

## FET Parameter Orthogonalization with Principal Components

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*J. Carroll, K. Whelan, S. Pritchett and D. Bridges. "FET Parameter Orthogonalization with Principal Components." 1994 MTT-S International Microwave Symposium Digest 94.1 (1994 Vol. 1 [MWSYM]): 409-412.*

A new method for representing the statistical variation of FET Equivalent Circuit Parameters (ECPs) is presented. This method utilizes a statistical technique known as principal components and provides an efficient method for statistically representing the means, standard deviations, and correlations of the FET ECPs. Applications of this technique include simulation of process variation using Monte Carlo analysis as well as model optimization. The modeling methodology can be easily implemented into existing commercial CAD simulators.

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