

Re: It's Official... PSpice Schematics v10.3!

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In article <6c0lp09f6gua40vpbvgt5vogdfoono3v8f@4ax.com>, Jim Thompson <thegreatone@example.com> wrote:

[...]

>>>*BTW, I suspect that if you simulate any of those chips with the absolute worst case tolerances on all the components the yield drops to 0%.*

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>>*This could well be true today. I bet the makers are trying hard to raise the yield by making the parameter spread smaller.*

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>

>*In the IC business we have an advantage called `_ratioing_`, resistors may be 30% low, but so what, they're ALL low.*

In discrete land, getting matched sets does this too but it costs like the dickens. I've had R-packs made to get the tight ratio match needed it turned out to be the less expensive option.

>*Performance in a GOOD analog circuit design depends primarily on ratios.*

Yes, and of them it depends on the ratios that are an easier match.

The trouble starts when the parameter you are trying to control is frequency. It is hard to get frequency to depend on a parts ratio. This is a big part of why almost everything is fed into a DSP these days. The DSP cost less than the discrettes that would be needed.

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kensmith@rahul.net forging knowledge