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| Objective |
| Batch name: Process template |
| This process flows is a guideline on how to spin, develop and rinse AZ5214E on substrates as Si, SiO2 and SOI, using the SSE Spin coater and Aligner-6inch or KS Aligner, in case you will do lift-off process. |

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| Step Heading | Equipment |  | Comments |
| 1. Pretreatment | | |  |
| * 1. Surface treatment | BHF dip  *or*  HMDS  or  Track 1 or 2 | BHF dip for Si substrates (30 sec, H2O 5 min)  HMDS treatment for SiO2 and III-V substrates  Recipe: T1T2 HMDS only |  |
| 1. Spin coat of AZ5214E 1.5µm | | |  |
| * 1. Clean spinner | SSE spinner | Clean spinner nozzle and run the dummy wafers  Recipe: 1.5 4inch | 1-3 dummies  Note time in logbook |
| * 1. Coat wafers | SSE Spinner | **Resist:** AZ5214E  **Recipe:** 1,5um\_4inch or 1,5um\_6inch  **Softbake:**  Is included in the spinning recipe  90sec@90deg | Resist thickness can be measured on FilmTek  Recipe: resist\_QC\_9points |
| 1. Exposure | | |  |
| * 1. Exposure | Aligner-6inch  KS Alignment | **Recipe:** DCH\_1,5\_FPA\_rev in case you will not align  Or DCH\_1,5\_TSA in case you do a Top Side Alignment  **Exposure mode:** Hard Contact  **Exposure time:** 1,7 sec  **Mask**: your mask  **Reverse Bake:** ….  **Exposure mode: Flood exposure**  **Exposure time: 30 sec**  **Exposure mode:** Hard Contact  **Exposure time:** 3,5 sec  **Mask**: your mask  **Reverse Bake:** 100sec@110deg  **Exposure mode: Flood exposure**  **Exposure time: 30 sec** | We suggest you do a dose test exposure to find an optimum exposure for your process.  Remove your mask and do flood exposure  Use 110deg HotPlate |
| 1. Development & Rinse | | |  |
| * 1. Develop | Developer bench or  Developer-6inch  Developer TMAH UV-lithography | Develop in 351B for 60±10 sec  Develop in TMAH for 60 sec puddle | Rinse and spin dry included in developing recipe |
|  | Wet bench/ Spin dryer | Rinse in DI water for 5 min (300±30 sec).  Spin dry |  |
| 1. Inspection | | |  |
| * 1. Inspection | Optical microscope | Check pattern and alignment marks | Optical microscope |