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REVISION			
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### IMPORTANT NOTICE

**This specification contains important precautions, handling, and storage instructions and must accompany the packaged wafers or chips at all times.**

**Failure to follow the instructions may void the warranty.**

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			WAFER / CHIP STORAGE AND HANDLING		
Originator	Engineering	Quality	Operations	Marketing	Management
JEF	JS	CG	JS for JR	SR	JS for JR
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	Size A	Sheet 1 of 2	Drawing Number CPS170		Rev. B

- 1.0 Purpose: This specification defines the requirements for proper storage and handling of Central Semiconductor Corp. wafers and chips.
- 2.0 Wafer and chip storage:
  - 2.1 Wafers and chips are to remain in the carriers provided by Central Semiconductor Corp. until ready to use.
  - 2.2 Wafers and chips are to be stored as follows:
    - 2.2.1 For short term storage (less than 1 month) and during handling and processing, wafers and chips should be kept in an environment with a Relative Humidity level controlled between 35% and 65% to prevent damage due to Electro-Static Discharge (ESD).
    - 2.2.2 For long term storage (more than 1 moth) wafers and chips should be kept in an inert gas, dry air, dry nitrogen, or in nitrogen flow boxes. The Relative Humidity level must be controlled between 7% and 30% and the environment must be free from moisture and contaminants.
    - 2.2.3 Wafers and chips are to be stored between 18°C and 24°C. For transport (less than 5 days) wafers and chips may be stored between 8°C and 60°C.
- 3.0 Wafer handling:
  - 3.1 Always wear static dissipative garments while handling wafers.
    - 3.1.1 Conductive wrist straps or ground straps.
    - 3.1.2 Static dissipative cleanroom gloves.
  - 3.2 Always handle wafers by the edges only.
    - 3.2.1 Wafer tweezers or vacuum wands should be used to move wafers from the carrier, or anytime it is necessary to touch the actual wafer.
  - 3.3 Always make sure that any surface to come in contact with the wafer is grounded, clean, and free from any objects that could cause potential damage.
  - 3.4 It is recommended that all wafer processing (such as unpacking, inspection, sawing, die bonding, wire bonding) be performed in an at least class 10,000 (ISO 7) clean room environment.
- 4.0 Chip handling:
  - 4.1 Always open chip trays in an environment free from static build up.
    - 4.1.1 Use an ionizer to remove static build up in the surrounding air and all surrounding surfaces.
    - 4.1.2 Wear grounding straps and static dissipative garments to prevent static build up on the body.
    - 4.1.3 Place the chip tray on a static dissipative surface before opening.
  - 4.2 **Always take extreme caution when opening chip trays.**
    - 4.2.1 Carefully remove the tray clip. Insure that the tray cover is held tightly in place during removal of the chip tray clip.
    - 4.2.2 Gently lift the tray cover up and off of the chip carrier tray. The polyethylene insert must remain on the chip carrier tray.
    - 4.2.3 Slowly **slide** the polyethylene insert off the chip carrier tray in a horizontal motion.
  - 4.3 Always use a vacuum pencil with a non-abrasive tip or equivalent for the removal and handling of individual die.
  - 4.4 It is recommended that all chip processing (such as unpacking, inspection, die bonding, wire bonding) be performed in an at least class 10,000 (ISO 7) clean room environment.