PART ONE: General description

Pt electroplating		07/13/00
Process name	*Process Code*	*Last Update*
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Electrodes for ionic conductivity.

General description of process

PART TWO: Details

☒ *Cleaning*

☒ Nano-strip 10 *Time (min)* ☒ BOE 1 *Time (min)*

☒ *Wet Oxidation*

450 *Thickness (nm)*

☒ *Metal deposition(Seed layer)*

Sputter sphere *Evaporator*

☒ Cr *Material* 50 *Thickness (nm)*

☒ Au *Material* 700 *Thickness (nm)*

Background Pressure: <1e-6 *(mTorr)*

☒ *Resist Coating (to create openings in resist where the Pt will be electroplated)*

☒ AZ 1512 *Resist*	50 *Speed1 (RPM)*	5 *Time(sec)*	3000 *Speed2 (RPM)*	30 *Time(sec)*	
☒ PreBake	Hot Plate	100 *T (℃)*		3 *Time(min)*	
☒ Exposure	3" Aligner			20 *Time(sec)*	
☒ Develope	AZ351:H2O (1:4)			1 *Time(min)*	

☒ *Electroplating*

Solution: H_2O : $PtCl_6H_2$ *100 ml : 1gr*

Ultrasonic bath on *Current* *20* *mA*

Process Time 1 *min*

☒ *Remove Resist*

Rinse in acetone
Rinse in Methanol

☒ *Resist Coating (to create openings in resist where the seed layer will be removed)*

☒ P-10 *Primer*	50 *Speed1 (RPM)*	5 *Time(sec)*	3000 *Speed2 (RPM)*	30 *Time(sec)*	
☒ AZ 1512 *Resist*	50 *Speed1 (RPM)*	5 *Time(sec)*	3000 *Speed2 (RPM)*	30 *Time(sec)*	
☒ PreBake	Hot Plate	100 *T (℃)*		3 *Time(min)*	
☒ Exposure	3" Aligner			20 *Time(sec)*	
☒ Develope	AZ351:H2O (1:4) *Developer*			60 *Time(sec)*	

☒ *Seed layer Etching*

Au etch *etchant* 1 *Time(min)*

comments

PART THREE: General Comments

For passivation can also use nitride.
No need to use primer on the Au Seed layer in the first lithography process.