

Abstracts

Common and differential crosstalk characterization on the silicon substrate

W.R. Eisenstadt and D.E. Bockelman. "Common and differential crosstalk characterization on the silicon substrate." 1999 Microwave and Guided Wave Letters 9.1 (Jan. 1999 [MGWL]): 25-27.

Integrated circuit pad-to-pad crosstalk characterization structures were fabricated and measured over a 8000 μm^2 area using Al pads on a silicon substrate. The structures were tested by a pure-mode network analyzer to yield common- and differential-mode crosstalk at 1 and 2 GHz. Differential-mode signals introduce far less substrate noise. This novel technique can characterize substrate noise levels near sensitive radio frequency (RF) and microwave circuits.

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