

"Skin effect" and "Proximity effect"

Get an idea of where high frequency currents travel in conductors.

http://www.national.com/nationaledge/nov04/adc_article.html

Skim through 17.4.4.1.1 Trace Antennas (pg. 362-364)

get an idea of how a pc board trace impedance changes with frequency and why you should minimize loop area.

Skim through 17.8 Summary (pg. 376-377)

get an idea of the rules for good high speed pc board layout

<http://focus.ti.com/lit/an/slod006b/slod006b.pdf>

Skim over "A REVIEW OF SHIELDING CONCEPTS" (pg. 71-75)

Get an idea of how skin depth changes with frequency for different materials (table 9.2) and how the size of a hole in the shield relates to the frequency that can enter through the hole (Eq. 9.10).

http://www.analog.com/UploadedFiles/Associated_Docs/36904322486563Section9.pdf

Some general rules to follow:

Always minimize the loop areas (think about where the return current is flowing).

minimize rise time (i.e. use the slowest parts possible)

power cables can conduct noise (use filtering and decoupling)