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A pattern recognition approach to transistor array parameter variance

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Highlights

1. A systematic, quantitative analysis of the properties of bipolar transistors in a same integrated circuit (IC) is presented.

2. It is shown that transistors from the same IC have, on average, 1/20 of the variability in their parameters than transistors from different ICs.

3. The relative variation among devices from different ICs can be large enough to justify customized design for more critical applications.