PHOTORESIST STRIPPING SOP

October 2013

**Purpose:** To remove positive resist that served as a mask during etching or in case of unsuccessful photolithography procedure.

**Procedure (Wet Strip):**

1. Locate the NMP bath in the Wet Etch Bay

2. Place the Silicon wafer inside one of the wafer boats located on the Wet Bench.

3. Immerse the wafer boat into the bath and use an egg timer to keep the wafer boat in the solution for at least 5 minutes.
4. When the timer is up, dip the wafer boat into and out of the bath several times to help ensure all the photoresist is removed.

5. Move the wafer boat to the Quick Dry Rinse (QDR) and activate it. This bath will automatically rinse the wafer.

![Image of Quick Dry Rinse](image)

6. Use the Nitrogen gun to blow dry the wafer after it has been washed.

7. For many applications, it is recommended to move to the Spin-Rinse Dryer (SRD) to ensure a properly cleaned wafer.

**Procedure (Dry Strip):**

Resists can also be removed by oxygen plasma stripping. The plasma creates reactive oxygen radicals that chemically etch the resist polymer. This process can be performed in

_Axic HF8 Barrel Asher or March RIE_

**Note:** Sometimes a combination of soaking in remover and plasma stripping is required to remove stubborn resist (it is usually recommended to follow a wet strip with a brief plasma strip to remove resist residues). If this does not work, you can resort to Nanostrip or Hot Piranha. These are acid etches specifically designed for the removal of organics.

**BUT** both of these processes will also etch many metals.