



Cable Loss Data

Analytical Analysis

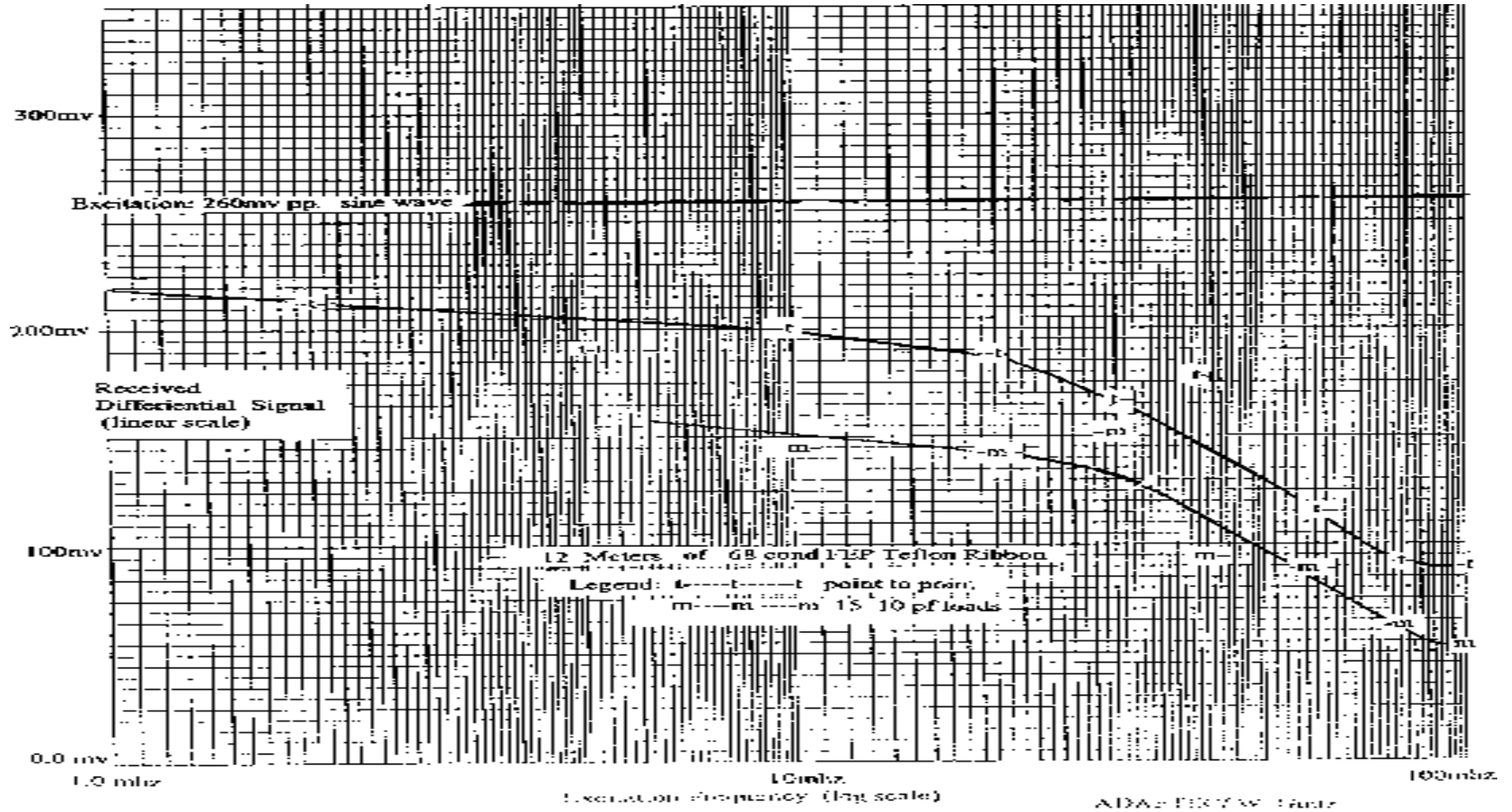
Test Data

Compatibility

Amplitude Vs Frequency
Excitation: 260mv pp sine wave

120 ohm source; 120 termination
Tempflex p/n F300 S-68-025-85
130 ohm 10pf/ft 0.17 uh/ft

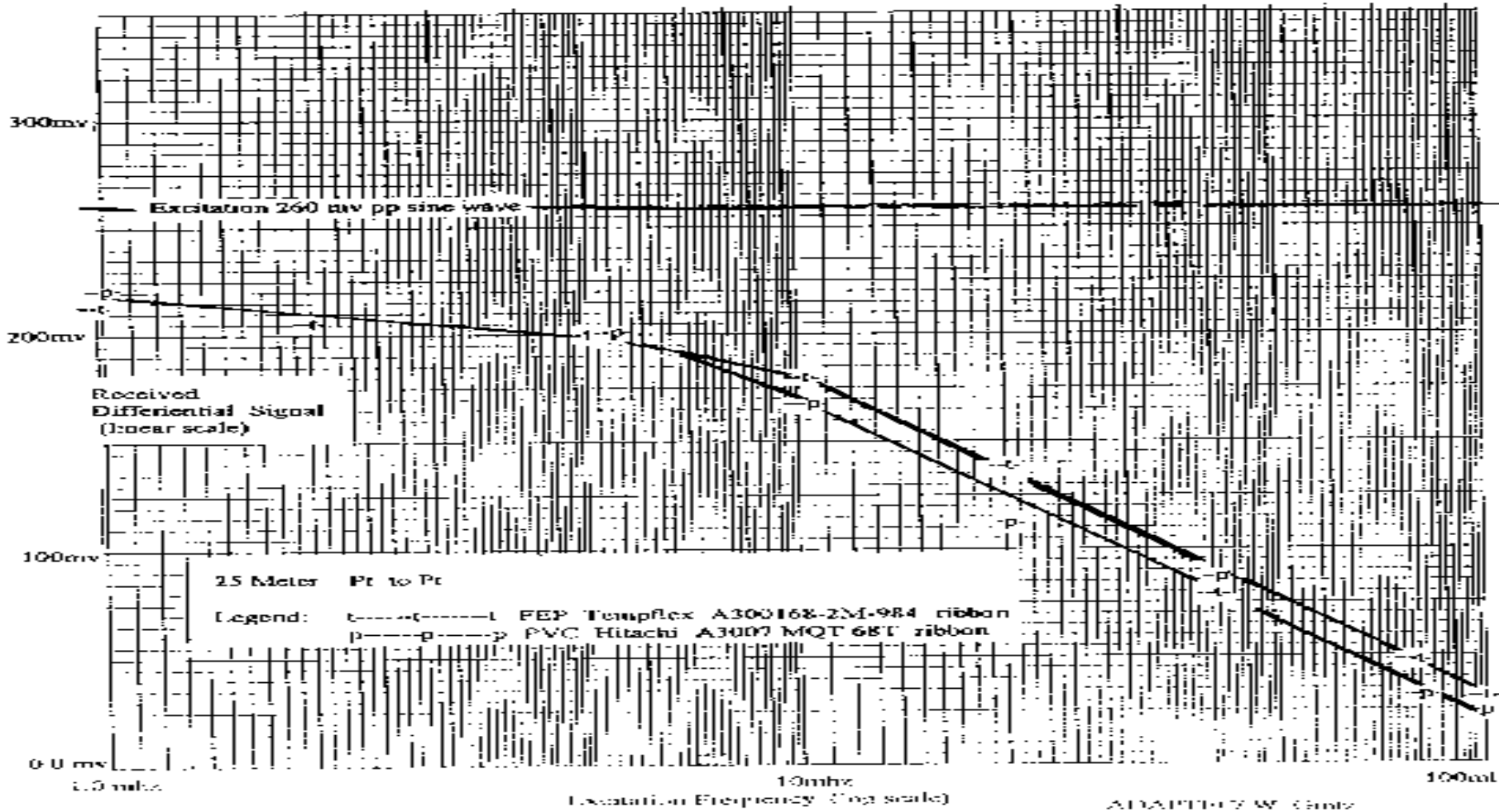
Cable Attenuation



Cable Attenuation

Amplitude Vs Frequency
25 M Point to Point

Excitation 260 mv pp sine wave
100 ohm source & termination
10pf load each end



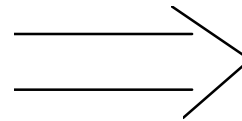
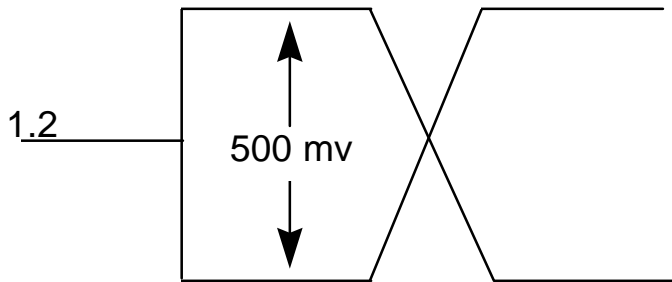
Cable Chart III

		<u>Loss 40</u>	<u>Loss 80</u>
Teflon 12 Meters	Point to Point	47% (-5.3 db)	64% (-7.3 db)
	Multipoint	54% (-7.08 db)	75% (12 db)
Teflon PVC 25 M	Point to Point	70% (-10.23 db)	87% (-15 db)
	Point to Point	66% (-9.2 db)	77% (-12.7 db)

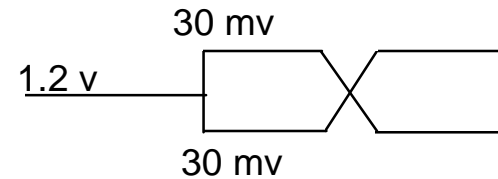
Power

No Bias 500 mv

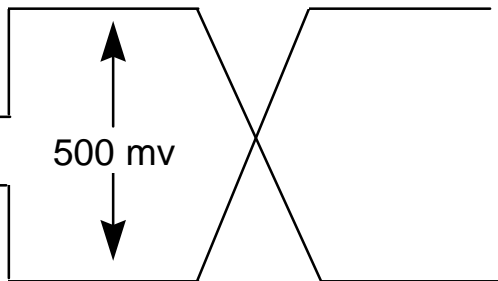
Driver



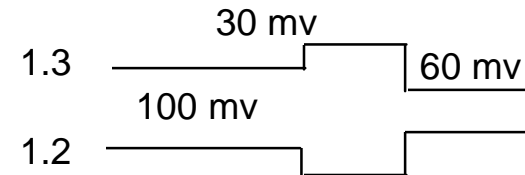
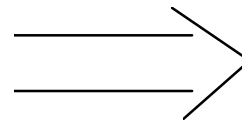
After Attenuation



1.3
100 mv
1.2



Equal Power Situation



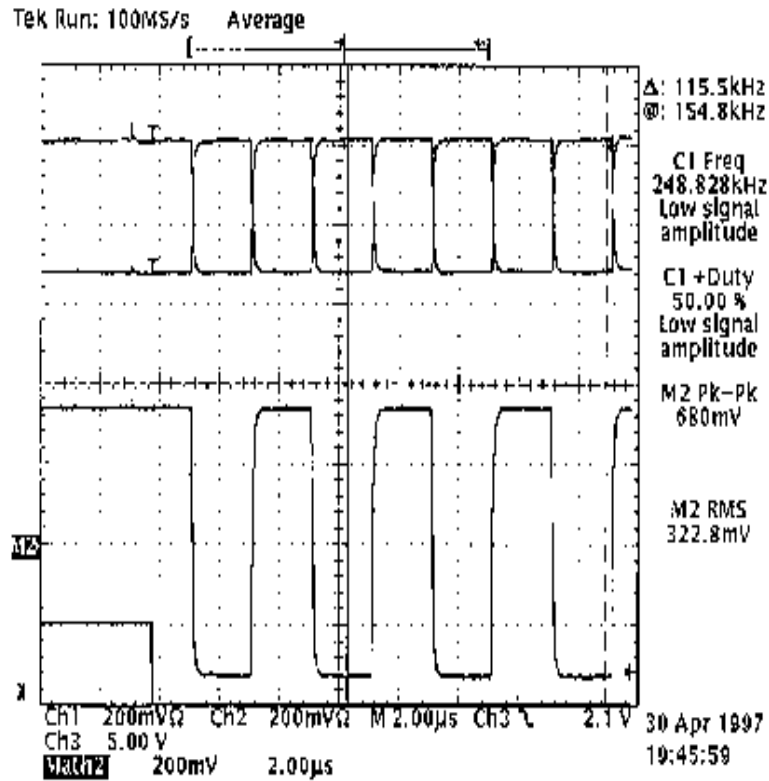
100 mv Bias is lost signal

Conclusion: Can do as well with less power

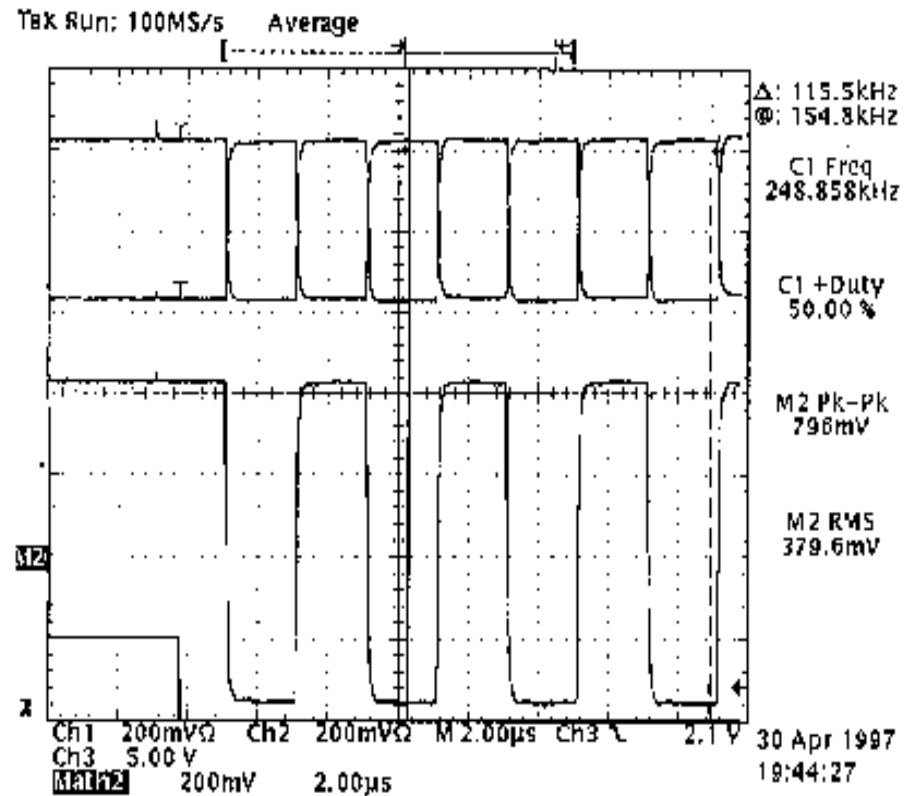


Test Data

D0, 61m, 4000 ns, Sym. No Bias, 250 KHz

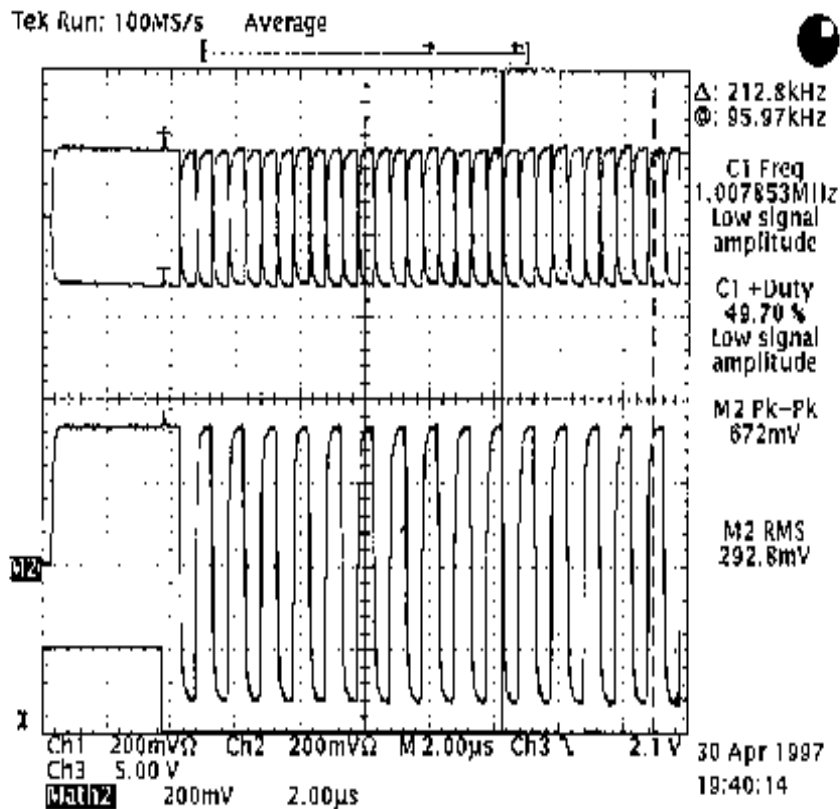


D0, 61m, 4000 ns, Asym. Bias, 250 KHz

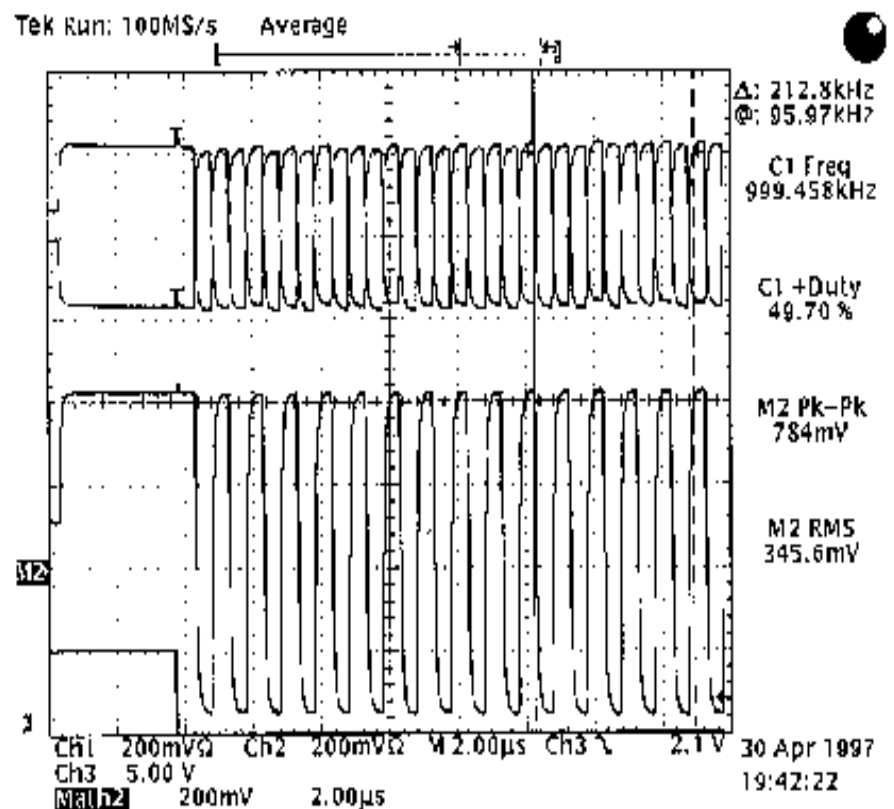


Test Data

D0, 61m, 1000 ns, Sym. No Bias, 1 MHz

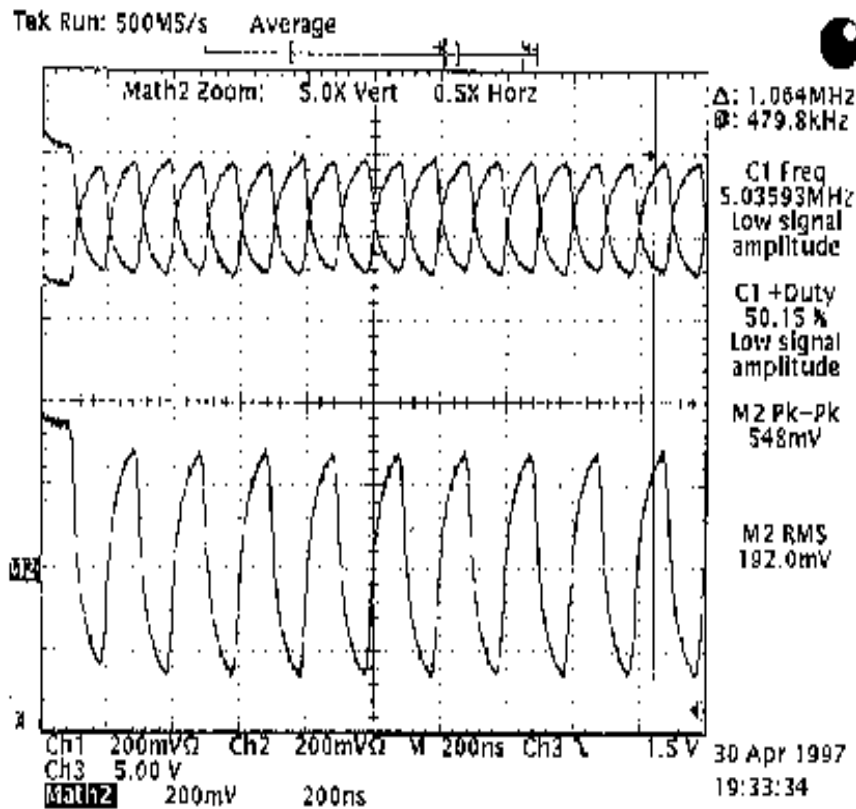


D0, 61 m, 1000 ns, Asym. Bias, 1 MHz

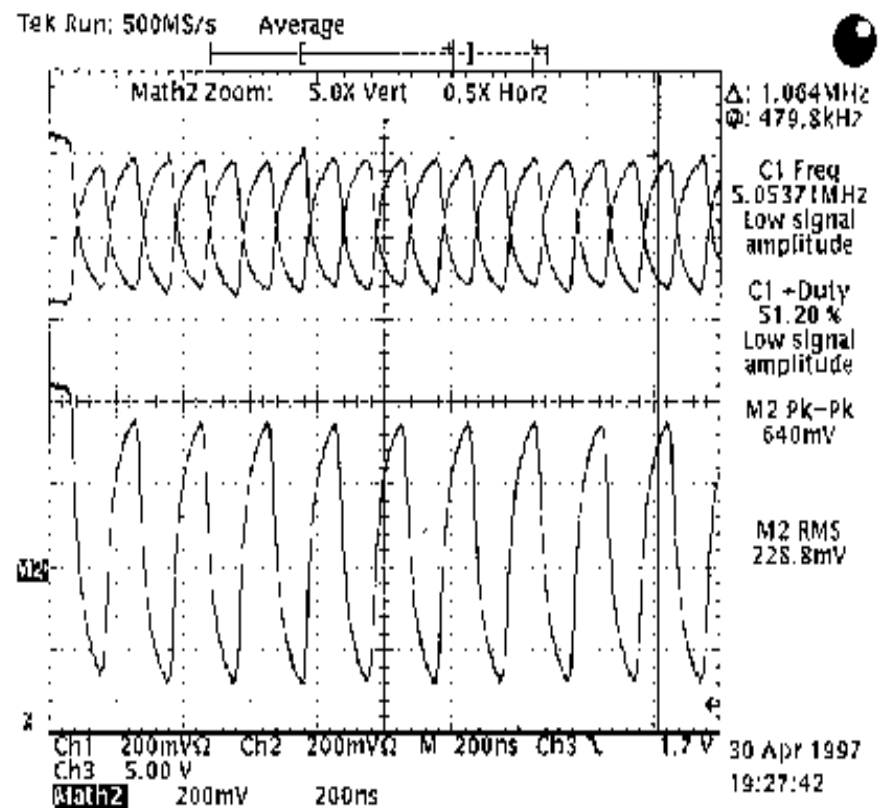


Test Data

D0, 61 M, 200 ns, Sym., No Bias, 5 MHz

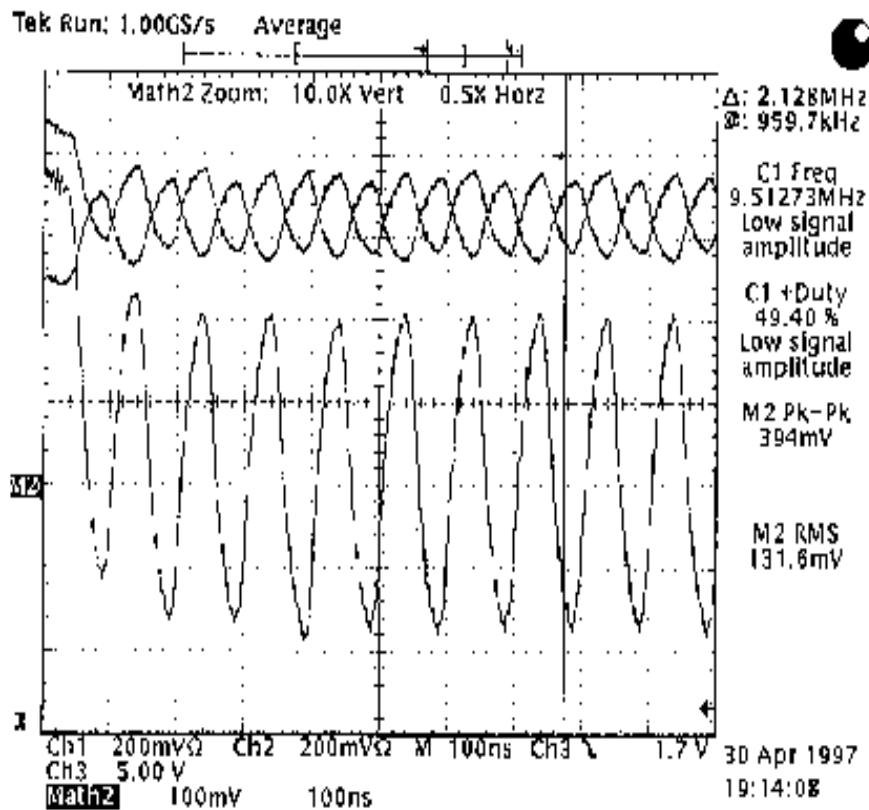


D0, 61 M, 200 ns, Asym., Bias, 5 MHz

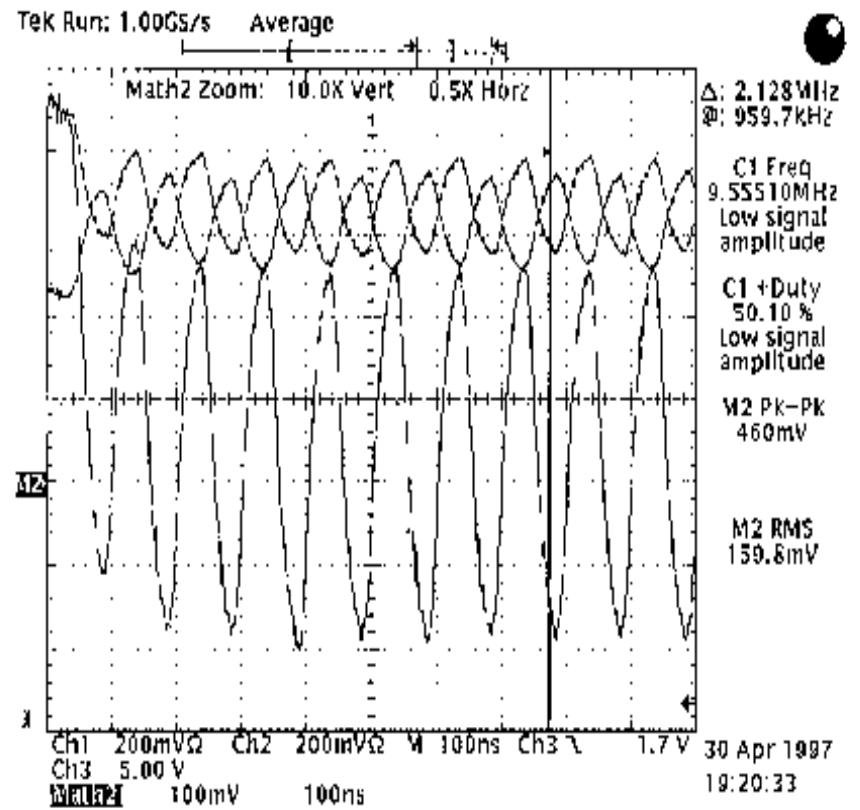


Test Data

D0, 61 M, 100 ns, Sym., No Bias, 10 MHz

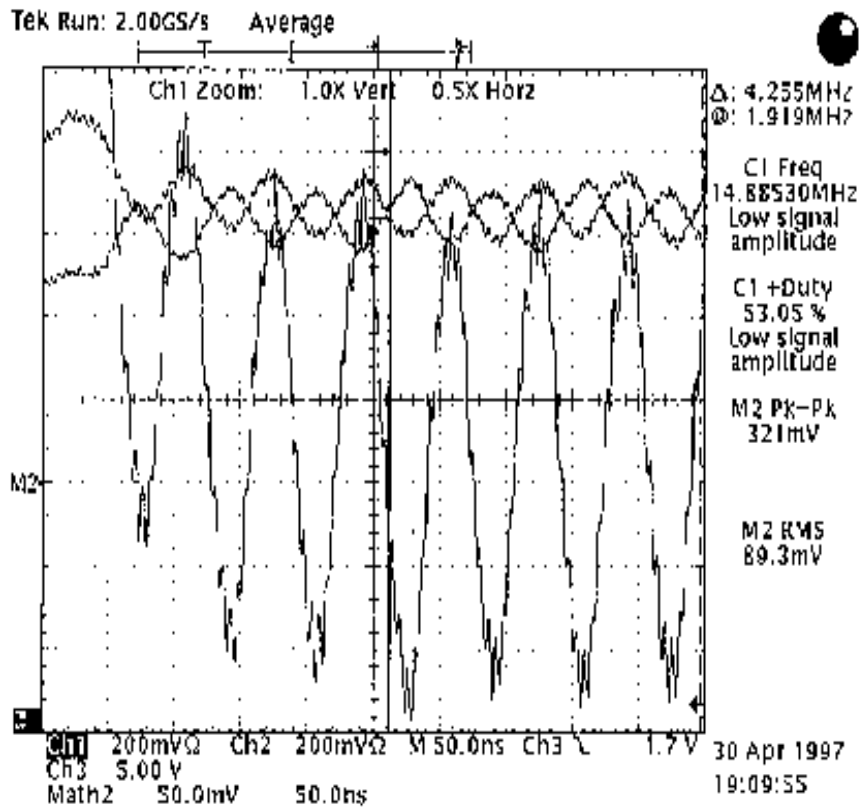


D0, 61 M, 100 ns, Asym., Bias, 10 MHz

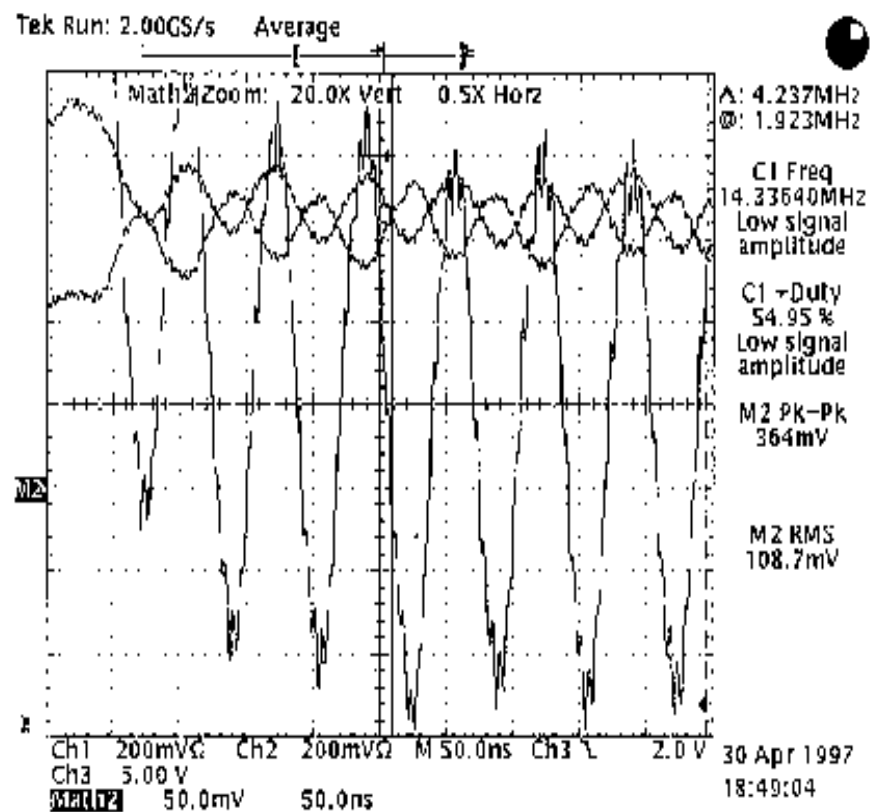


Test Data

D0, 61 M, 66.6 ns, Sym., No Bias 15 MHz

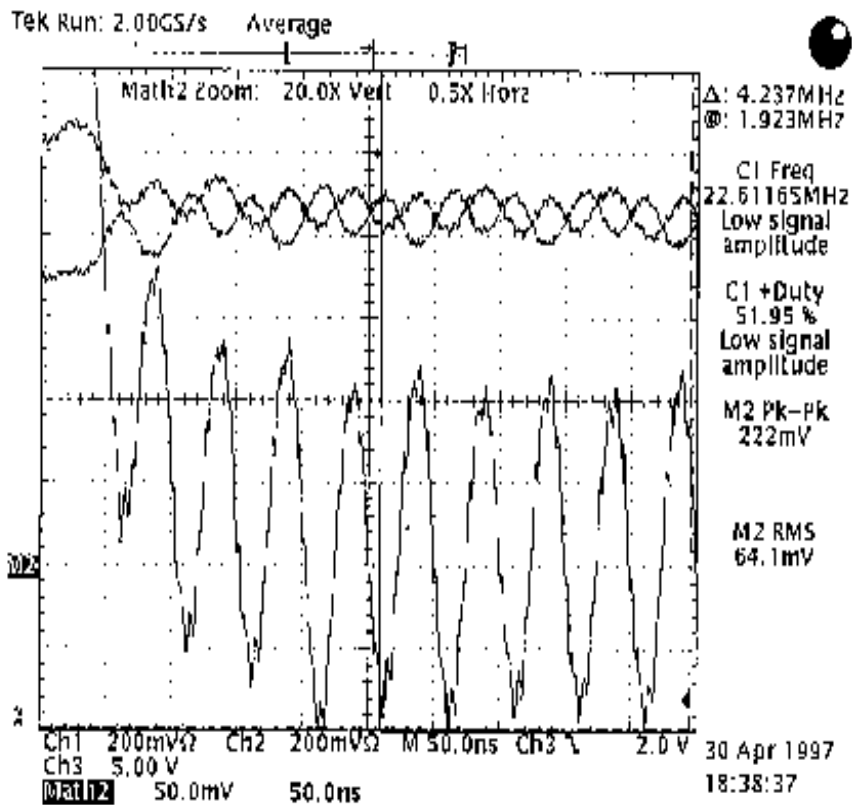


D0, 61 M, 66.6 ns, Asym., Bias, 15 MHz

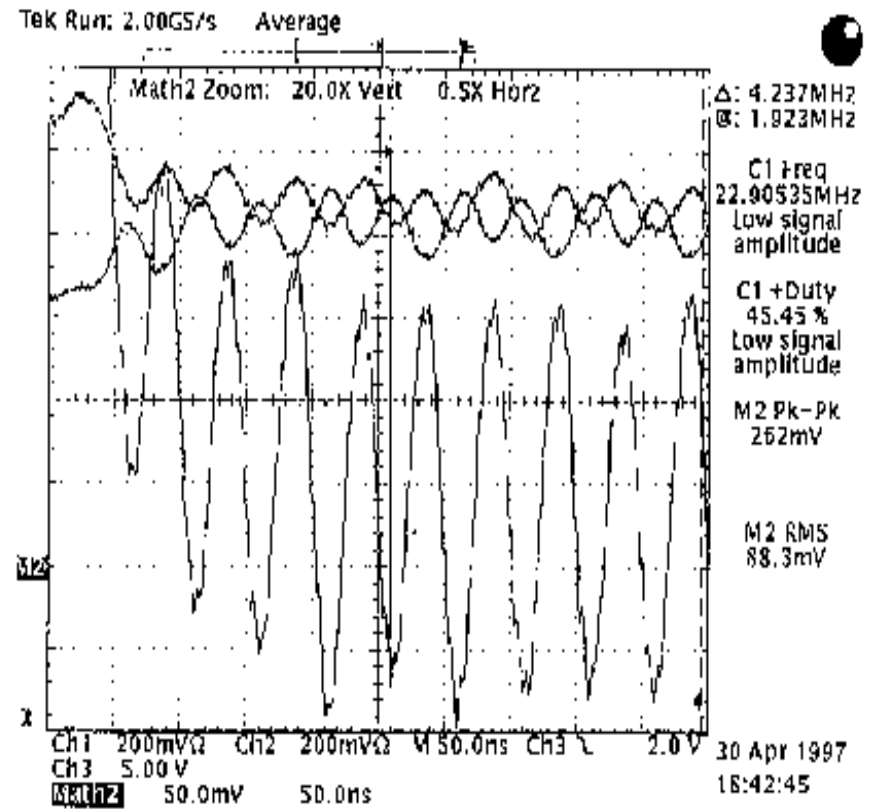


Test Data

D0, 61 M, 50 ns, Sym., No Bias, 20 MHz

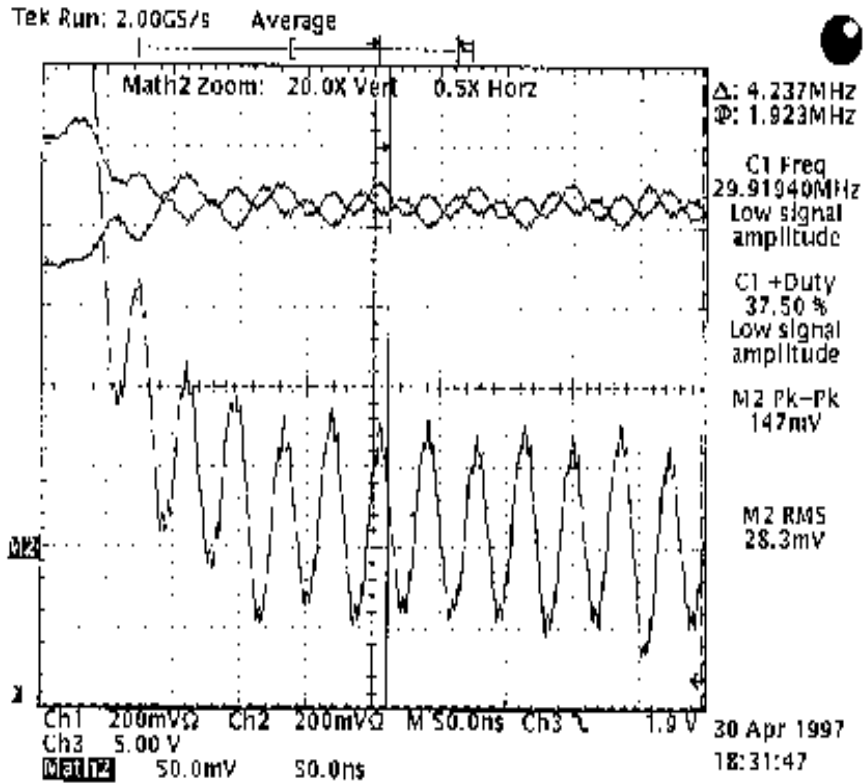


D0, 61 M, 50 ns, Asym., Bias, 20 MHz

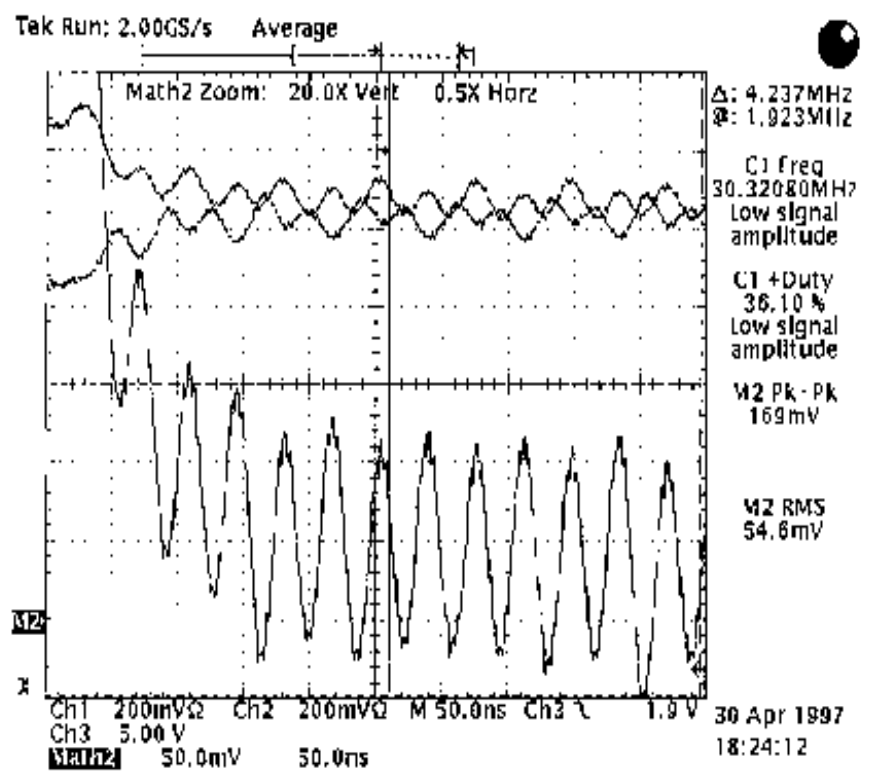


Test Data

D0, 61 M, 36 ns, Sym., No Bias, 27.77 MHz

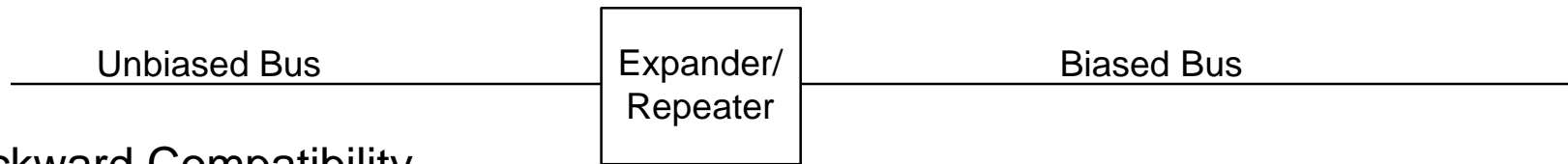


D0, 61 M, 36 ns, Asym., Bias, 27.77 MHz

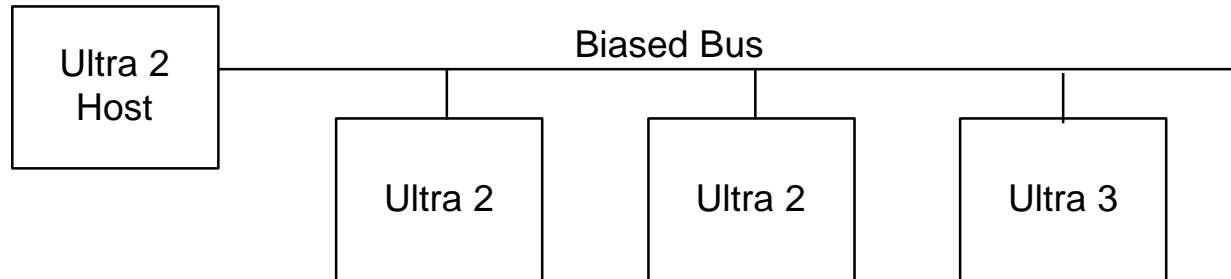


Compatibility

Define Expander



Backward Compatibility



Forward Compatibility

