1. Purpose

This procedure describes how to develop, etch, and strip resist off from a blank mask coated with chrome and AZ1518 resist after using the DWL66 mask writer.

2. Scope

This procedure provides processing information on how to Develop, Etch, and Strip photo resist after using the Heidelberg Direct Mask Writer. The use of this process procedure is for faculty, staff, and outside companies that need access and use of the shared equipment in the OPF laboratory. Internet connection is required to view process procedures.

3. Definitions

N/A

4. Responsibilities

It is the responsibility of the Laboratory Manager to ensure that any users of this process procedure have been trained and understand the use of the mask writer, chemical hood, and chemical safety protocol.

5. Equipment/Material

813 Hood
817 Hood
AZ300MIF Developer
Chrome Mask Etchant
1165 Resist Remover
2000mL Pyrex Glass Tray
Stainless Steel Wafer Tweezer
Blank mask coated with chrome and photo resist

6. **Procedure**

Step No.	Description	Equipment	Conditions	Remarks
1	**Develop**			
1.1	Develop AZ1518	813 Hood, 2000mL pyrex glass tray	60 to 90 seconds, room temperature, AZ300MIF	
1.2	Rinse	813 Hood, DI H2O	1 minute	
1.3	Dry	813 Hood, Nitrogen	Blow dry both side	
2	**Etch**			
2.1	Etching Chrome	817 Hood, 2000mL pyrex glass tray	180 seconds, agitate every 30 seconds, chrome mask etchant	
2.2	Rinse	817 Hood, DI H2O	1 minute	
2.3	Dry	817 Hood, Nitrogen	Blow dry both side	
3	**Resist Strip**			
3.1	Strip Resist	817 Hood, 2000mL pyrex glass tray	1165 stripper at 75°C for 10 minutes. Air dry for 10 minutes.	
3.2	Rinse	817 Hood, DI H2O	1 minute	
3.3	Dry	817 Hood, Nitrogen	Blow dry both side	
3.4	Inspection	Nikon microscope		
3.5	Descum (if necessary)	Tepla M4L	300W, O2, 5 min	
4	**Inspection**			
4.1	Inspect Final Written Image	Nikon Microscope	Measure features	

7. Record Retention

N/A

8. Reference Documents

N/A