| PROCESS BATCH SHEET (C | Oxide Etch) | Issue 7 |
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| ENSC Batch No | W           | afers Started | Date      |  |
|---------------|-------------|---------------|-----------|--|
| Material      | Orientation | Size          | Thickness |  |
| Resistivity   |             | Туре          |           |  |
| Wafer Vendor  | V           | endor Batch # | SFU P.O   |  |

| Process<br>Step<br># | <b>Process Conditions</b>  | Oper<br>&<br>Wafer<br># | Comments  |
|----------------------|--|-------------------------|---|
| A                    | Oxide Etch to endpoint Transene buffered oxide etchant. Slight agitation. Room temp. Etch rate = about 0.1 micron/min. Calculate time to etch but determine endpoint by eye. Note that presence of borosilicate and phosphosilicate glasses will affect oxide etch rate. |                         | Coat the back side of wafer with resist if oxide must remain. This is common for micromachining, but not for semiconductor processing. If the back side is 3 dimensional, the integrity of the resist on the back is questionable. The wafer should then be floated on the surface of the etchant to etch the front side. |
| В                    | DI Water Rinse > 10 minutes in running DI water. Look for dewetting.   |                         |   |
| C                    | Dry Blow dry with dry N2. Do not spin. Resist contaminates chuck. Spin only furnace ready wafers.  |                         |   |
| D                    | Inspect Microscope with yellow light. Ensure etch complete. Etch more if needed. Measure if req'd.   |                         | Measurement optional if required.   |
| Е                    | Photoresist Strip<br>Soak in room temp acetone until<br>resist is dissolved. Soak in fresh<br>acetone for a further 1-2 min.   |                         |   |
| F                    | <b>DI Water Rinse</b> > 3 minutes in running DI water.   |                         |   |
| G                    | <b>Dry</b> Spin dry or blow dry with N2.   |                         |   |
| Н                    | Inspect and Measure Use microscope. Inspect for remnant resist. If necessary, repeat acetone strip. Measure features if required.  |                         | Measurement optional if required. Remnant resist may appear as films or hair like structures.   |