



..... COG(Chip on Glass) Product..... Introduction

BUYSEMI



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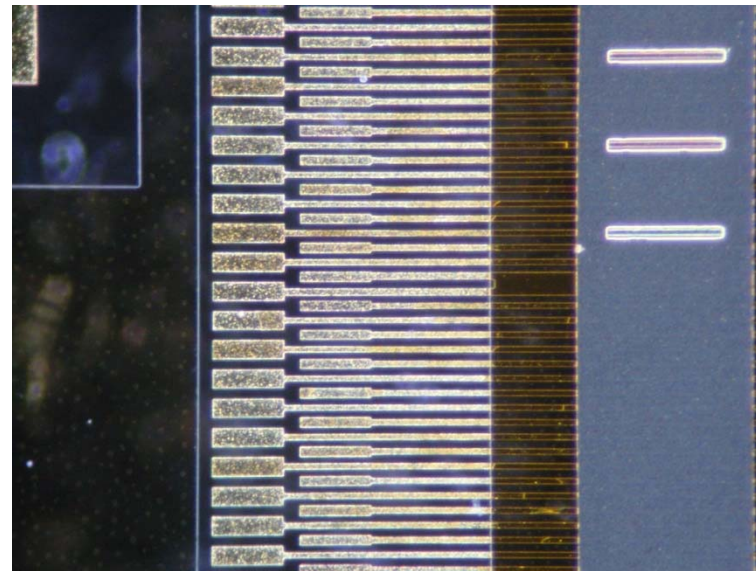
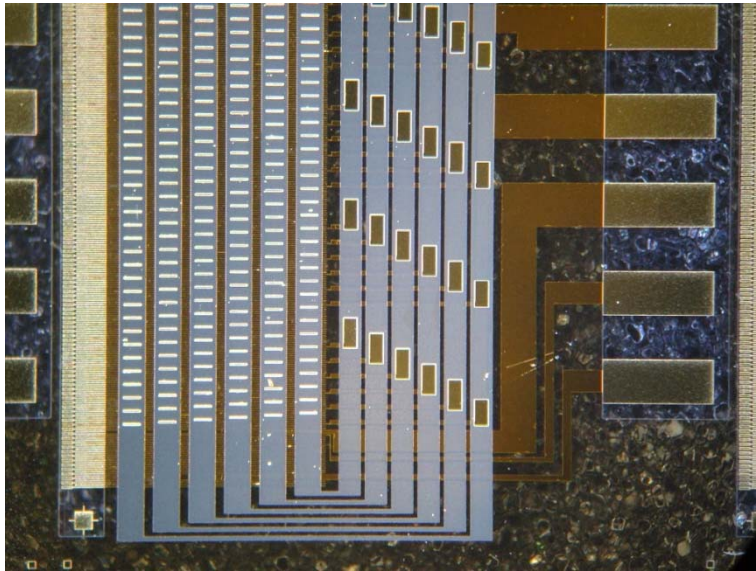
Introduction



COG(Chip on Glass) 란?

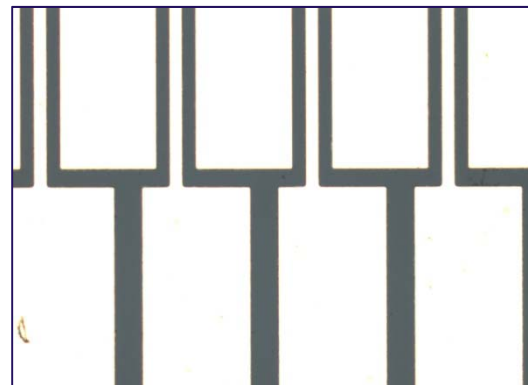
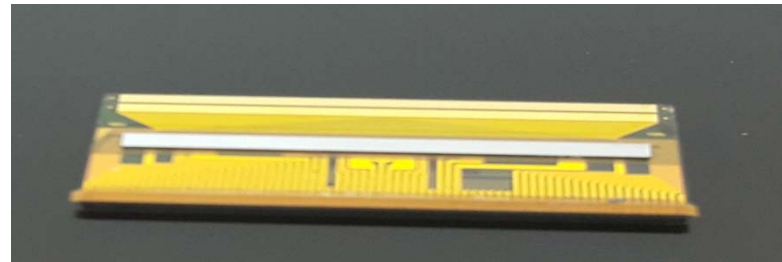
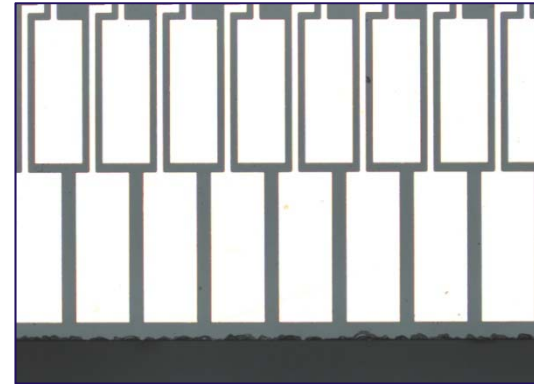
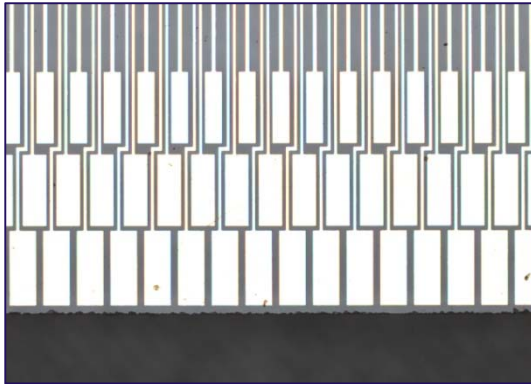
-반도체 공정을 사용하여 회로배선을 Glass기판위에 형성하는것 입니다
회로배선을 형성하는공정으로는 금속막 형성/금속막 패턴형성/절연막형성
으로 구성 됩니다.

COG기판의 전기적/기계적 특성을 높이기 위해서는 Glass위에 금속막을
우수한 접착력으로 증착하는 기술과 금속막 패턴을 미세한 패턴까지 형성하는
기술이 필요합니다.



[사진1. 3D COG 기판]

Introduction



[사진2. 2D COG 기판]

Product & Specification



2D COG Product Map

Step1. Glass
Cleaning



Step2. Ti/Au Deposition Step3. Ti/Au Etching Mask Pattern



Step4. Ti/Au Pattern
Etching



Step5. COG Block Saw



Product & Specification



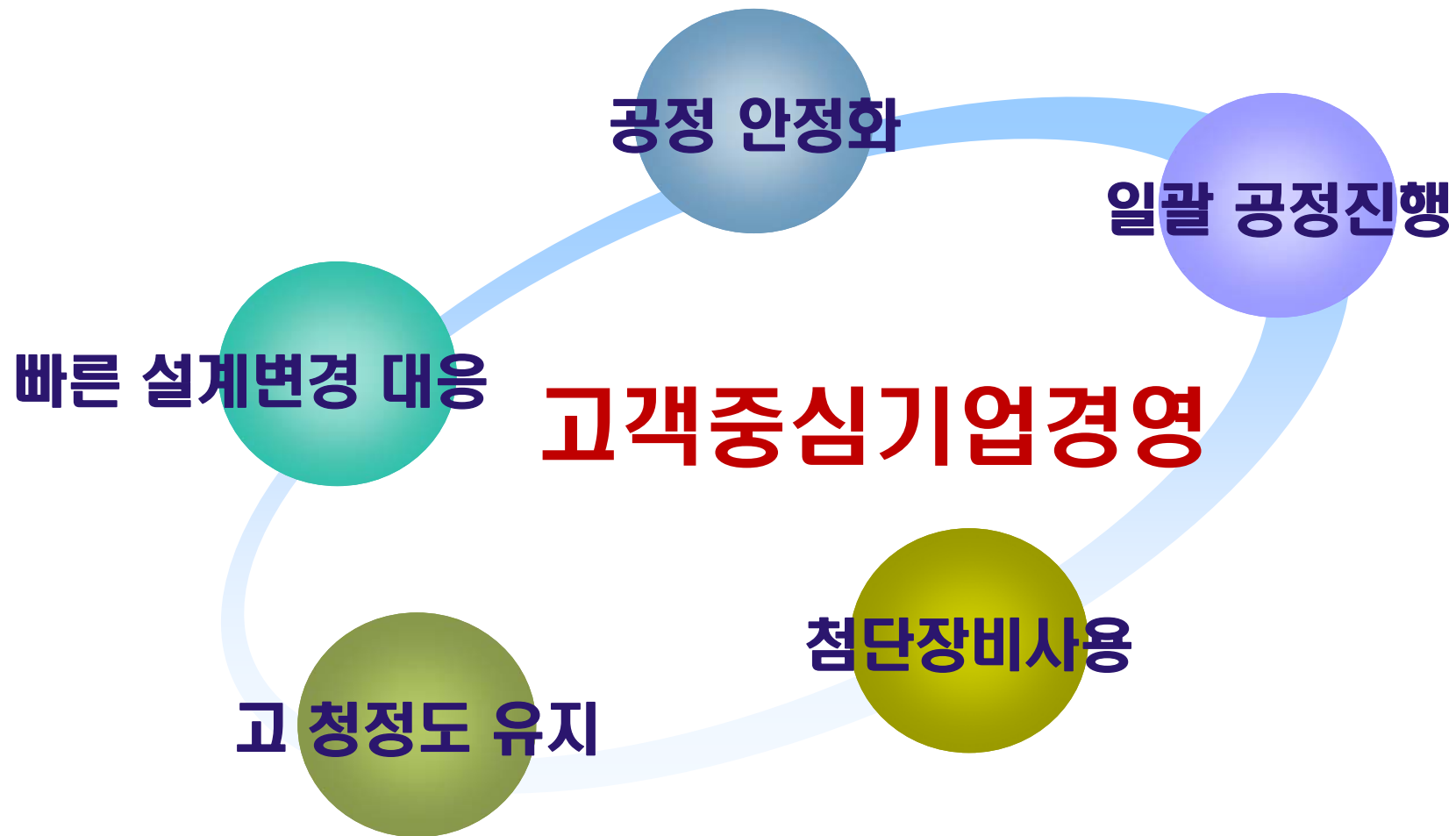
2D/3D COG Delivery

	2D	3D	Mask
Delivery	4Day	5Day	3Day

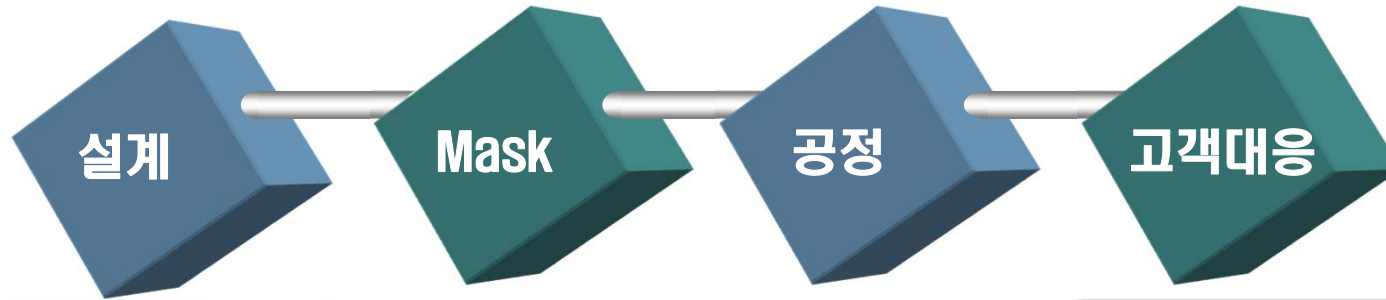
2D COG Specification

	Low Price	Medium Price	High Price
Ti Thickness	500Å ↓	700Å~1500Å	1500Å ↑
Au Thickness	1000Å ↓	1000Å~3,500Å	3,500Å ↑
Ti/Au Pattern	40μm ↑	13μm~40μm	3μm~12μm ↓
Insulation (3D COG)	1μm ↓	2μm	3μm ↑
Price (2D)	80%	100%	150%

Merit



Merit



설계기술보유

- CAD/3D설계
- 파일변환기술
- 설계변경기술

Mask 제작

- 생산System
- Mask설계변경
- 빠른 고객대응

수원KANC Fab

- 첨단장비 사용
- 고 청정도 유지 [10 Class]
- MEMS 기술보유
- 유기적관계유지

영업전략

- 적극적 고객요구 수요
- 유기적 기술정보 공유
- 생산력 향상으로 납기단축
- 지속적인 공정연구로 수율향상

2D/3D 설계 전담 엔지니어
1명

MEMS공정 전담엔지니어
3명
COG 전담 Q/C 엔지니어
1명

MEMSYS 전담영업요원
1명

COF에 대한 COG Merit

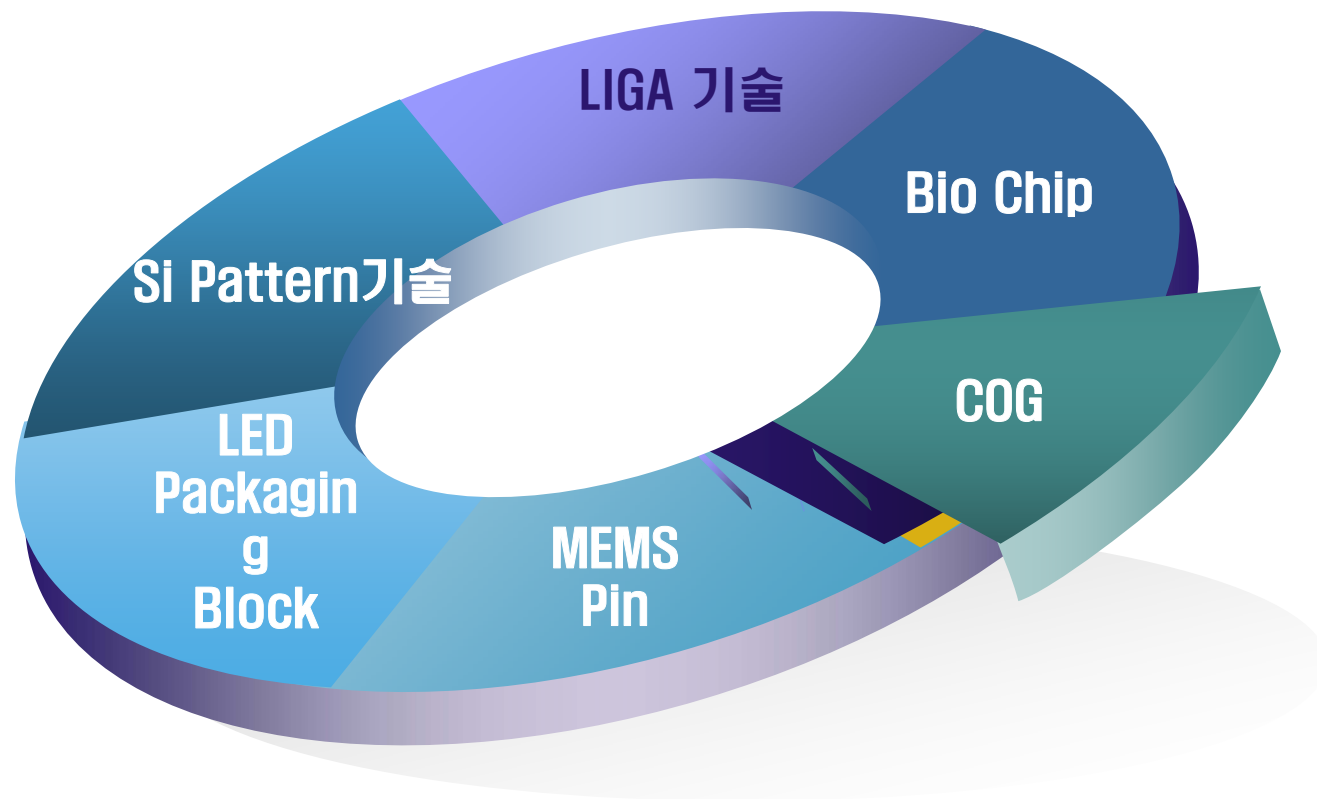


구동 주파수 상승
에 따른
노이즈 발생 문제
해결

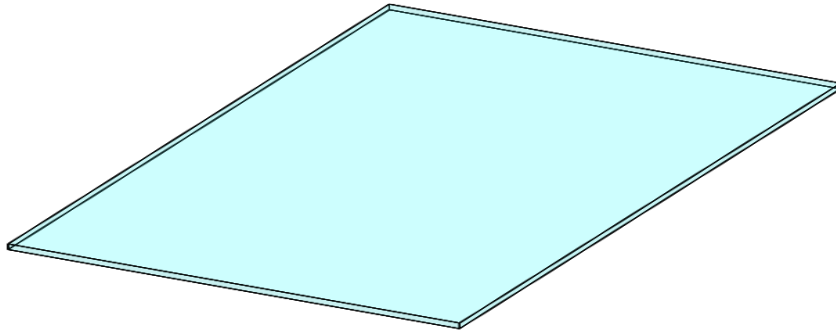
검사 시 온도가
올라가도 COG는
COF보다 안정적

반복 검사 가능

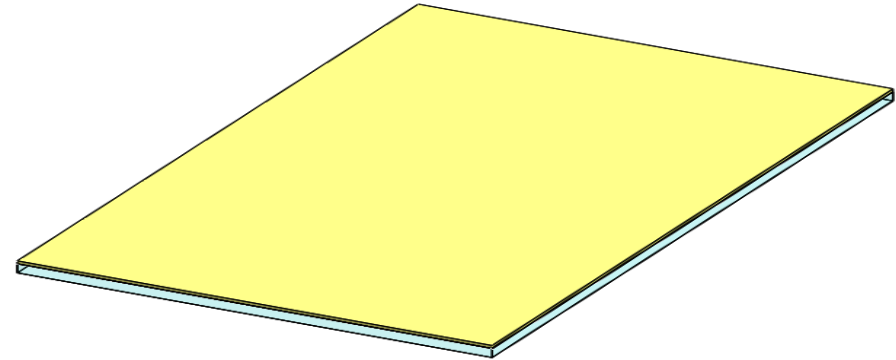
Challenge



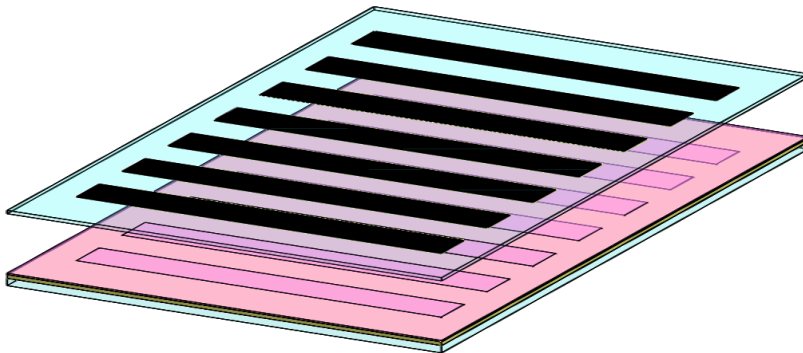
2단 COG(3D COG) 공정도



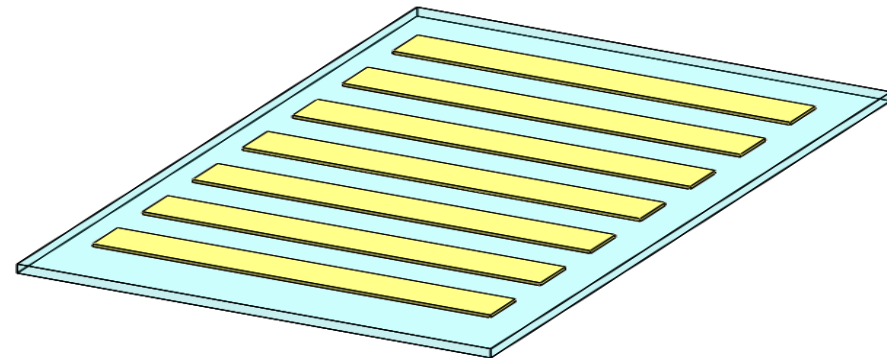
1. Glass Cleaning



2. Metal Deposition

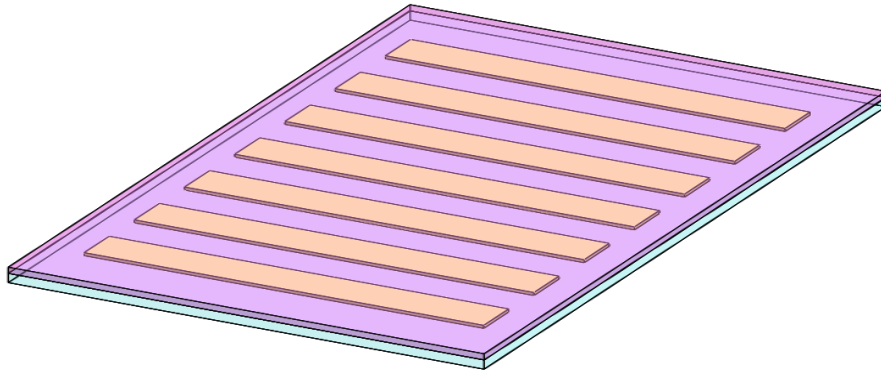


3. 1st PR Pattern

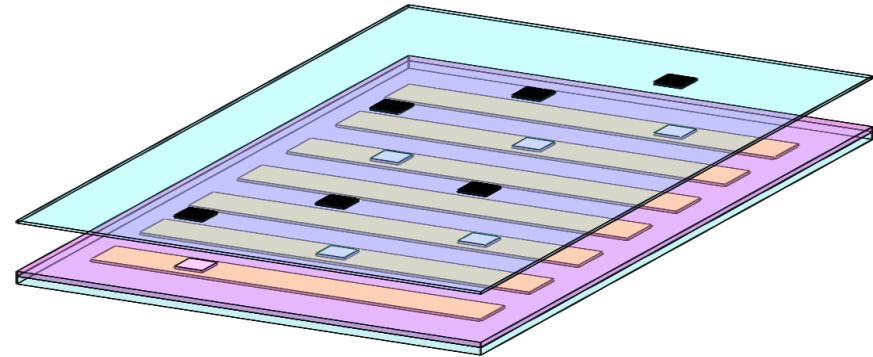


4. 1st Metal Pattern

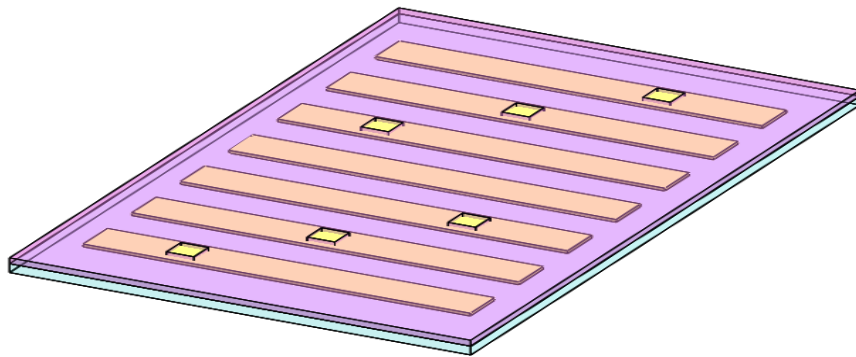
2단 COG(3D COG) 공정도



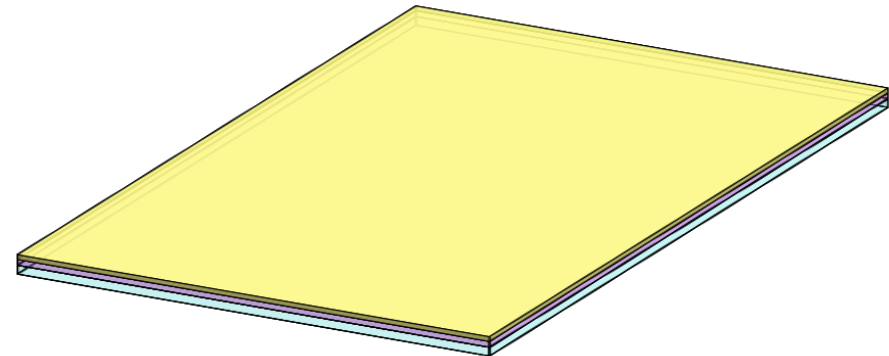
5. 2nd PR coating



6. 2nd PR Pattern1

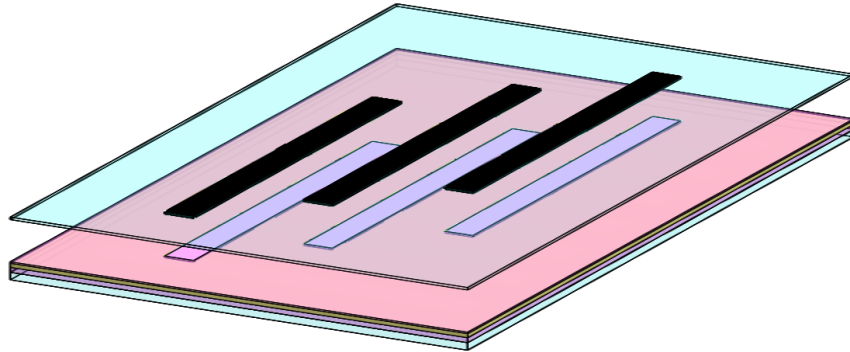


7. 2nd PR Pattern2

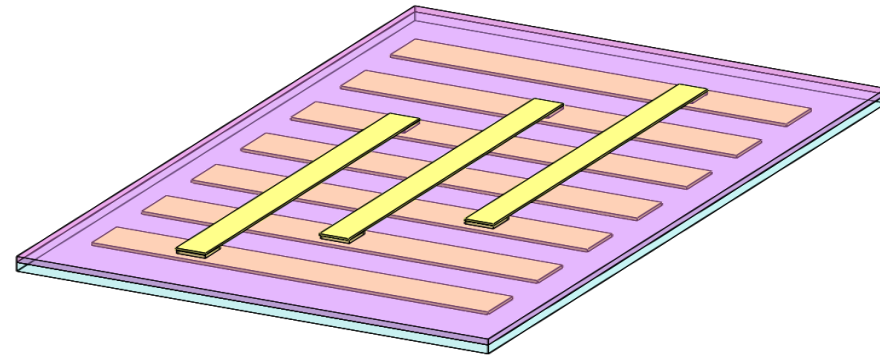


8. 2nd Metal Deposition

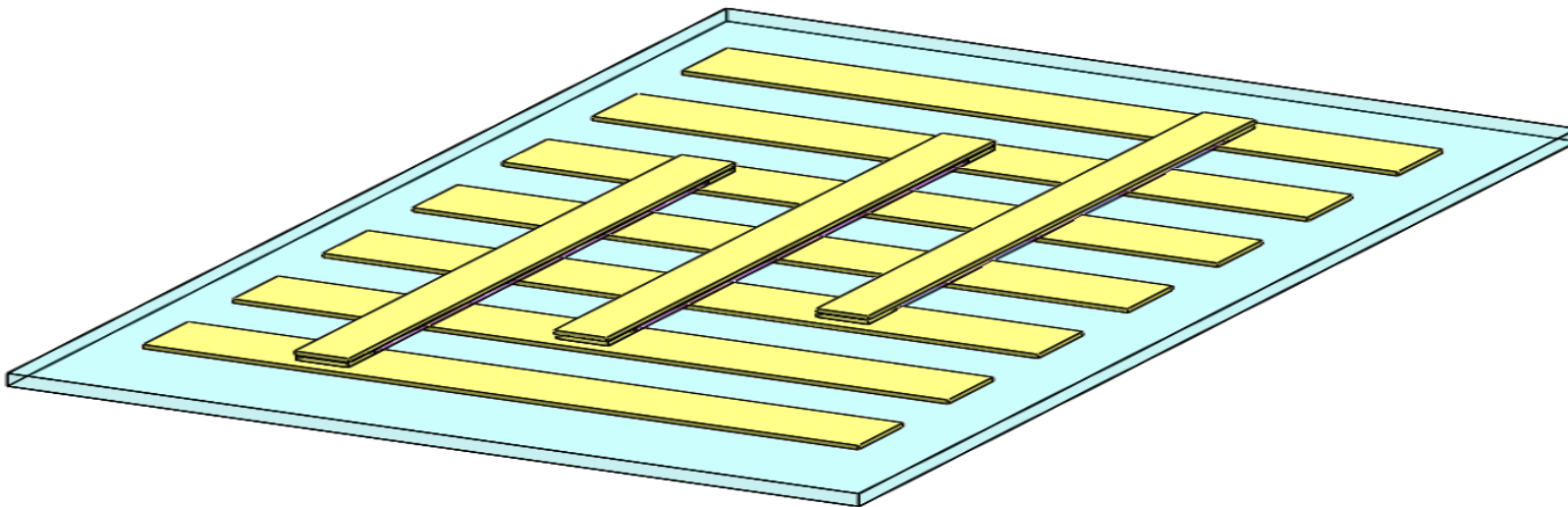
2단 COG(3D COG) 공정도



9. 3rd PR Pattern1



10. 3rd Metal pattern



11. PR 제거후 최종모습



Thank You!

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