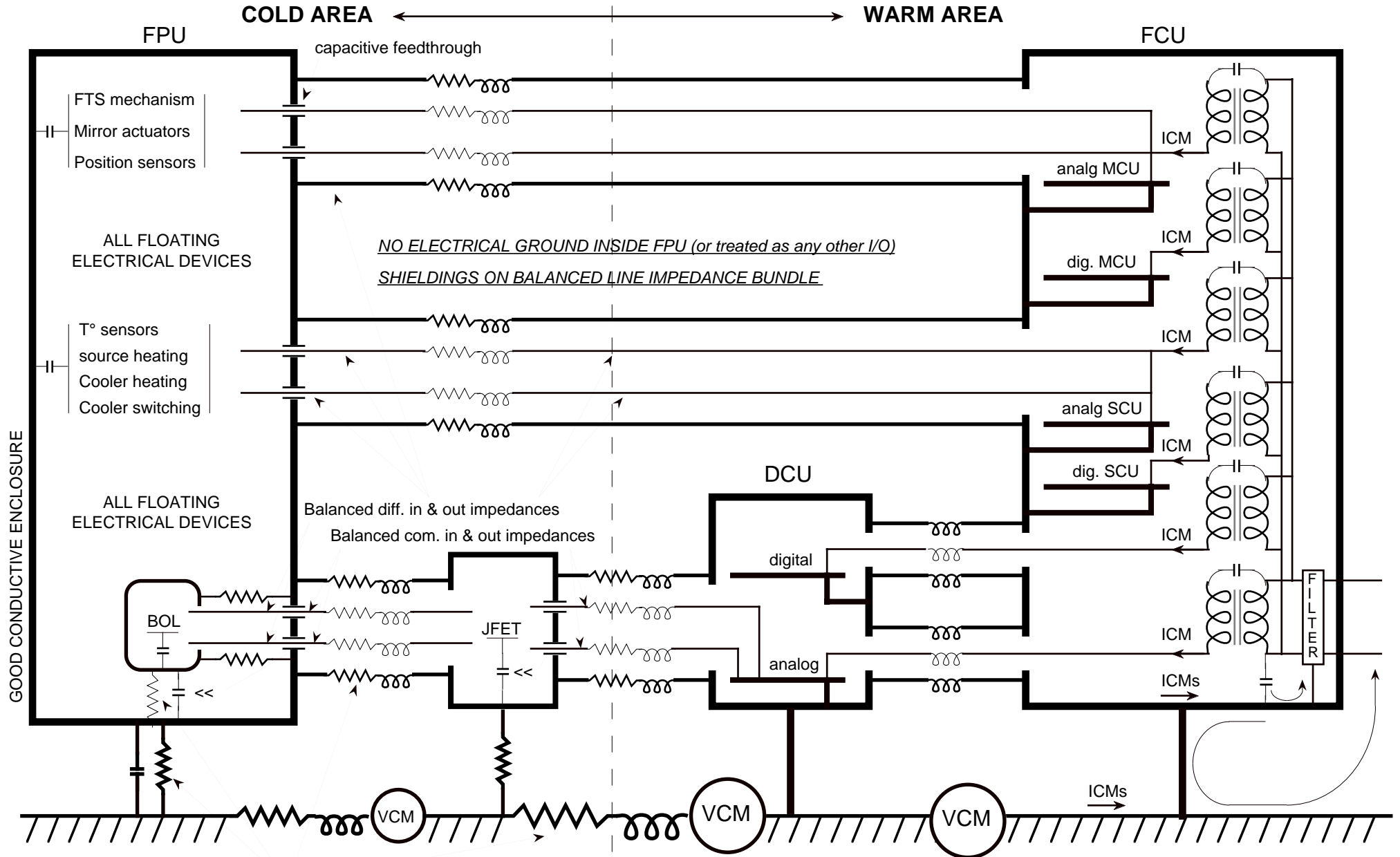


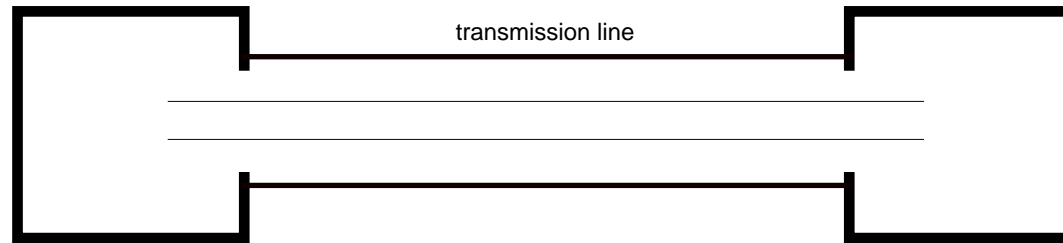
SPIRE SUGGESTED BASIC GROUNDING PRINCIPLE



POORLY CONDUCTIVE LINKS

All shown capacitance are unavoidable parasitic capacitance

EMC SPIRE GENERAL CONSIDERATION



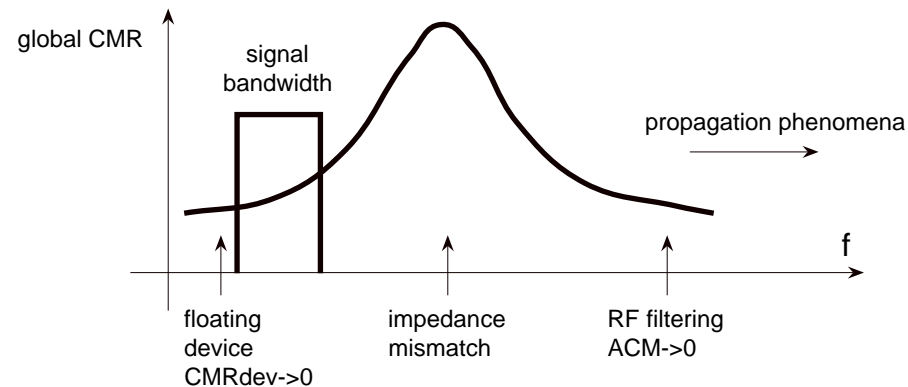
2 main parasitic mechanisms:

- Induced voltage in signal bandwidth (electromagnetic field in loop, current injection in common impedance, cross effect...)
- RF detection in unlinear devices

Common mode induced voltage is more problematic for space application

$$\text{global CMR}(f) = v_{DM}/v_{CM} = \text{CMRdev}(f) * \text{TI}(f) * X(f) * \text{ACM}(f)$$

- CMRdev: Common mode rejection of victim device
- TI : Transfer impedance (cable shielding efficiency)
- X : unbalanced line impedance/coupling factor
- ACM : Common mode filtering attenuation factor



SPIRE PSU_DRCU Implementation

10 Triple output
DC/DC Converter
Modules

