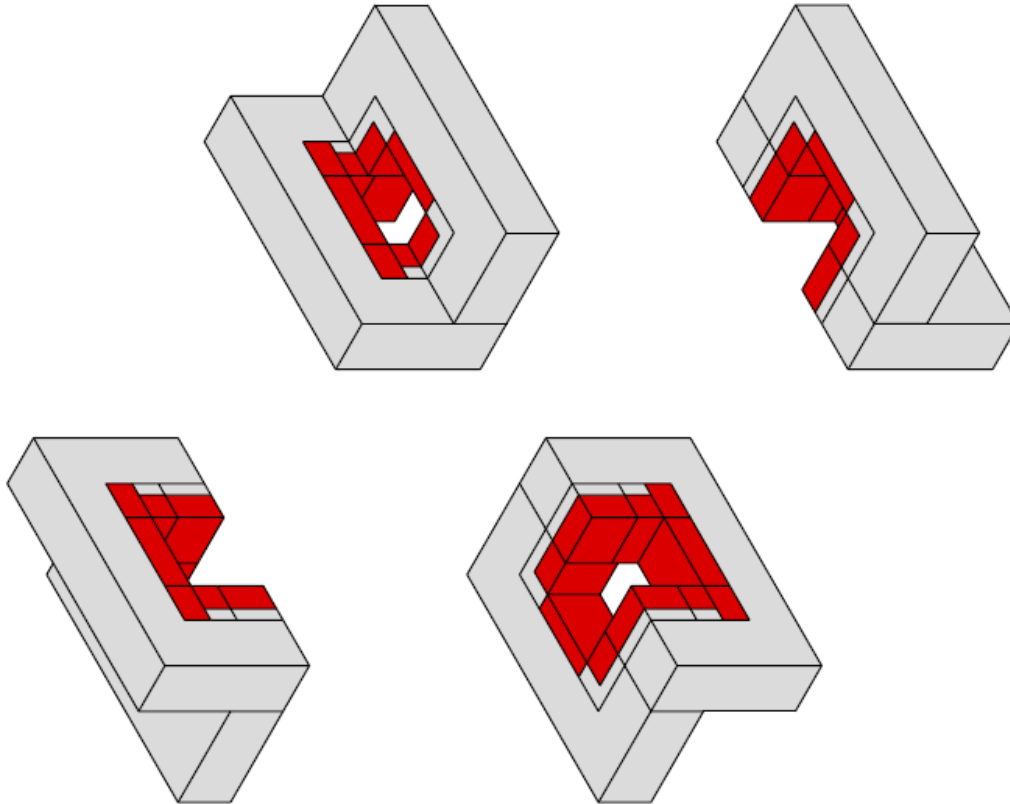
5.2.1. You may enter a sales order request to the stockroom, the stockroom will pull inventory and ship to the designated drop zone within the building.

5.2.2. Training on entering a sales order:

[https://sps08.itg.ti.com/sites/training/WPL%20Functional%20Training%20Repository/Stockroom%20Sales%20Orders%20Training%20\(SAP%20VA01%20and%20MOST\).pptx](https://sps08.itg.ti.com/sites/training/WPL%20Functional%20Training%20Repository/Stockroom%20Sales%20Orders%20Training%20(SAP%20VA01%20and%20MOST).pptx)

| ATE Storage Case Size (inches) |       |        | Overpack Box Part Number |
|--------------------------------|-------|--------|--------------------------|
| Length                         | Width | Height |                          |
| 9.4                            | 4.5   | 2      | 4730611-0003             |
| 9.5                            | 8     | 3.5    |                          |
| 12.6                           | 12.6  | 1.2    | 4730611-0006             |
| 13                             | 13.2  | 2.8    |                          |
| 19.7                           | 19.7  | 3.9    | 4730611-0002             |
| 20.1                           | 18.9  | 2.8    |                          |
| 20.7                           | 21.1  | 4.3    |                          |
| 20.9                           | 19.1  | 3.9    |                          |
| 20.9                           | 19.1  | 3.9    |                          |
| 20.9                           | 20.9  | 5.9    |                          |
| 22                             | 20.5  | 5.2    | 4730611-0004             |
| 23.6                           | 17.7  | 5.9    |                          |
| 23.6                           | 17.7  | 3.3    |                          |
| 24.3                           | 16.4  | 4      |                          |
| 25                             | 25    | 6.5    | 4730611-0001             |
| 27.6                           | 23.6  | 4.9    | 4730611-0005             |
| 28                             | 17.7  | 3.1    |                          |
| 28.7                           | 25.1  | 4      |                          |
| 30                             | 25    | 6.5    |                          |
| 40.2                           | 23.6  | 4.9    | 4730611-0007             |

- 5.3. The overpack boxes listed utilize configurable foam corner pieces that allow you to ship different sizes cases in the same overpack box. Each foam piece is perforated to allow you to easily remove portions of the foam to allow you to have a larger case size. Image shown below shows that by removing the red sections you can increase the allowable area for the case without changing the overpack box size. Your dock personnel can help if you have questions regarding this.



- 5.4. You may also create your own overpack box if desired. Recommendation is to utilize a double corrugated cardboard box with at least 3 inches (75mm) of dunnage material around the full perimeter of the storage case.

**6. REFERENCE DATA**

- 6.1. For shipping procedures please talk to your local dock personnel, they will be able to provide you the proper contacts for shipping.
- 6.2. Miscellaneous Shipping Requests and submission
  - 6.2.1. To gain access to make miscellaneous shipment requests: Must complete TI Finance: EVMs/ Samples/ Miscellaneous Shipments Overview Training: [FIN-ACB-EVM SMPL MSCSHP](#) There is a self-study online option. Send proof of completion to [miscshipaccess@list.ti.com](mailto:miscshipaccess@list.ti.com)
  - 6.2.2. Miscellaneous Ship Request page can be found [here](#)
  - 6.2.3. Miscellaneous Ship Request Form Instructions can be found [here](#).
  - 6.2.4. You will also be required to provide export classification of materials.
    - 6.2.4.1. This information is obtained from the manufacturer of the item.
    - 6.2.4.2. If unable to obtain from the manufacturer, you can check classification list of historically shipped non-TI items [here](#).
    - 6.2.4.3. If you do not see your item on the list of historically shipped items you may enter an ECCN Classification request [here](#)
  - 6.2.5. Make sure you attach proof of value of the material. This can be an invoice, a web store screen shot, or a note from your finance team noting the value of the material.
  - 6.2.6. If you are shipping to China the Net weight of each line item on the request must be weighed prior to shipment. The net weight is the weight of the item by itself without any packing material.
  - 6.2.7. Once you have the Miscellaneous Ship Request number you can box your materials up, write the request # on the box and transfer the materials to the Forest lane international shipping dock for processing.
  - 6.2.8. Dock to Dock Transfers: to move material between any north Texas TI sites the requestor can bring the material to any manned dock, the dock can initiate a dock to dock transfer via Logisticorp on call shipments should deliver within 2hrs.

| Revision | Description  |
|----------|--|
| A        | ECR 2169621 – INITIAL RELEASE – 10/31/17 – JAH   |
| B        | ECR 2172712 – Updated personnel contacts for shipping, fixed links in pdf – 03/01/18 - JAH |
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