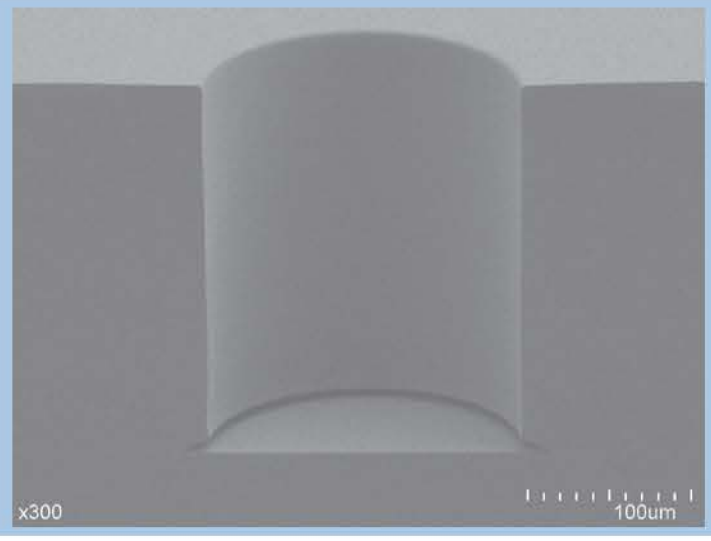
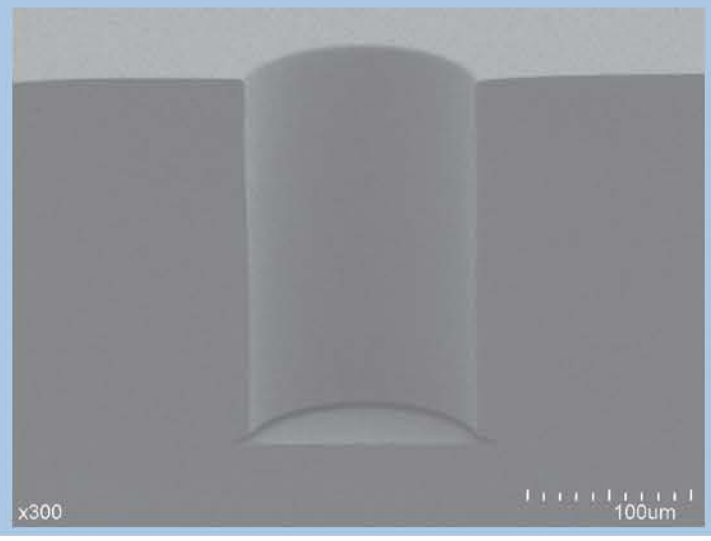
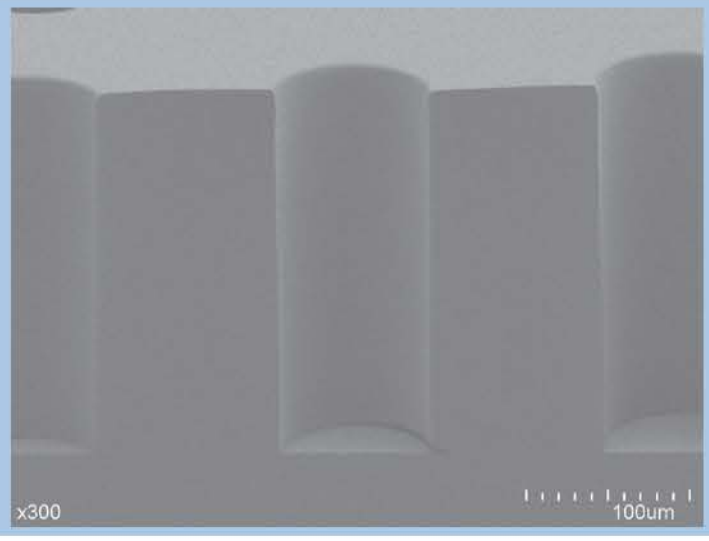
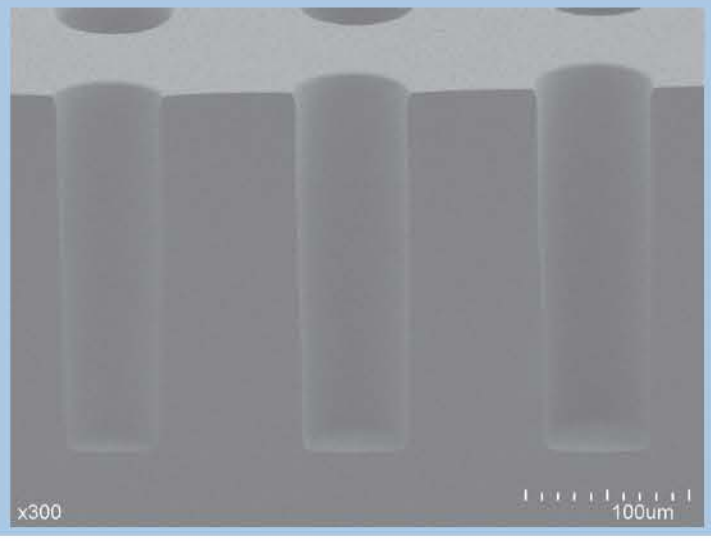
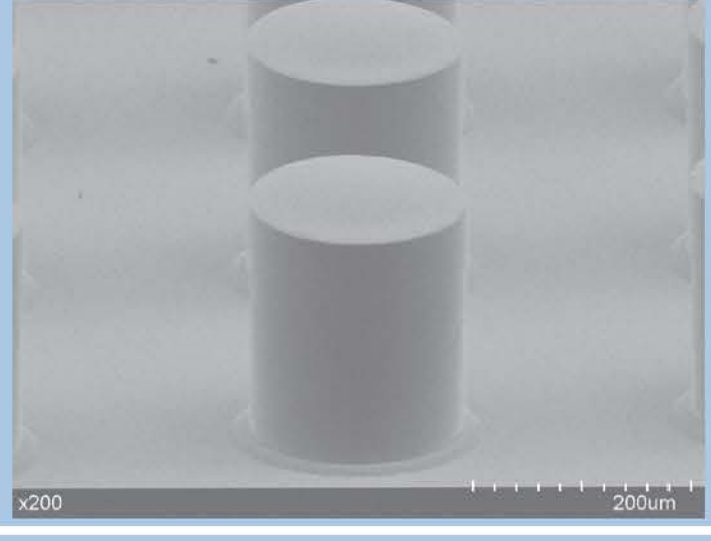
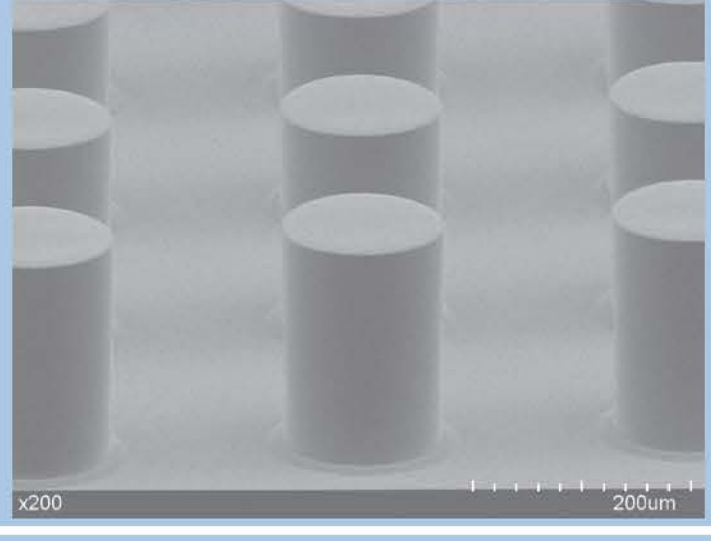
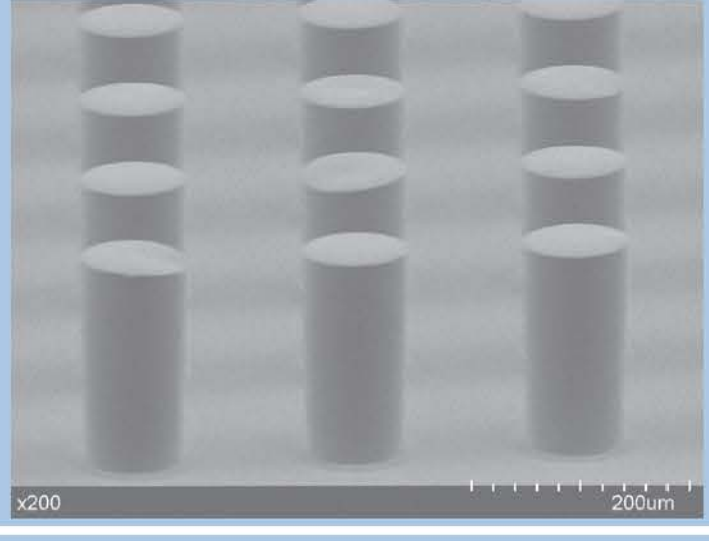
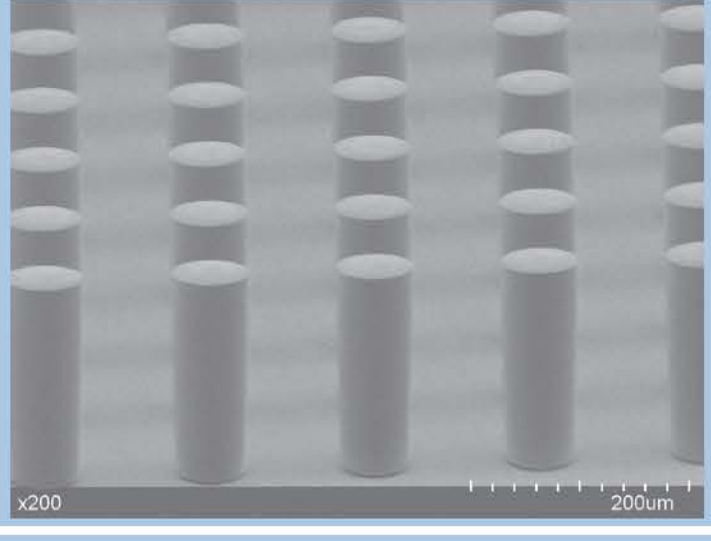


JSR ELPAC™

THB series Thick Layer Photoresist

for High Metal Pillar Bumping

ϕ	200 μm	150 μm	100 μm	75 μm
Before plating				
After plating				
Cu plating height	226 μm	214 μm	200 μm	190 μm

< Patterning Conditions >

Substrate: Cu sputter wafer, Soft-bake : 120 C / 5 min(1st), 120 C / 10 min(2nd), Film Thickness after Dev.: 240 μm

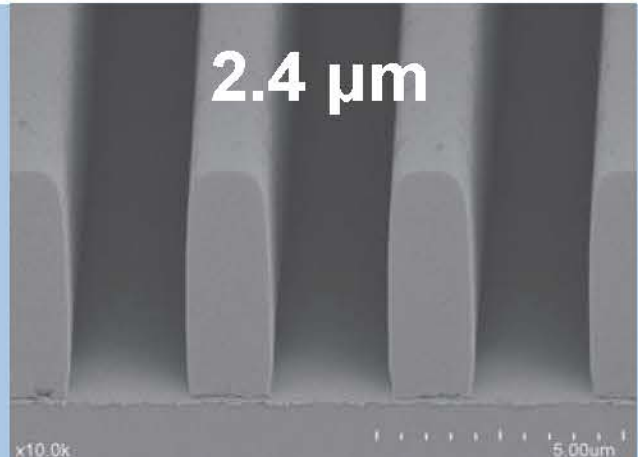
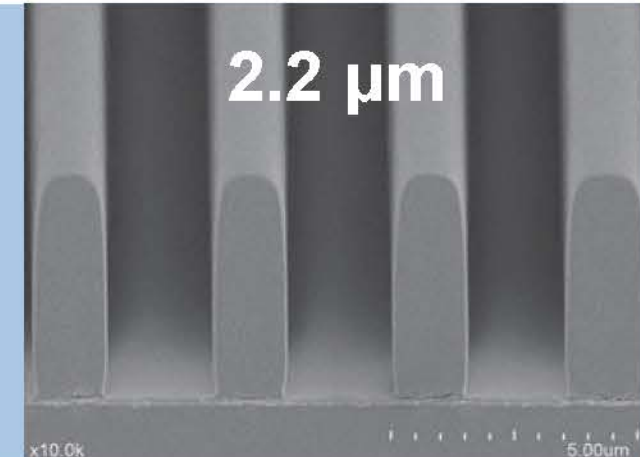
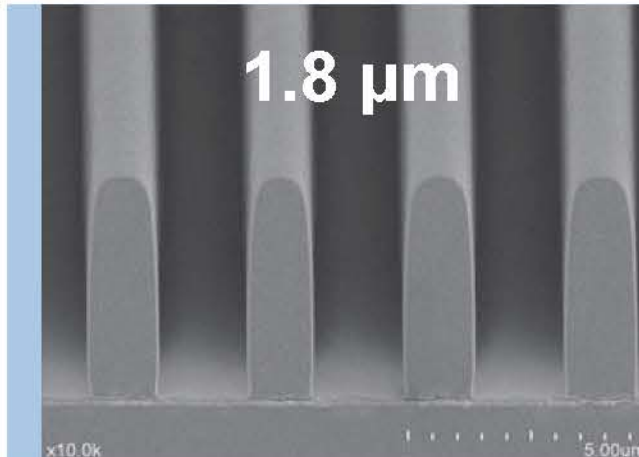
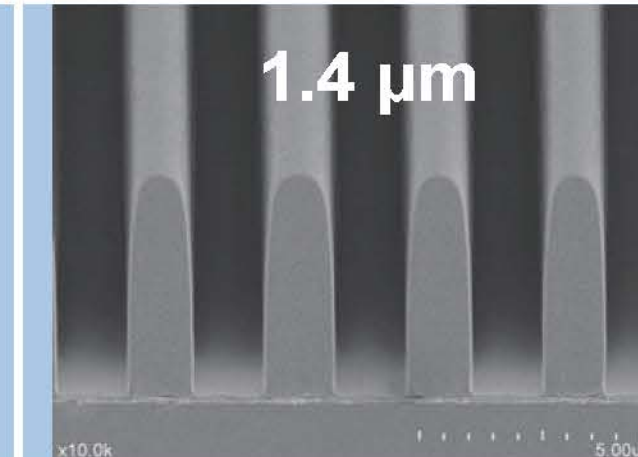
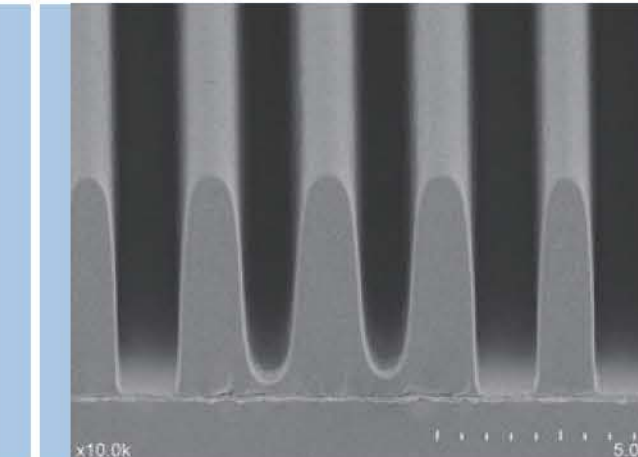
Exposure: 1000 mJ/cm^2 (ghi-line UT stepper, NA=0.16, sigma=1.00 , Focus=20 μm inside from film surface), Development : 60 sec x 6 times / 2.38 wt%TMAH

< Plating and Stripping Conditions >

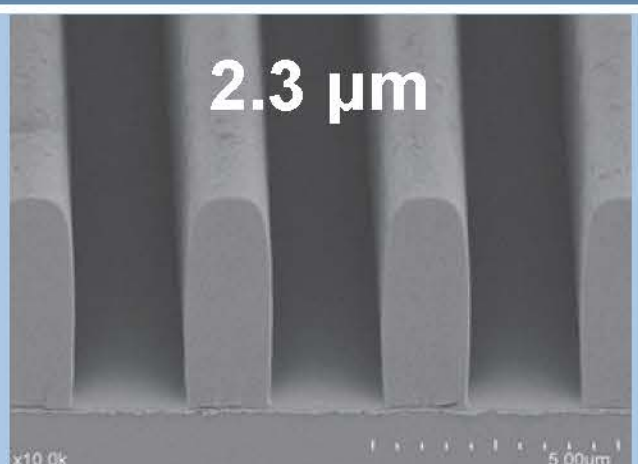
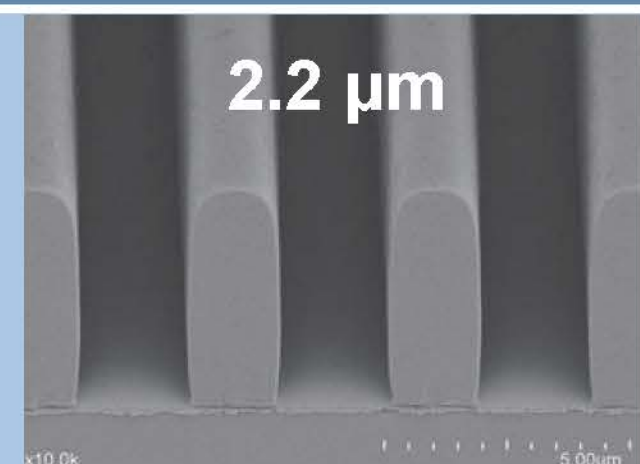
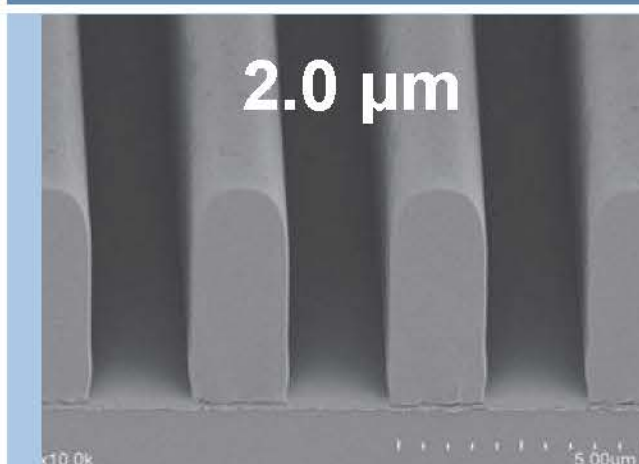
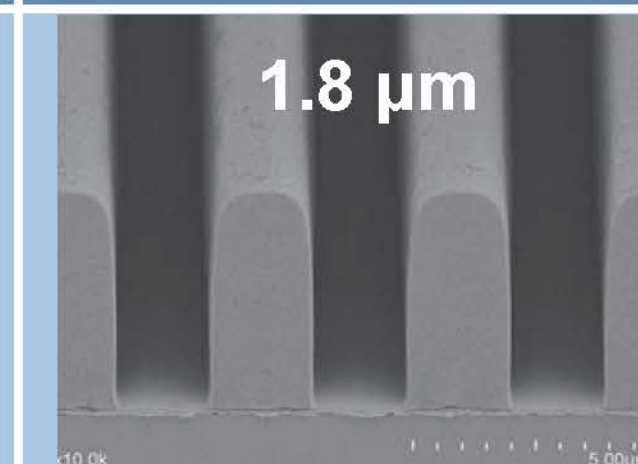
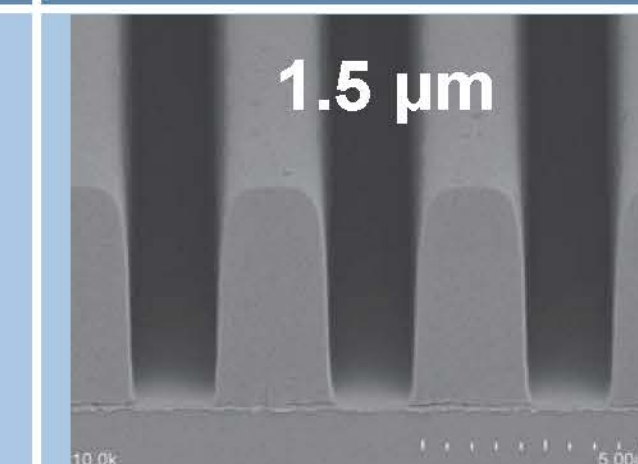
Plating: Cu ## μm (Cu350@EEJA), stripping: 40 min / 40 C / DMSO+TMAH stripper

for Fine Pitch RDL

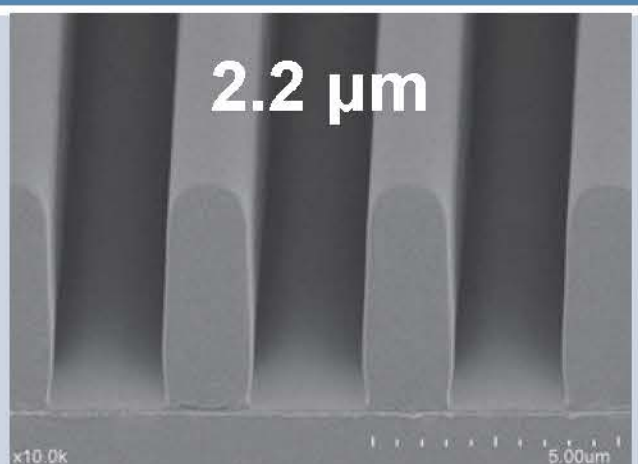
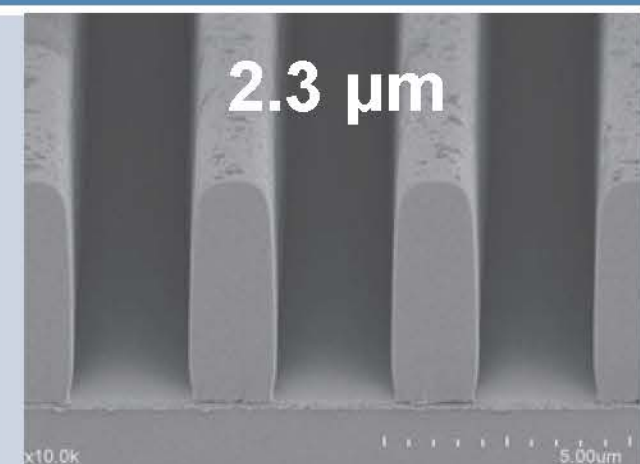
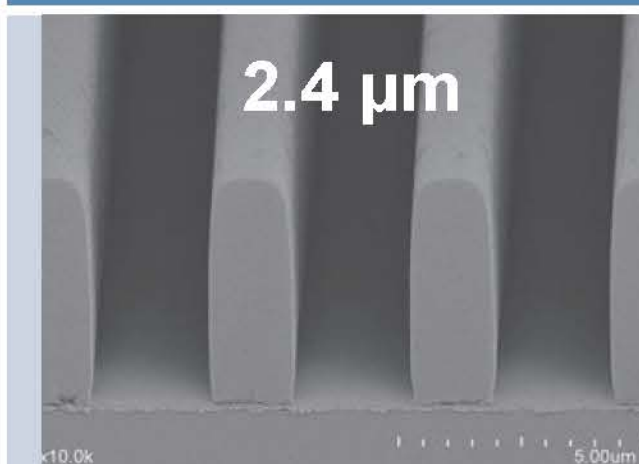
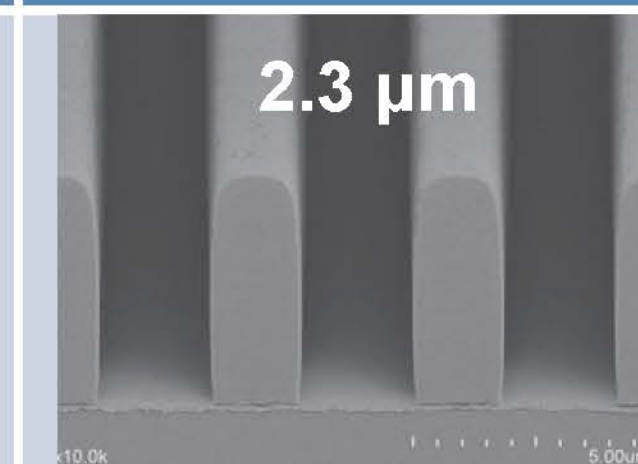
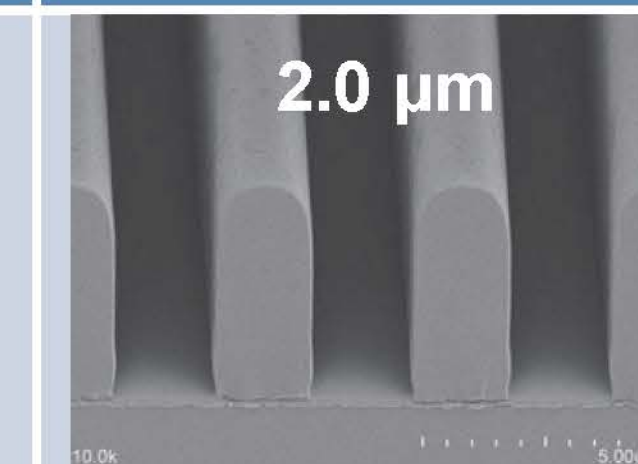
◆ Resolutions

L/S	2.0 μm	1.8 μm	1.6 μm	1.4 μm	1.2 μm
170 mJ/cm^2					

◆ Dose margin

Dose	140 mJ/cm^2	155 mJ/cm^2	170 mJ/cm^2	185 mJ/cm^2	200 mJ/cm^2
2 μm L/S					

◆ DOF margin

Focus	-5 μm	-2.5 μm	0 μm	+2.5 μm	+5 μm
170 mJ/cm^2 2 μm L/S					

< Standard Patterning Conditions >

Substrate: Cu sputter wafer, Film Thickness after Dev.: 5 μm , Soft-bake : 110 C / 3 min,

Exposure: ### mJ/cm^2 (Canon FPA-5520 iV(i-line), NA=0.18, Focus= # μm inside from film surface),

Development : 60 sec x 2 times / 2.38 wt%TMAH