1998 MICROWAVE APPLICATION AWARD

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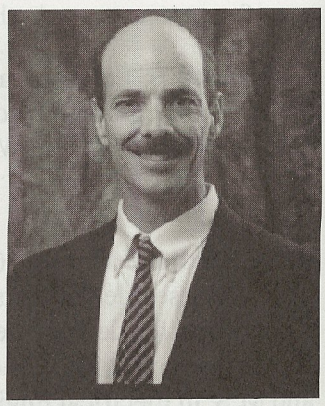

Mr. David D. Heston (S'82, M'83) is a Senior Member of the Technical Staff in the RF/Microwave department at Raytheon TI Systems (RTIS). He joined Texas Instruments in 1981 as a summer Fellowship student from the University of South Florida where he graduated with an MSEE and BSEE in 1983.

Mr. Heston has designed a wide variety of monolithic microwave integrated circuits including: 2-, 3-, and 4-stage LNAs, high efficiency amplifiers (from 0.25 watt to 5 watt output power levels), broadband single-pole 2-, 3-, and 4-throw switch circuits (both MESFET and PIN diode technologies), distributed amplifiers (both low noise and medium power), phase shifters, pin diode switched limiter circuits, and attenuators (both digital and variable).

From 1983 to 1993, Mr. Heston worked closely with the Central Research Laboratory of Texas Instruments (now part of TriQuint Semiconductor Texas) in the development of a number of advanced microwave devices: low noise FETs/pHEMTs, GaAs PIN diodes, and heterostructure power devices.

His work with low noise devices led to two patents involving series feedback for low noise amplifier designs. His work with GaAs PIN diodes led to two patents in the area of limiters and switched limiters.

From 1996 - 1998, Mr. Heston has been the technical lead for a cross functional engineering team investigating HFET and pHEMT device anomalies, their impact on circuit performance, and determination of solutions at both the device and circuit level.

Mr. Heston has four U.S. patents and has coauthored more than 20 technical articles.