Ma-N 2410 process:

Substrate prepration and coating:

- Substrate cleaning with acetone, IPA and DI water and drying using Nitrogen gun and hot-plate
- Spin coating the ma-N 2410 resist with 3000rpm for 30sec (Program B of Laurel can be used)
- Prebake at 90°C for 150 sec

Exposure:

- Using 20 keV e-beam with the exposure does of 100-200 $\mu C\ cm^{-2}$. Exposure dose depends on the feature size and the substrate type. Smaller exposure dose should be used for less conductive substrates and smaller feature sizes.)
- Using deep UV with exposure dose of $420 \pm 50\ mJ\ cm^{-2}$

Developement:

- Develop at ma-D 525 for 2-5 mins (ultrasonic bath can be used for smaller feature size)
- Rinsing with DI water and drying

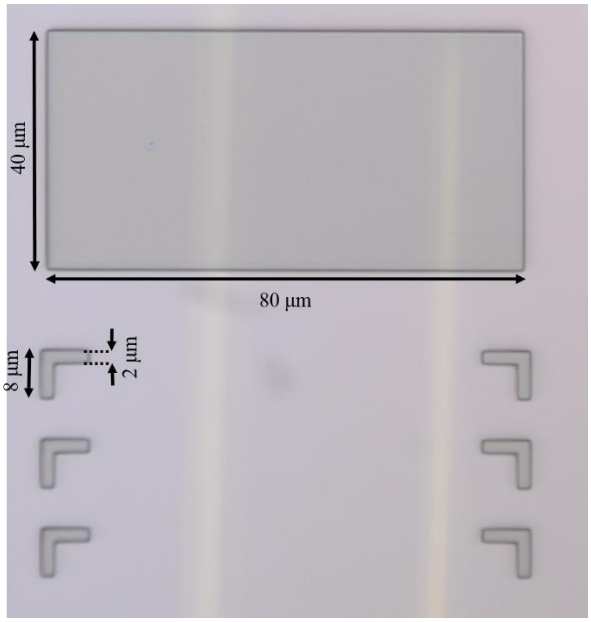
Hard bake (optional):

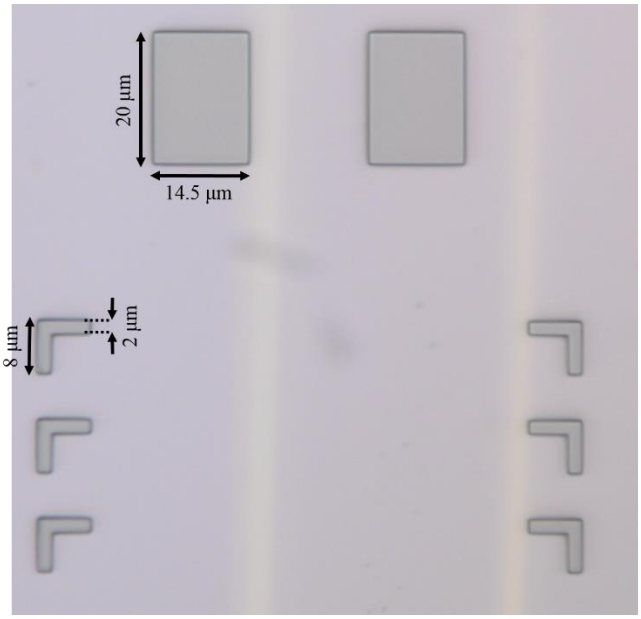
- If required, the etch resistance and the thermal stability of the resist can be further increased. Hardbaking of the developed resist patterns is suggested in an oven at 100 °C for approximately 5-15 min.

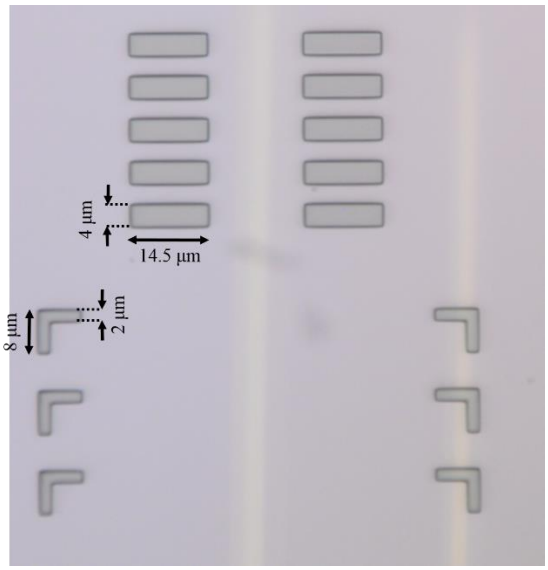
Resist Removal:

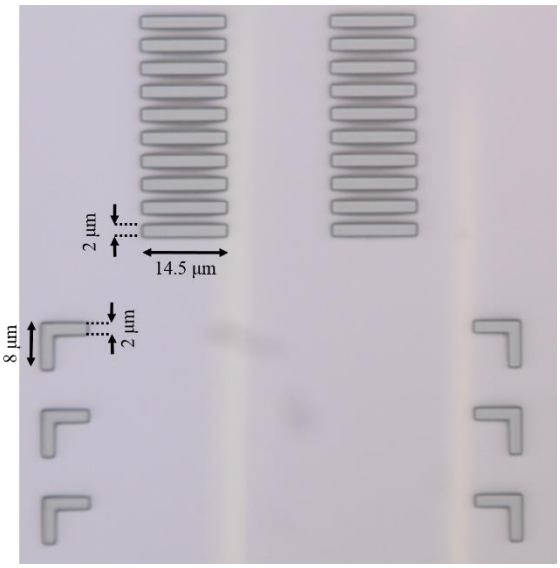
- Using aceton (ultrasonic bath can be used)

Here you may find the pictures of some patterns generated by maN 2410.



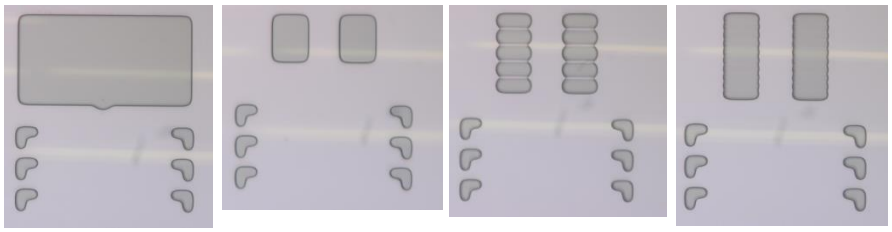






The following figures show the effect of development time for the samples mentioned before.

Develpment time: 130 secs



Develpment time: 5 mins (in ultrasonic bath)