

In support of link comments

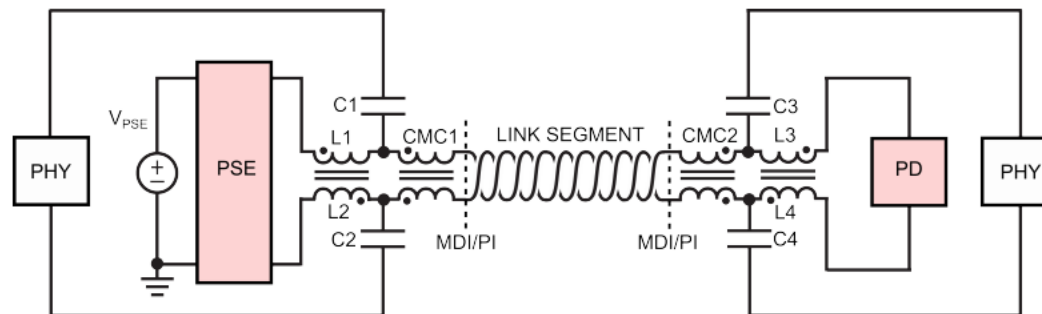
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Where in clause 104 ?

From Dallas tutorial, excellent figure why not in bu?

Interaction with Data

- PoDL affects the channel via the coupling network
 - Return loss and mode conversion are affected by the inductors
 - dv/dt , di/dt , and power supply noise can also affect data
 - Limits are in Clause 104



Who is interested?

1. Certainly not only 100BASE-T1 and 1000BASE-T1,
2. Others to come.
3. The resistance could allow 100 m.
4. Proposal to make clause 104 general and present 1. as an example

MDI

- This sub clause (104.5) should then say:
 - The MDI specification shall be as good as the system in use. Additional balance limits may apply
- It is preferable not to copy limits from other standards. Better to reference them, they may change without warning.

Balance, Common Mode

- Different limits specified: table 104-3
- But the load of the PD is not. As the PD is connected to the “hot” wires the load shall not disturb the transmission, in transient and steady state.
- Remember it is a transmission line with 100 Ohm differential and 50-75 Ohm to ground

Balance, Common Mode

- The inductors and filters protect from fast disturbances but not from slow PD changes
- Extreme example: If one leg shorts to ground the PHY will not work any more
- A low frequency or DC balance is missing
 - then the symmetry of the PD is specified

Thank You