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# A Comparison of Pre-Compensation and AAF

T10/00-351r0

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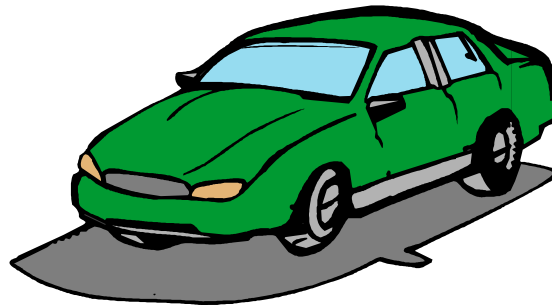
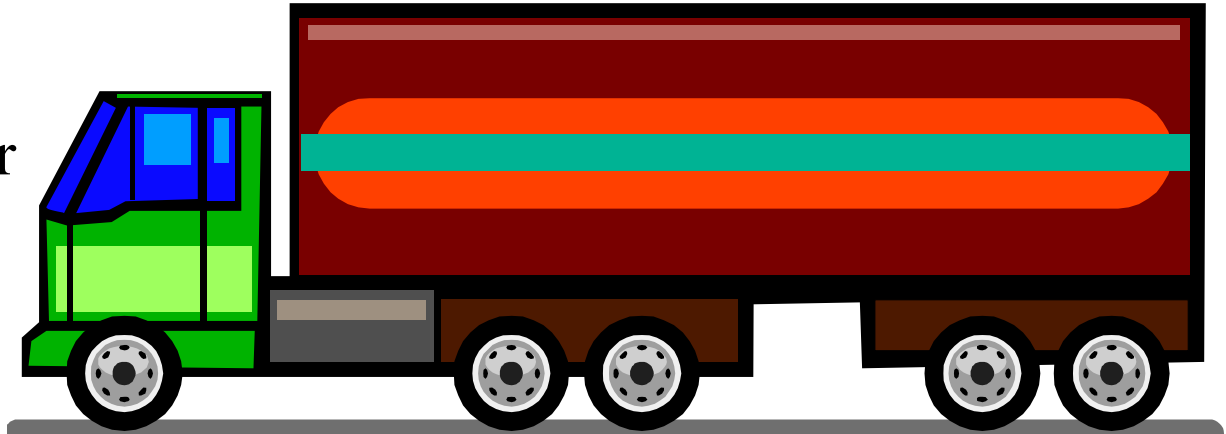
Huntington Beach, CA

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# Horsepower Analogy

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500 Horsepower



130 Horsepower

# Equalisers are not Bad

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- If used in the appropriate place
- Disk drive read channels are a great application
  - Costs about a dime
  - Many (2-20) heads into one channel
  - Increases head yield (\$1.5 per head) \$3 per drive
  - Increases Capacity 30% (20 GB to 26 GB)

# Not Necessary for SCSI Tranceivers

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- Need about \$2 (20 receivers)
- Overkill in 95+% of cases
- Can't turn it off (only the boost can be reduced to 0)
- Even with no boost it adds noise and phase distortion and uses power
- Temperature, voltage and process variations
- Reduces margin in 95% of the cases

# Precomp

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- Costs pennies
- Can be totally turned off (no power)
- Adds no distortion or noise
- Timely and robust design

# Invitational Challenge

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- We set up our lab to facilitate these kind of measurements - and partially automated the collection of data and its presentation
  - First Pulse
  - Frequency attenuation
  - Cable measurements
- We invite you to use our lab
  - Send us you materials and we will measure
  - Come with your materials and we can measure together
  - (If Quantum - we'll set it up in the park next door)