

Re: What's the Toughest Branch in Electronics?

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On 8 Sep, 04:02, D from BC <myrealaddr...@xxxxxxxx> wrote:

What's the Toughest Branch in Electronics?

Examples:

Smmps design (switchers for..everything!)

Audio design (power amplifiers, analogue filters)

RF design (radio transmitters, receivers, radar, cellphones)

Digital design (computers,microcontrollers,FPGA)

I'll guess this order of difficulty.

- 1) RF design
- 2) Smmps design
- 3) Audio design
- 4) Digital design

D from BC

Audio design.

Nothing else is remotely as involved in the details at the limits of current science/technology.

The basic electronic design is not so arduous but from there the development becomes increasingly more time consuming if the requirements of the true audiophile are to be met.

For example whilst it is well established in the audio world that hand soldering all components with 60/40 RA fluxed solder produces a more 'rounded' sound to the recordings of orchestral works made on a thursday afternoon, it required years of research to add a 'vibrant cleanliness' to the sound by ensuring the solder resist was green and manufactured by someone wearing red socks. Even as I write the purity of the sound from CD and DVD players using lasers with a bandwidth greater than 1pico metre is being questioned.