

ME585 - Fall 2015 - Final Design Project

Final Projects	Point Person	Point Person
Group 1 Microfluidics 1 Cell Trapping	Surhabi Manisha Dalton Evret Luis Luis	Group 5 Accelerometer 1 Apple Jin Ben Bloser Jared Cesar Corey Ben
Group 2 Microfluidics 2 With UI Cell Separation	Andrew Shryas Hari Shum Shryas	Group 6 Energy Harvester Jonathan Marshall Harry Ho John Hernandez Zach Fowler Harry
Group 3 NeuroMEMS E-Field Modeling Cross-talk	Leigh Ann Zach Goodrai Ricardo Montes Matt Revie Tyler Collins Leigh Ann	Group 7 Accelerometer 2 Samsung Waseem Gabriel Marcus Ibrahim Ruben Gabriel
Group 4 Chemical Sensor	Sonny Samantha Inigo Armind Prathmesh Inigo	Group 8 Hybrid CMEMS Max Zeke Dominic Lek Raymond Max

Details of Projects

Group 1	Research & Choose Device
Group 2	Research & Choose Device
Group 4	Research & Choose Device
Group 5	Research & Choose Device
Group 6	Research & Choose Device
Group 7	Research & Choose Device

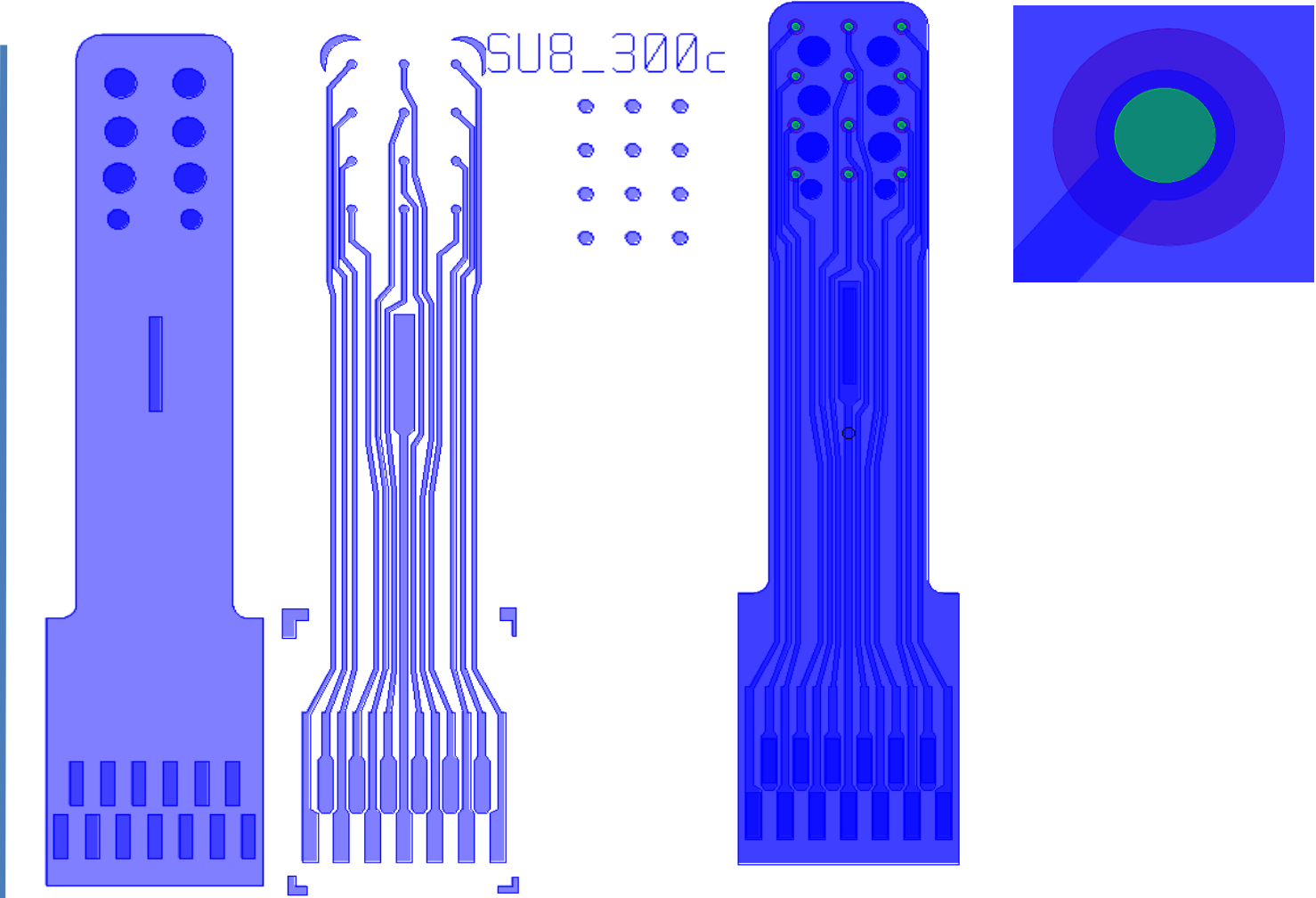
Deliverable

You need a device that has > 2 masks
 Need a mask layout with *.proc and *.cat files
 Show final 3D structure built by CoventorWare
FEA Modeling for:
 optimizing dimensions
 conforming physics used - electrostatic, etc

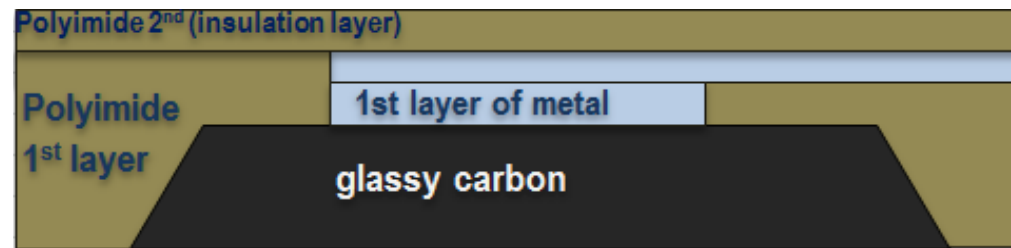
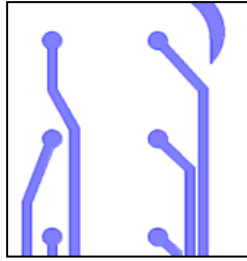
Group 3

Gen III – May 2015

Group 4



Electrode = 300 μm dia.
Via = 130 μm opening.
Breathing holes = 600 μm dia.
Traces = 90 μm wide and 180 μm dia.
Total width of chip = 3mm



Section near GC electrodes