ESD Best Practices for DEMP Chips

**Apparel**

* White antistatic gloves should be worn whenever handling wafers or chips.
* Antistatic lab coats (white or blue with carbon fiber grid) should be worn whenever handling wafers or chips.
* Grounding bracelets should be worn whenever handling wafers or chips.

**Equipment**

* Antistatic tweezers should be used whenever handling wafers or chips.
* Wafers and chips should be transported in black conductive carriers inside pink antistatic polybags.
* Antistatic floor mats should be placed at all workstations where wafers or chips are handled.
* ESD mats should be placed in all locations where wafers or chips are regularly handled.

**Processes**

* Chips should always be grounded unless unavoidable (such as when transferring into 32 channel box
* Chips must be placed inside Faraday cage when plasma cleaning.
* Chips must be connected to grounded shunt socket when wire bonding.
* All apparel must be in place prior to opening antistatic bags or conductive containers.

**32 Channel Box measurements**

* Chip should be carried from upstairs to downstairs in a closed metal box acting as a Faraday cage
* 32 channel box contacts must be grounded when inserting chip
* 32 channel box contacts must be grounded prior to and when changing connections (e.g. for DEP).
* When changing solution in the cell ensure the pipette tip does not touch the chip