

Abstract Submitted  
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**Investigation of Quality Factors in Multistage Photolithography**

CODY JOHNSON, Sonoma State University — This experiment was conducted to identify factors in the photolithography process that cause either a vertical or slumped undercut, thus providing a lower yield of usable features due to poor lift off of coating. Five parameters were altered to survey their individual effect on the profile of the undercut. Each parameter: developer time, exposure dose, spin speed, hard bake temperature and time; is representative of an integral step in the photolithography process. The wafers, after being processed, were then diced using a scribe and break machine and analyzed using a Nikon Nexiv microscope to identify the profile of the undercut and calculate its angle

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