

GCA AS200 Autostep 5X i-line Stepper

Instrument	Resist	Prebake	Exposure Time, PEB	Development
AS200	OiR 620-7i	90°C, 60 sec.	0.18, 115°C, 60 sec.	726 MIF, 60 sec.
AS200	SPR700-1.2	95°C, 60 sec.	0.22, 115°C, 60 sec.	726 MIF, 60 sec.
AS200	AZ nLOF 2000	110°C, 60 sec.	0.14, 110°C, 60 sec.	726 MIF, 120 sec.
AS200	SPR955CM-0.9	90°C, 90 sec.	0.25, 120°C, 90 sec.	726 MIF, 60 sec.
AS200	SPR955CM-2.1	90°C, 90 sec.	0.3, 120°C, 90 sec.	726 MIF, 60 sec.
AS200	SPR220-3.0	115°C, 90 sec.	0.35, 115°C, 90 sec.	726 MIF, 90 sec.
AS200	SPR220-7.0	115°C, 90 sec.	0.7, 115°C, 90 sec.	726 MIF, 120 sec.
AS200	AZ P4903	115°C, 90 sec.	(wait 45 min.) 5.0	AZ 421K, 3 min.

Note: all exposure times are approximate. Your process may be 0.5-2x these values or more.

The AS200 stepper uses 365nm illumination. These resists are specified as i-line or broadband; g-line resists should not be used. Output is measured to be $\sim 250\text{mW/cm}^2$ @365nm. Post exposure bake (PEB) is required for most of these processes.

Image reversal: expose as usual, run YES oven NH₃ process, flood expose 60 sec. using the ABM, develop 60 sec. in MF-321. Thicker films may require 726 MIF or longer develop times.

Image reversal for these resists should be fully characterized in the usual way. Be sure to measure the resist thickness after development to make certain that full height is retained. Underexposure will result in thinner resist with poor sidewall profile.