

**CHEMICALLY AMPLIFIED POSITIVE PHOTORESIST COMPOSITION FOR
IMPROVING PATTERN PROFILE AND RESOLUTION**

ABSTRACT

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The present disclosure relates to a chemically amplified positive photoresist composition for improving a pattern profile and resolution. The chemically amplified positive photoresist composition is characterized by including, based on the total
10 weight of the composition, 5 to 60 wt% of a polymer resin, 0.1 to 5 wt% of an under-pattern acid generating aid monomer additive represented by Formula 1 to Formula 3, 0.05 to 10 wt% of a photo acid generator, 0.01 to 5 wt% of an acid dispersion inhibitor, and the remainder of a solvent. The chemically amplified
15 positive photoresist composition provides an improved vertical profile and improved resolution and sensitivity compared to conventional positive photoresists and does not generate residual scum. Thus, the chemically amplified positive photoresist composition has excellent process margins.