Additional Termination Issue

Drive Current 7 mA Min/ Voltage mode drivers
Lower Common Mode Resistance Required with higher drive current.
Drive Current

- The fixed bias termination, higher leakage and the lower impedance of the loaded bus/ incident wave switch requirements requires a higher drive current.
- 7 mA minimum - my Calculations
- Voltage Mode Driver - 24 mA max current
LVD SCSI Bus

Common Mode
Z = 500, * 10 mA
5 V signal single current mode driver,
Voltage 24 mA
12 Volts - Arbitration
Driver against drive
plus Common mode voltage

7-10 mA
Per Driver
or 24 mA Maximum Voltage mode

Higher current Drivers require low common mode Resistance, 150 Maximum 24 mA, 3.6 V

With the bias fixed and leakage, 7 mA minimum Drive current required for the 30 mV Signal with margin.
Common Mode Termination

- Recommended range with the higher current drivers and lower impedance differential termination.
  - 7 < 10 mA Current mode
  - Voltage mode 24 mA maximum
  - 100 - 150 ohms Common Mode Resistance
  - 3 resistor with 2 voltage references
  - 5 resistor single reference & bias.
Example Termination

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Alternate Termination

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