

Modeling LVD Terminators

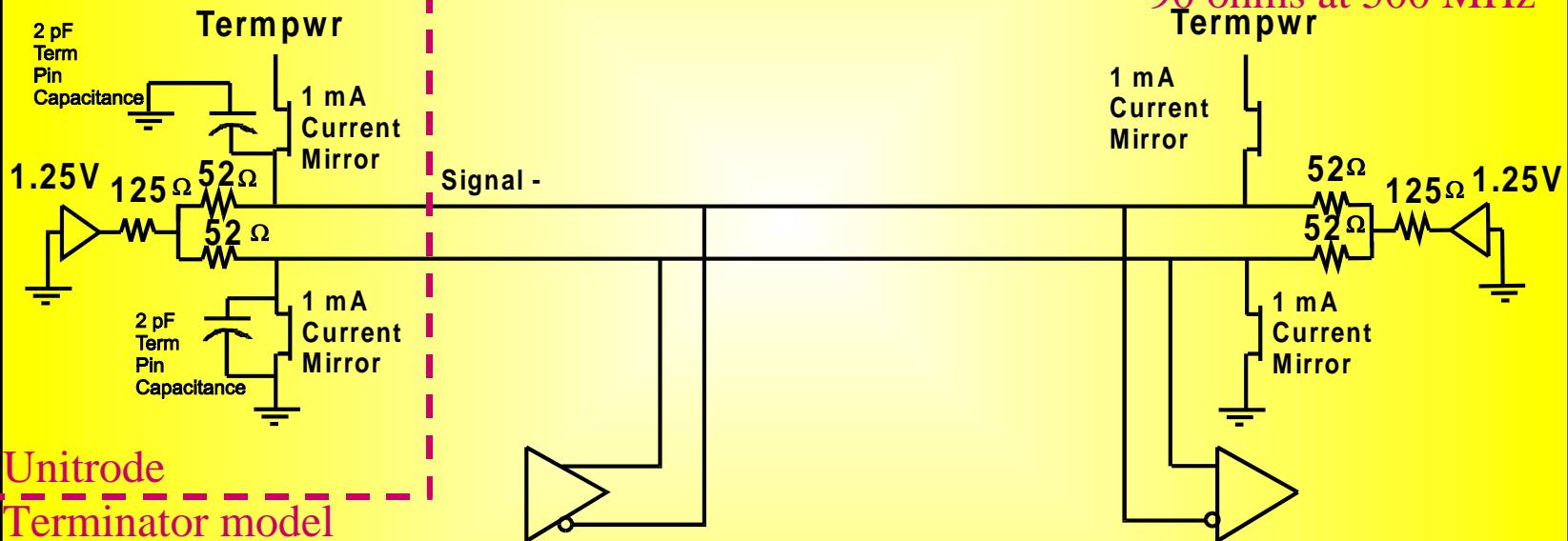
Unitrode LVD and
Multimode Terminators
Network Analyzer
Flat to 400 MHz
90 ohms at 500 MHz

Bias 100 - 125 mV
Diff Z 100 - 110 ohms
Common Mode
Z = 110 - 300 ohms

Diff Z = 110 < 135 ohms

Diff Z Loaded Bus = 85 < 120 ohms

Single ended Z = 72 < 96 ohms



Unitrode
Terminator model

Asymmetrical Driver Current = 5.0 to 14.0 mA
Driver Current delta between 0 and 1 = 4 mA

Receiver Threshold +/- 60 mV
or -0.25 of the previous state.

Note: 500 MHz was the equipment limit

Resistor Stack used for Plug Terminators

UC561

Resistor and Layout dependant
but can be flat to 500 MHz with
a good design.

APPLICATION INFORMATION

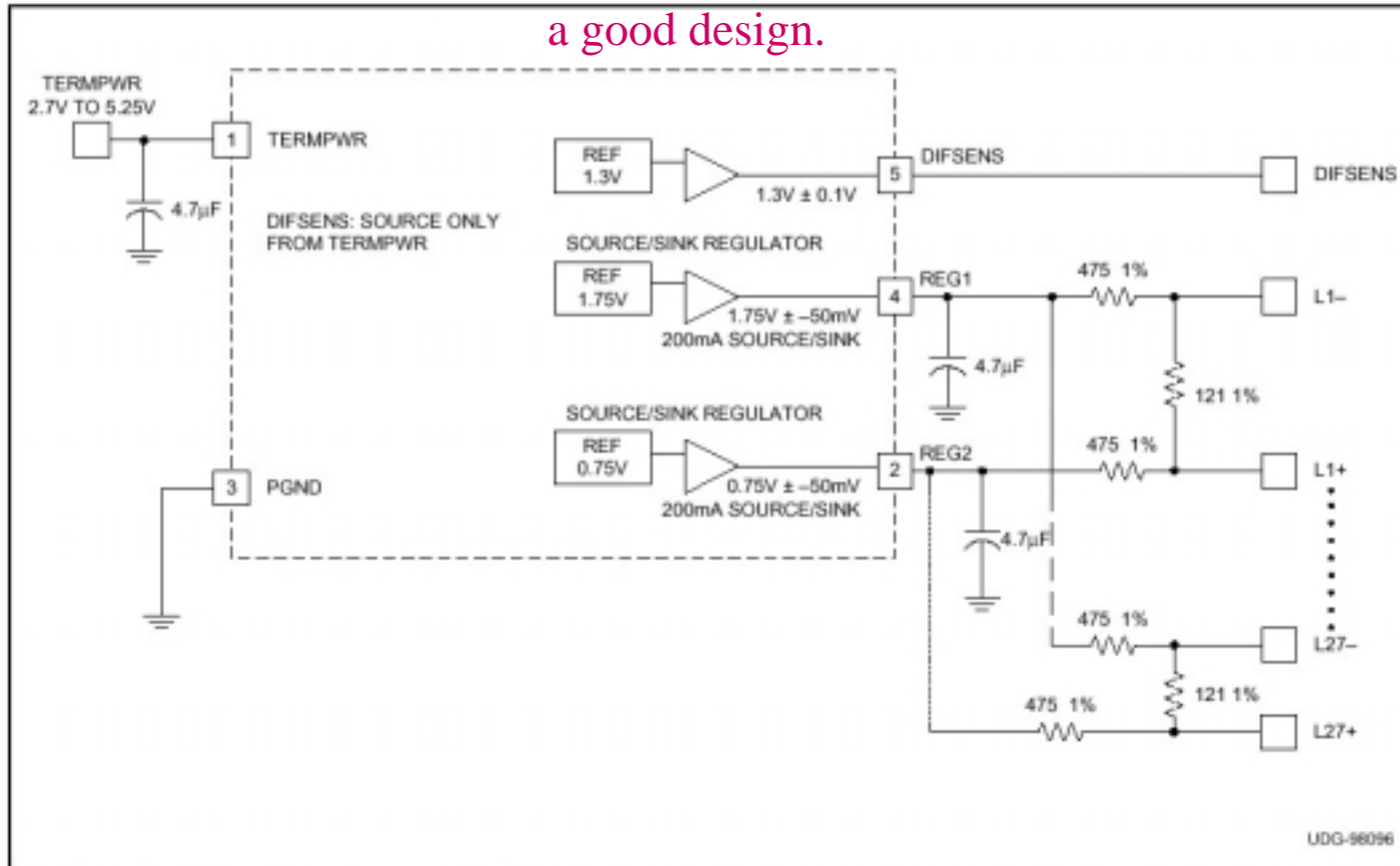
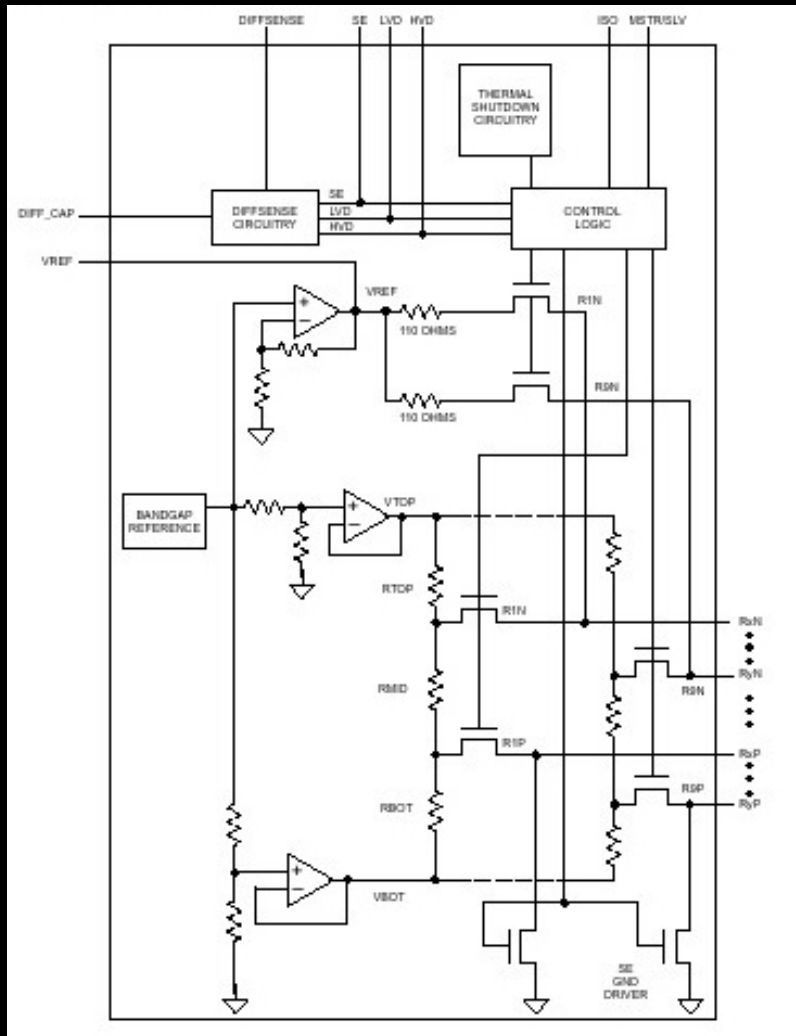


Figure 1. LVD SCSI discrete resistor stack.

Other Terminators on the Market



The series switches load the signal lines increasing the roll off.
Network analyzer - differential measurement
Flat to 100 MHz
80 ohms at 150 MHz
60 ohms at 400 MHz

Other Terminators on the market
Flat to 85 MHz
140 ohms at 150 MHz