

SQUAT Fab Process

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Dolan Junction version

Pictures not to scale, especially towards the end....

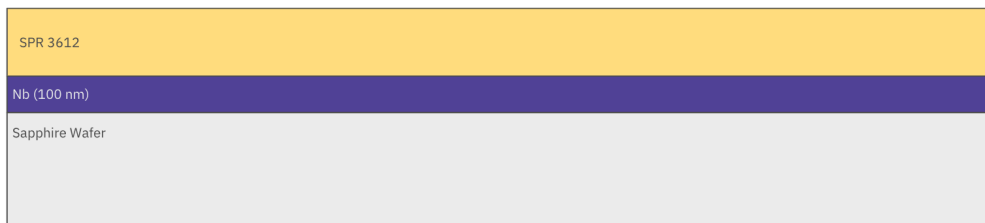
Wafers that follow this process: Nb231204, Nb230126

Step #1: Optical layer (Nb)

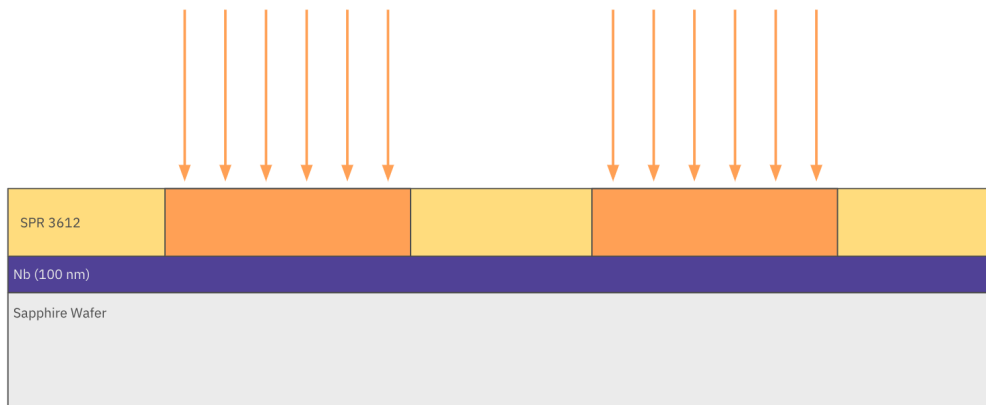
Plassys 0.7nm/s



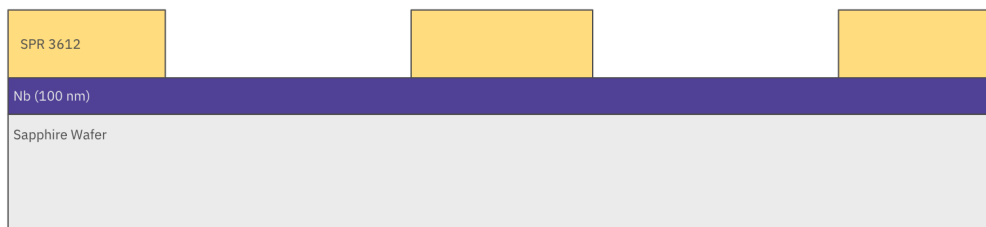
Manual Headway2 Spinner



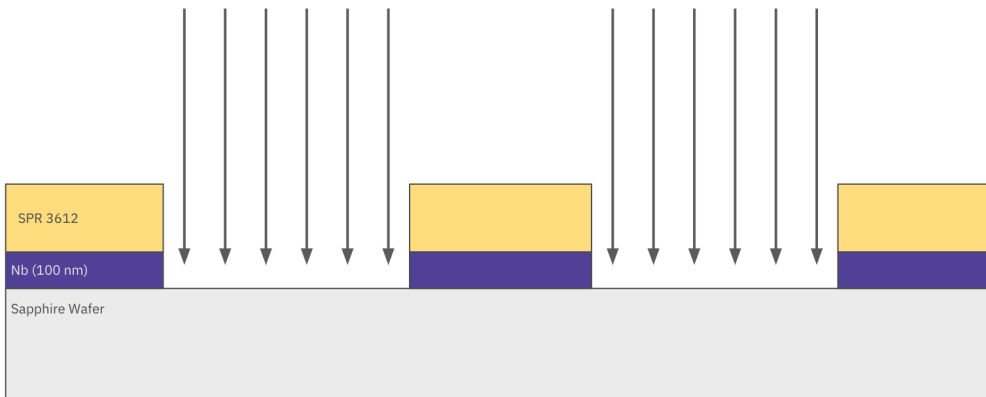
Heidelberg Optical Exposure



Manual Develop in MF26A



PT-MTL Dry Etch (mostly SF₆)



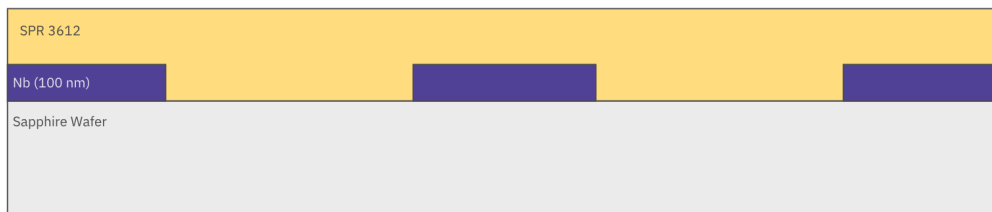
Strip Resist with 80C Remover PG



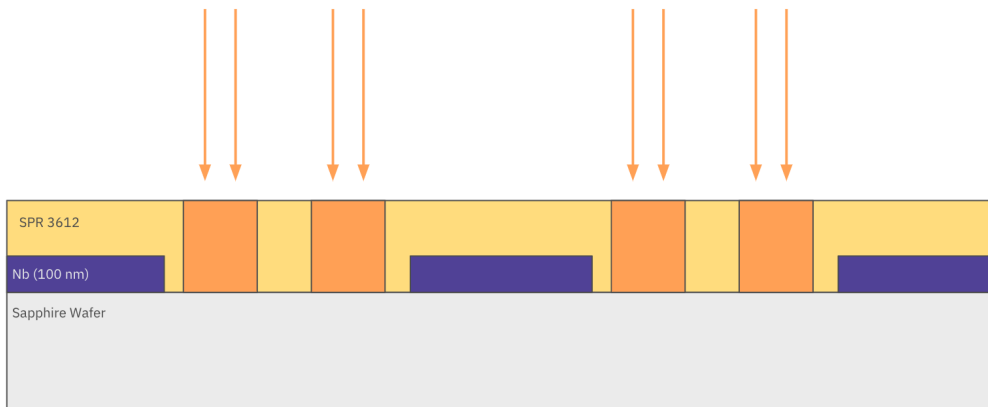
Step #2: Optical layer (Al fins)

Current fin height is 200nm, but we want to get to 600nm eventually

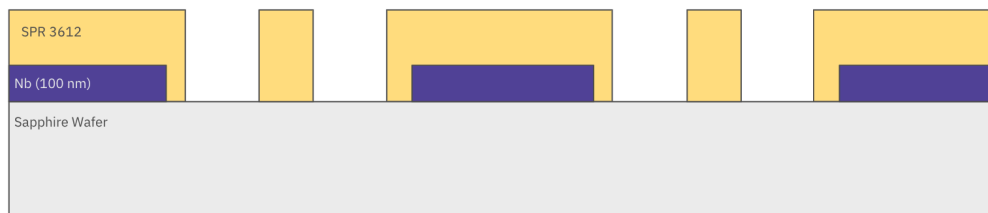
Manual Headway2 Spinner



Heidelberg Optical Exposure



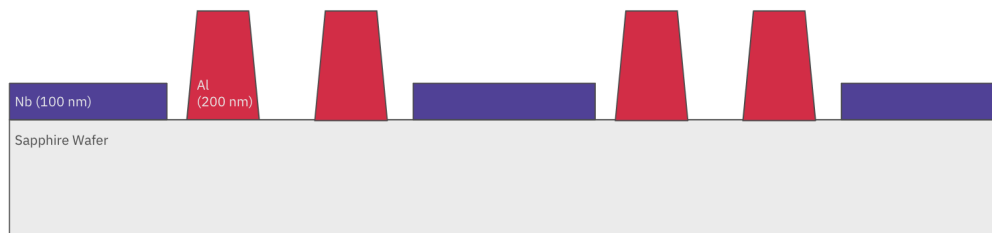
Manual Develop in MF26A



Plassys Al 0.3nm/s

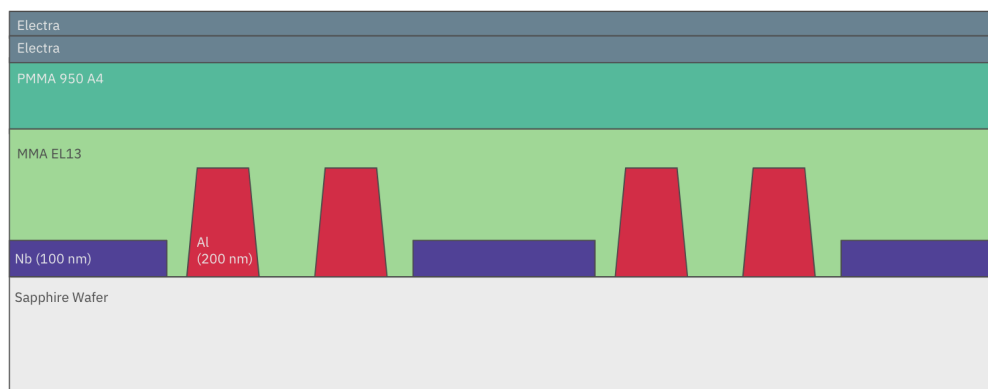


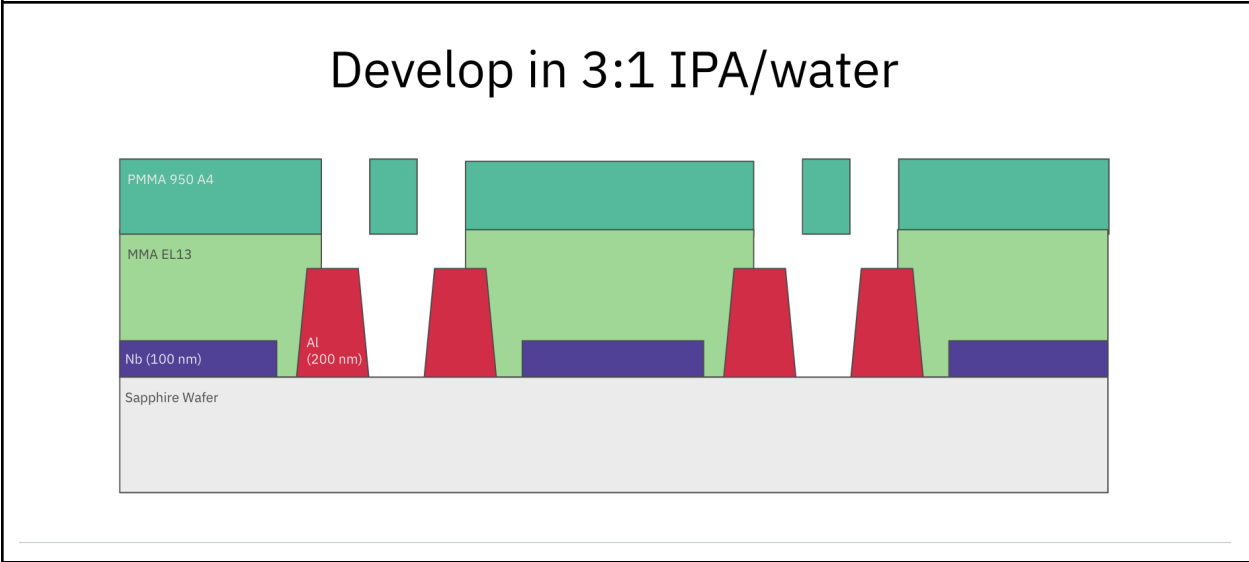
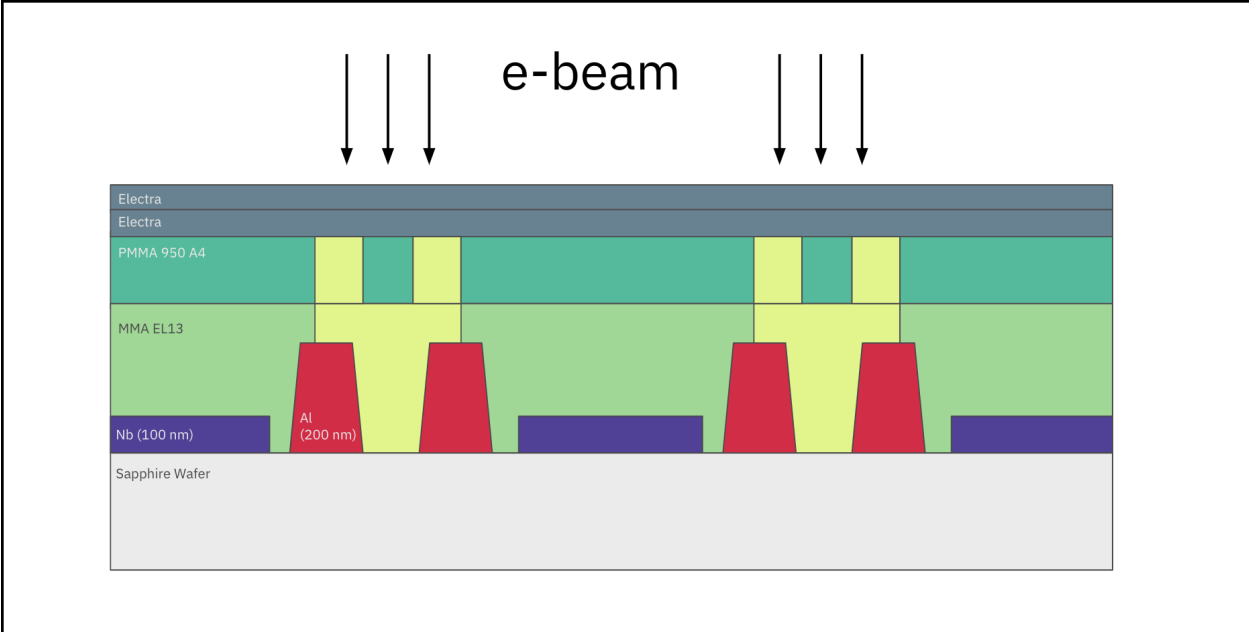
Liftoff in Remover PG overnight



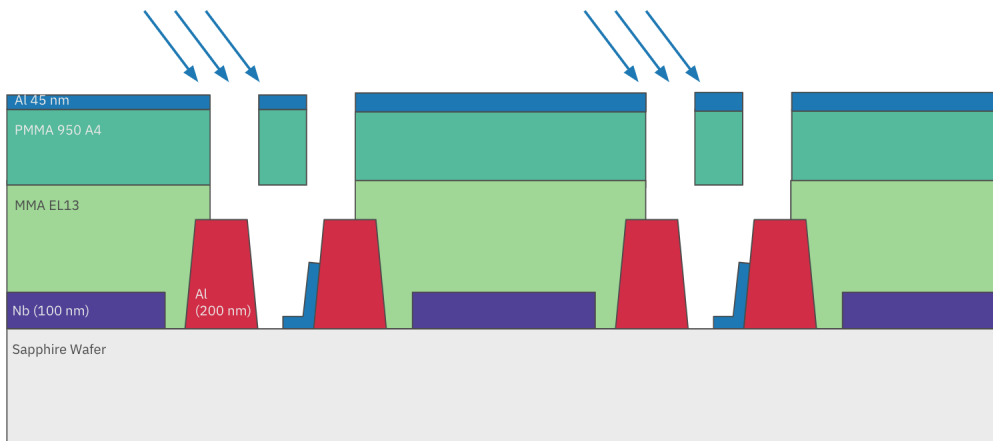
Step #3: E-beam junction layer

Spin e-beam resist

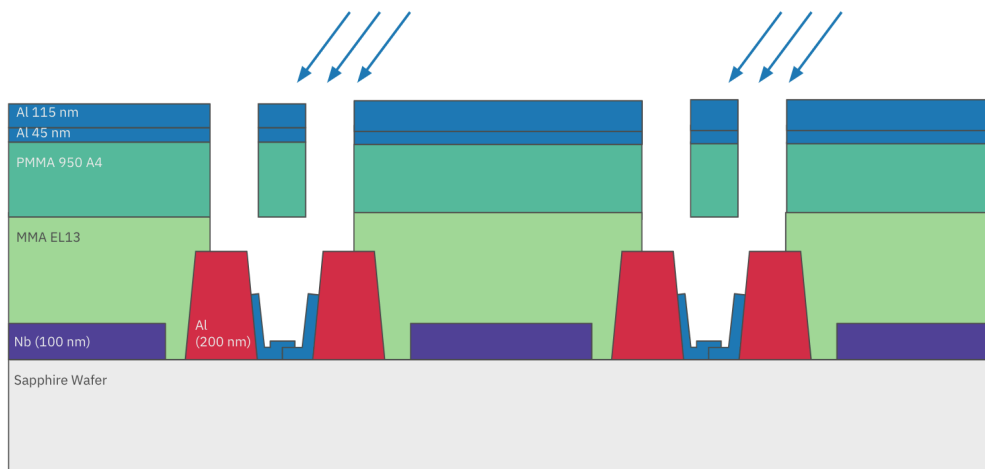




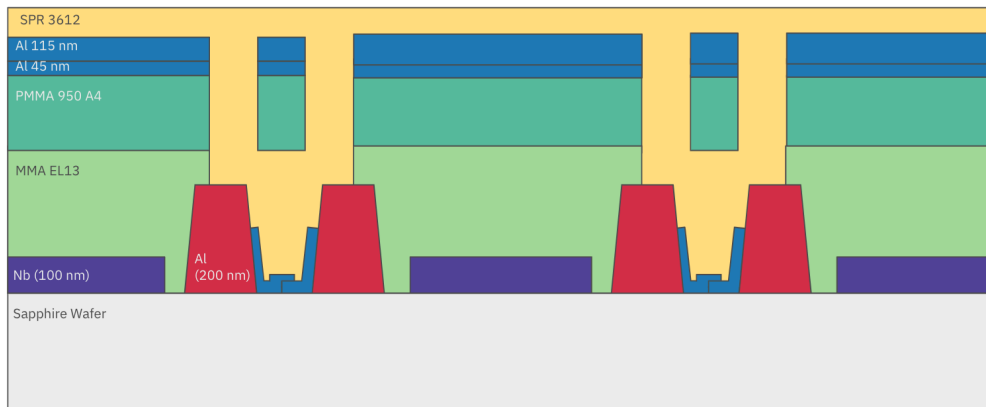
Plassys Al 0.3nm/s, -23deg



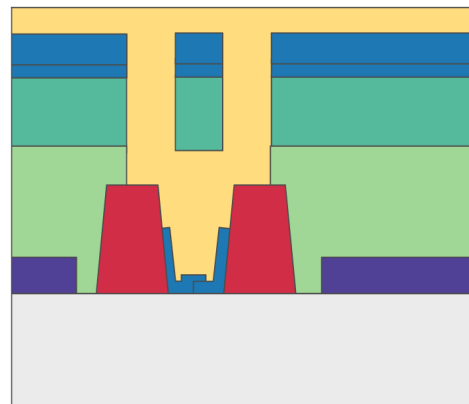
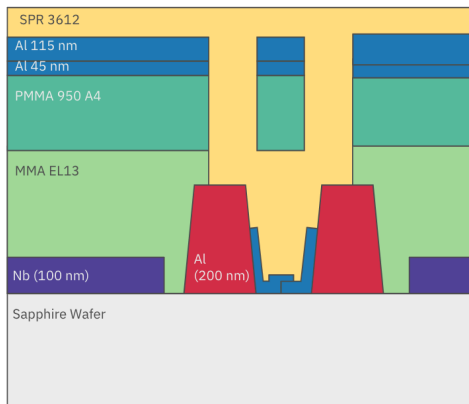
Plassys Al 0.3nm/s, +23deg



Manual Headway2 Spinner



Dicing



Liftoff in Remover PG

