# Abstracts

## The gain advantages of four cascaded single stage distributed amplifier configurations

*B. Banyamin and M. Berwick. "The gain advantages of four cascaded single stage distributed amplifier configurations." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1325-1328.*

This paper demonstrates a hybrid-distributed amplifier based on four-cascaded single stage distributed amplifiers (4-CSSDA). The amplifier produces an available power gain significantly higher than conventional distributed amplifiers (CDA) using the same number of active devices. Simulation results show the advantage of the proposed amplifier over the conventional one. Measured results for two versions of the 4-CSSDA were achieved and show a good performance of high gain, gain flatness, input and output matching, flat group delays and low noise figure across 1-10 GHz bandwidth. The two versions of the CSSDA proved that the available power gain can be increased by increasing the interstage characteristic impedance of the amplifier stages.

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