

초청강연 I

# Optical Equipment in Computer Manufacturing

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## Abstract

The fabrication of computer components requires a great variety of optical equipment. The patterning of integrated circuits is performed either on step-and-repeat cameras, scanning systems or step-and-scan systems. The image forming optics used in these machines is quite difficult to design and fabricate. In addition several layers of patterns must be precisely superposed, and also the illuminators have to provide the final irradiance in the image plane constant to within 1%. Other uses of specialized optical equipment are mass production of chip packages, inspection scanners and laser ablation cameras for polymers. The details of some of these systems will be described with particular emphasis on different optical structures and the use of excimer lasers as light sources.