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| Objective |
| Batch name: Process template |
| This process flow is a guideline on how to spin coat, expose, and develop AZ 5214E on 4” substrates such as Si, SiO2 and Borofloat, using Spin Coater: Gamma e-beam & UV, KS Aligner and Developer: TMAH UV-lithography.  |

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| Step Heading | Equipment |  | Comments |
| 1. Pretreatment
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| * 1. Surface treatment
 | BHF dip *or*250C oven | BHF dip for Si substrates (30 sec, H2O 5 min) Overnight bake  | HMDS pretreatment can course bobbles in resist during exposure.  |
| 1. Spin coat of AZ4562
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| * 1. Clean resist nozzle
 | Spin Coater: Gamma e-beam & UV | Clean spinner nozzle before every batch |  |
| * 1. Coat wafers
 | Spin Coater: Gamma e-beam & UV | **Resist:** AZ4562 (CO2 line 4)**Spin:** 30 s @ 2000 rpm (for 10µm)**Softbake:** 300 s @ 100 °C, 1mm proximity**Sequence:**(4410) DCH 100mm AZ456 10um | Resist thickness can be measured with FilmTek |
| 1. Exposure
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| * 1. Exposure
 | KS AlignerorAligner: MA6 – 2 | **Mask:** your mask**Exposure mode:** Soft contact**Exposure dose:**450 mJ/cm2 for KS520 mJ/cm2 for MA6 – 2**Exposure time:**64 s @ 7 mW/cm2 for KS40 s @ 13 mW/cm2 for MA6 – 2 | Activate multiple exposure, e.g. 4 steps with 10 s pause between exposure steps.Information on exposure dose for other thickness, aligner, or developer: http://labadviser.danchip.dtu.dk/index.php/Specific\_Process\_Knowledge/Lithography/UVExposure\_Dose |
| 1. Development
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| * 1. Develop
 | Developer: TMAH UV-lithography | **Development in TMAH (AZ 726 MIF):** Multiple puddle, 4 x 60 s**Sequence:**DCH 100mm MP 4x60s |  |
| 1. Inspection
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| * 1. Inspection
 | Optical microscope | Inspect pattern / alignment mark / process monitor |  |