

PANEL SESSIONS

Panel I: Millimeter-Wave Measurements

Date: Wednesday, May 30, 1984, 8:00 pm to 10:00 pm
Room: San Francisco A, Hyatt Regency Hotel
Organizer: James Wiltse, Georgia Tech (EES), Atlanta, GA (404) 894-3494
Moderator: James Wiltse

Abstract

The panel will discuss the current problems, accuracies, and reference standards relating to reproducible measurements from about 30 to 100 GHz. The types of measurements include power, frequency, frequency stability, scattering parameters, oscillator noise, noise figure, and other properties for which the measurement accuracy becomes poorer at higher frequencies.

The discussion will also include new measuring techniques and instruments, as well as accurate measurements of the properties of materials such as GaAs and low-loss dielectrics.

Panel II: MMIC's, A Prognosis Update

Date: Wednesday, May 30, 1984, 8:00 pm to 10:00 pm
Room: San Francisco B, Hyatt Regency Hotel
Organizers: Marvin Cohn, Westinghouse Electric Corp., Baltimore, MD,
Douglas W. Maki, Hughes Aircraft Co., Torrance, CA
Panelists: Dr. Robert Weck, ERADCOM, Ft. Monmouth
Mr. David McQuiddy, Texas Instruments Co.
Dr. Jim Oakes, Raytheon Corporation
Mr. Bert Berson, Eagle Package Co.
Mr. Douglas Maki, Hughes Aircraft Co.
Moderator: Marvin Cohn

Abstract

There have been rapid growth and extraordinary advances in the development of MMIC's during recent years. But low cost, the principal justification for this technology, has yet to be demonstrated. Costs are a function of processing yields, testing, chip selection criteria, and packaging.

This panel will attempt to update yield and cost projections, and to discuss the interaction of yield and specifications. They will evaluate the cost impact of testing at various levels—the undiced wafer, the chip, and the assembled multichip package. Probes, required for d.c. and RF measurements, affect chip selection, subsequent packaging, and additional testing—all bearing on cost. What is the cost impact of “out of spec” performance at this last stage? Is the concept of trimming MMIC's worth investigating?

Panel III: Japan/USA Competition in Technology

Date: Thursday, May 31, 1984, 3:30 pm to 5:30 pm
Place: Main Arena, Civic Auditorium
Panelists: John Arnold, Vice President, Harris Corp., San Carlos, CA
William Finan, U.S. Department of Commerce, Washington, DC
H. William Tanaka, Counselor at Law, Washington, DC
Keisuke Yawata, President of NEC Electronics, USA, San Mateo, CA
Moderator: Leo Young, Office of the Undersecretary of Defense for Research and Development,
Washington, DC

Abstract

Over the past two decades, American industries have witnessed massive Japanese inroads in both domestic and overseas markets across a broad spectrum of products including automobiles, steel, motorcycles, and consumer electronics. Is high technology in danger of also falling behind Japan? After the oil shock in 1973, Japan's Ministry of International Trade and Industry (MITI) placed a major thrust on high technology, particularly in the semiconductor, communication, and information processing industries. What impact will this have for microwave engineers? How important is MITI to Japan's industrial success? What is the importance of their industrial success? What is the importance of their industrial approach, management style, and quality assurance? This panel will help prepare the microwave community for the coming challenges.