

Re: EMC Question

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Un bel giorno google@xxxxxxxxxxxxxxx digitò:

My feeling is that any DC ground that I should make available on the external connector should be taken from **before** the common mode choke, since if it was the 'filtered' DC ground that was made available externally, the filter itself would get shunted if 'external' grounds were commoned.

I suppose it depends on the application. In very noisy environments you probably need differential signaling anyway, therefore you can use the external ground, just to make sure that the common voltage between two different systems won't be too high.

In other cases, when you need a clean ground (i.e. single ended analog inputs) perhaps it's better to use a ground filter for each input, and connect each one to the relevant "internal ground".

In my experience though, ground splitting (i.e. analog vs. digital ground) is necessary only for very precise applications. Normally an uniform ground plane and a correct placement/routing works well, or even better.

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