

GaAs MMIC Technology: Past, Present and Future
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ABSTRACT

MMIC technology has been an extremely active area of research and development for about 20 years. During the most recent six or so years, MMIC technology has matured to a level wherein literally hundreds of production parts are available from more than 30 vendor companies, worldwide. For most of this period, the dominant "market" for MMIC based products has been military end use. It has been recognized for a number of years that military markets alone will not provide sales opportunities sufficient to support the full body of MMIC vendor companies. Commercial markets for GaAs based products have been, and remain, the "hope for our future".

This presentation will examine some of the decisions that dictated technological choices which underlie current MMIC design and production capability. A brief history of MMIC sales will be provided. Important aspects of GaAs MMIC materials history, progress in fabrication technology, the status, past and present, of design capability and demonstrated MMIC performance trends will be discussed. The presentation concludes with some brief personal speculations on what the future might be for our industry.