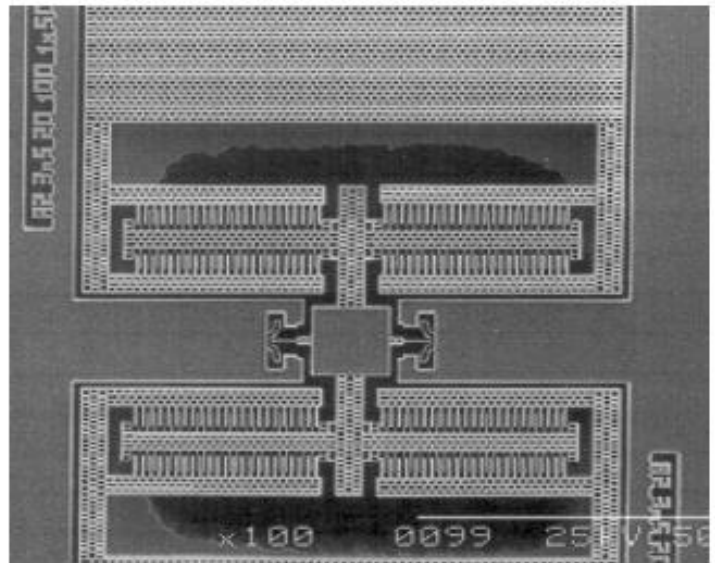
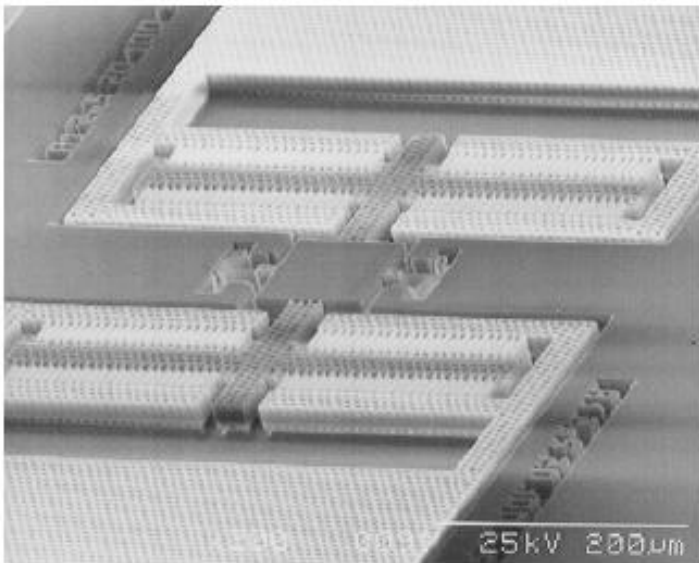
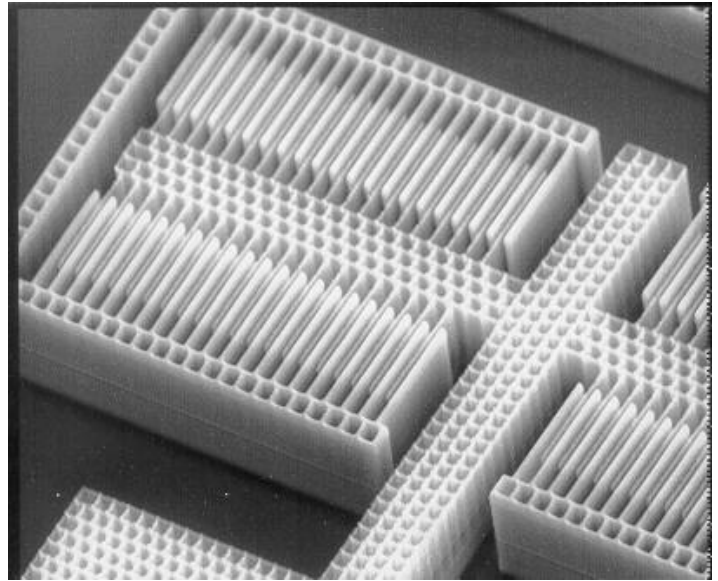
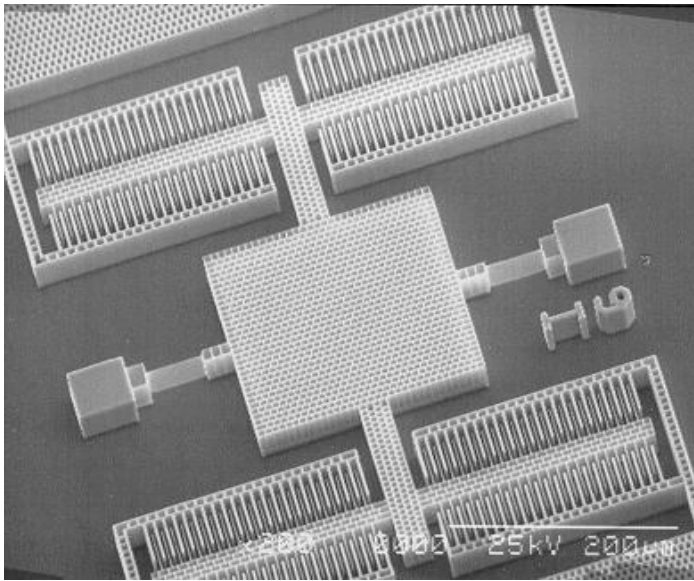


# Multilevel Comb-Drive Actuators



The images above display micrographs of completed kHz-rate analog micromirror devices fabricated in monolithic single-crystal silicon (non-SOI, no buried insulator layer). The fabrication procedure employed a single-mask and was based on a derivative of the SCREAM (single-crystal reactive etch and metallization) bulk micromachining process developed in Noel MacDonald's group at Cornell University. Through careful design and processing, these devices feature non-overlapping vertical comb-drive actuators with minimum linewidths of 0.5  $\mu\text{m}$ .

*This work was performed in cooperation with K. Subramanian, M. P. Rao, A. Riley, S. Boeshore, and N. C. MacDonald.*

