Purpose: To convert image from positive to negative image with positive photoresist.

**WARNING:** Be careful that no one enters photolithography room while turning on vacuum pump and NH₃ as door may cause injury.

**YES System Start-up**

1. Turn **ON** power to the oven using the breaker located on the back, left corner.
2. Press green **POWER ON** button
3. Turn **ON** vacuum pump located behind oven on the floor.
4. Open N₂ valve located on wall behind oven.
5. Turn on NH₃ at bottle located behind system.
1. Process wafer normally using standard soft bake and expose parameters.

2. Turn HMDS/NH$_3$ valve to NH$_3$ (located behind glass cylinder, short end of knob indicates valve selection)

3. Select 2 on the Thumbwheel.

4. Set temperature for front/rear zones. Press and hold SET BUTTON (far left), set temperature to desired setting.

**NOTE:** Oven must be at set temperature before beginning processing.

- **Front Zone:** 90°C
- **Rear Zone:** 90°C

5. Press S.P. on the controller and check each set point.

   Recommended Settings:

   - **Set point 1:** (Display Set Point) 600 Torr
   - **Set point 2:** (Set Point 2) 100 Torr
   - **Set point 3:** (Alarm 3 Low Limit) 1 Torr
   - **Set point 4:** 500 Torr

6. Using the touch screen press:

   - GOTO Alarms Panel
   - GOTO Process Variables

7. Enter Process Variables

   Recommended Process Variables:

   - Number of dehydration cycle purges: 3
   - Number of exit cycle purges: 5
   - IR Wafer Warm Up Delay: 10
   - Process duration: 2700 seconds

8. Press GOTO OPERATOR PANEL

9. Load Samples

10. When oven has stabilized at set temperature, press START

11. Flood exposure using ABM
Recommended parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1813</td>
<td>12 sec</td>
</tr>
<tr>
<td>SPR220</td>
<td>60 sec</td>
</tr>
</tbody>
</table>

12. Develop

Total cycle time for the recommended process is approximately 90 minutes

Shutdown

1. Turn off breaker on back of oven.
2. Turn off vacuum pump.
3. Turn off N₂.
4. Close valve on NH₃ cylinder if used.