ERAI RECOMMENDED INSPECTION PROCESS

ORDER DETAILS:

PO#: _____ Invoice #: _____ Supplier Name: _____

Date Parts Received: __ / __ / _____ Inspected by: _____ Inspection Approved by: _____

SHIPMENT DETAILS:

Number of boxes received from carrier:_____ Condition of boxes: ☐Good, ☐Fair, ☐Poor

Did parts show any signs of damage as a result of shipping? _____ Weight of Box:_____

Type of material used to fill the box: ☐Popcorn ☐Newspaper ☐Styrofoam ☐Other_____ Was this material ESD compliant? ☐Yes ☐No

PRODUCT DETAILS:

Part Number: _____ Manufacturer:_____ QTY Received: _____

QTY Posted on: ☐ Invoice ☐ Packing Slip Parts shipped in: ☐ tubes ☐ trays ☐reels ☐bags ☐other _____

Parts were ordered as: ☐New ☐Used ☐Refurbished ☐Other_____ Date Code(s):_____ Lot Code(s):_____

INSPECTION CHECK LIST

PACKAGING:

☐Yes ☐No 1. Are the parts in factory original packaging (factory issued tubes, reels, trays)?
If no describe packaging (i.e.: third party, color, dimensions, length of tubes etc. if other than known factory original):
_____
_____

☐Yes ☐No 2. Are the parts moisture sensitive?
If yes, answer questions 2a. – 2c.
If no proceed to question 3.

☐Yes ☐No 2a. Are the parts packaged in sealed bags?

☐Yes ☐No 2b.Did you open a bag to verify parts were packaged with proper desiccant and moisture tab indicator?
If no why: _____
_____

☐Yes ☐No 2c. Did the moisture indicator reveal moisture contamination?
If yes, stop inspection and report findings to manager.

2d. Moisture Sensitivity Classification Level:
☐1 ☐2 ☐3 ☐4 ☐5 ☐6

☐Yes ☐No 3. Are the parts in factory sealed bags?

☐Yes ☐No 4. If in factory bags, is there a label on the bag?

☐Yes ☐No 5. Are the parts packaged in ESD Complaint packaging?

☐Yes ☐No 6. Were there any noticeable tears or puncture holes?

☐Yes ☐No 7. Were the bags tightly sealed (vacuum sealed)?

☐Yes ☐No 8. Is the packaging (tube, tray, reel, etc.) in good physical condition?

☐Yes ☐No 9. Newer date code parts in old or damaged containers (i.e. tubes, trays, reels, etc.) should be treated as a red flag. Are the parts packaged in a container consistent with their age and condition?

ACTION REQUIRED:

10. _____ #of Non-Conformities noted in this section.

☐Yes ☐No 11. Photographs of packaging taken?

NOTES:
_____
_____
_____

(Please record all concerns as they might relate to the packaging of the goods in question, record any physical data that could be used to identify this material should a return be necessary.)

LABEL VERIFICATION:

1. Inspect all labels on boxes and bags to confirm all part and manufacturer information is consistent and matches your purchase order specifications and is consistent with contents of bag, box or tray. All non-conformities and abnormalities should be listed here:
_____
_____
_____

☐Yes ☐No 2. Was a bar code inspection conducted? If yes, did bar code read out match part data specifications?

ACTION REQUIRED:

☐Yes ☐No 3. _____ # of Non-Conformities noted in this section.

☐Yes ☐No 4. Photographs of label(s) taken?

NOTES:
_____
_____

SURFACE VERIFICATION:

(If inspecting NEW PARTS answer the following)

Parts should be inspected under bright light and with magnification in order to obtain best results.

☐Yes ☐No 1. Are you able to inspect the goods under magnification?

☐Yes ☐No 2. Do the parts contain test dots?

☐Yes ☐No 3. Are the parts dirty?

☐Yes ☐No 4. Do they show signs of dust, dirt or sand, which might imply they have been improperly handled or stored?

☐Yes ☐No 5. Are you able to compare these parts to a known good device?

☐Yes ☐No 6. Are all date code and lot codes consistently marked?

☐Yes ☐No 7. Is the country of origin consistent on all parts of the same date and lot code? (If parts are marked with one date code but contain multiple lot codes or countries of origin, stop inspection and notify supervisor.)

☐Yes ☐No 8. Are there any parts that are "upside-down" in the tube, tray or reel?

☐Yes ☐No 9. Is the manufacture's logo clearly noted on the component?

☐Yes ☐No 10. Are any scratches, cracks, chips or visual non-conformities evident?

☐Yes ☐No 11. Does the surface appear consistent on all components?

☐Yes ☐No 12. View components from various angles. Does the surface show signs of sanding or do you see ridges in the surface?

☐Yes ☐No 13. Viewing the component from the side, look at the top of the component, do you see what appears to be a "top layer" that has been adhered to the component? Is the part number laser etched in the surface of the component or does it appear to be printed on the surface?
☐Laser Marked ☐Printed

☐Yes ☐No 14. Are the part numbers clearly printed?

☐Yes ☐No 15. Is the part number consistently printed and is it straight and in the same location on all of the parts?

☐Yes ☐No 16. Did you compare the top markings to the bottom markings (if any) on the devices?

☐Yes ☐No 17. Is the texture and color of the component consistent on both the top and bottom of the device?

☐Yes ☐No 18. If the part contains a pin indicator, is the pin indicator located in the same position on all of the parts?

☐Yes ☐No 19. Are the mold pins clean and not filled in or coated over?

☐Yes ☐No 20. Do the part markings remain consistent during part marking permanency testing? (Part marking should be tested using either MIL-STD-883 (Method 2015.13) or JEDEC Standard (JESD22-B107C). Acetone is acceptable for blacktop removal when identifying resurfaced parts but may remove part markings from authentic parts.)

☐Yes ☐No 21. Were digital photos taken of the parts?

ACTION REQUIRED:

☐Yes ☐No 22. _____ # of Non-Conformities noted in this section.

☐Yes ☐No 23. Photographs of part surfaces taken?

NOTES:
_____
_____

LEAD & PHYSICAL VERIFICATION:

☐Yes ☐No 1. Are you able to obtain a copy of the manufacturer's data sheet for this part?
If No Why:_____
(not enough time, not available, not required by manager, etc.)

☐Yes ☐No 2. Do the leads appear to be straight and properly aligned?

☐Yes ☐No 3. Did you verify the pin count and confirm that the number of pins on the device you are inspecting is consistent with the manufacturer's datasheet specifications?

☐Yes ☐No 4. Do the leads show any signs of use (check both inside & outside of the pin)?

☐Yes ☐No 5. Do the leads show signs of age or improper handling (signs of oxidation, tarnishing, etc.)

☐Yes ☐No 6. Do the leads show any signs of dirt?

☐Yes ☐No 7. Do you see any broken, missing, bent or damaged pins or leads?

☐Yes ☐No 8. Do you see signs of solder-bridges, solder burns, solder drippings or detect inconsistent coloration?
If applicable, measure the dimensions of the parts and compare your findings to the datasheet for further product verification.

ACTION REQUIRED:

_____# of Non-Conformities noted in this section.

☐Yes ☐No 9. Photographs of parts pins taken?

NOTES:
_____