0-3 INVITED: SILICON INTEGRATED CIRCUIT TECHNOLOGY by

M. P. Lepselter

Bell Telephone Laboratories, Inc.

555 Union Boulevard, Allentown, Pennsylvania USA

ABSTRACT

The development of silicon integrated circuit technology has continued unabated over the years, leading to the availability of complex devices with thousands of components per chip. The path to LSI devices has been led by the advances in MOS technology, but bipolar devices are not far behind in complexity. Both families are in the midst of a technology development boom.

This talk will describe some of the current device development activities being pursued by semiconductor manufacturers around the world (e.g. - ion implantation, metalization, silicon gate MOS techniques, isolation-junction, and dielectric).