Screening Attenuation Proposal for Coax Links used in IEEE 802.3dm ACT

Rohit Sharma – Molex

Rich Boyer- Aptiv

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Shield Performance for ACT Draft of 802.3dm

- Screening and coupling attenuation for the ACT differential pairs will reference IEEE 802.3 clause 149.7.1.4 and 149.7.1.5 respectfully.
- Proposing the following for the ACT screening attenuation for the ACT coax cable links to be.
    - 55 dB (10 to 1000) MHz.
    - 50 dB (1 to 3) GHz.
    - 45 dB (3 to 5) GHz.
- Proposal review under way and is based on SerDes PAM2 to 5 Gb/s and PAM4 for 10 Gb/s relative to automotive EMC standards.
- Open for discussion to all.

201.12.2.1 Power sum alien near-end crosstalk (PSANEXT)

$PSANEXTloss(f) \geq \min(60, 60-5\log10(f/100)$ dB

where

f is the frequency in MHz; $3 \leq f \leq 4000$

201.12.2.2 Power sum alien attenuation to crosstalk ratio far-end (PSAACRF)

$PSAACRF(f) \geq \min(60, 60-5\log10(f/100)$ dB

where

f is the frequency in MHz; $3 \leq f \leq 4000$