

**PROCESS BATCH SHEET (Boron Drive-in/Wet Oxidation) Issue 5** Pg \_\_\_\_ of \_\_\_\_

ENSC Batch No. \_\_\_\_\_ Wafers Started \_\_\_\_\_ Date \_\_\_\_\_  
 Material \_\_\_\_\_ Orientation \_\_\_\_\_ Size \_\_\_\_\_ Thickness \_\_\_\_\_  
 Resistivity \_\_\_\_\_ Type \_\_\_\_\_  
 Wafer Vendor \_\_\_\_\_ Vendor Batch # \_\_\_\_\_ SFU P.O. \_\_\_\_\_

Process Step #	Process Conditions	Oper & Wafer #	Comments
			Wafers must be put through a full RCA clean, per specs, just before this process. If necessary, use modified process to protect oxide.
____ A	<b>Prepare Furnace</b> Dry N2 @ 4 scfh. Ramp temp to 750-800C. Start bubbler.		
____ B	<b>Load Wafers into Boat</b> Use correct forceps, boat and white elephant		
____ C	<b>Push Boat into Furnace</b> Dry N2 @ 4 scfh. Temp = 800C. Push @ < 4"/min		
____ D	<b>Ramp Furnace Up</b> Dry N2 @ 4 scfh. Set operating temp.		
____ E	<b>Oxidation/Drive-in</b> Wet N2 @ about 4, sufficient for good action in the bubbler. Open valve and start timer. Close valve at end of time.		Desired oxide thickness = _____ microns Time = _____ min Temp = _____ C
____ F	<b>Ramp Furnace Down</b> Dry N2 @ 4 scfh. Temp=400C. Bubbler off.		
____ G	<b>Pull Boat and Unload</b> Pull when all zones < 800C. Max pull < 4"/min		
____ H	<b>Return Furnace to Idle</b> O2 @ 0. N2 @ 0.5-1.0 scfh		
____ I	<b>Inspect</b> Visual, etc.		