

## CNF Contact Aligners

<b>Instrument</b>	<b>Resist</b>	<b>Prebake</b>	<b>Exposure Time</b>	<b>Development</b>
ABM / MA6	S1805	115°C, 45 sec.	0.9	726 MIF, 60 sec.
ABM / MA6	S1813	115°C, 60 sec.	1.4	726 MIF, 60 sec.
ABM / MA6	S1818	115°C, 60 sec.	1.8	726 MIF, 60 sec.
ABM / MA6	S1827	115°C, 90 sec.	2.8	726 MIF, 60 sec.
ABM / MA6	SPR700-1.2	95°C, 60 sec.	5.5	726 MIF, 60 sec.
ABM / MA6	AZ P4903	115°C, 90 sec.	(wait 45 min.) 15	AZ 421K, 3 min.

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

The Contact Aligners use 405-365nm broadband illumination. These resists are specified as g-line or broadband, but i-line resists can be used as well. Output is measured as  $\sim 15\text{mW/cm}^2$  @405nm, and  $\sim 12\text{mW/cm}^2$  @365nm. Post exposure bake (PEB) is not required for these processes.

**Image reversal:** expose as usual, run YES oven NH<sub>3</sub> 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 S1800 series resists requires 4-5X normal dose; this can be characterized by exposing test doses and developing (without NH<sub>3</sub> baking) in MF-321 for 60 sec. The best dose for this process will be very close to the correct reversal dose. The reversal dose should still 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.