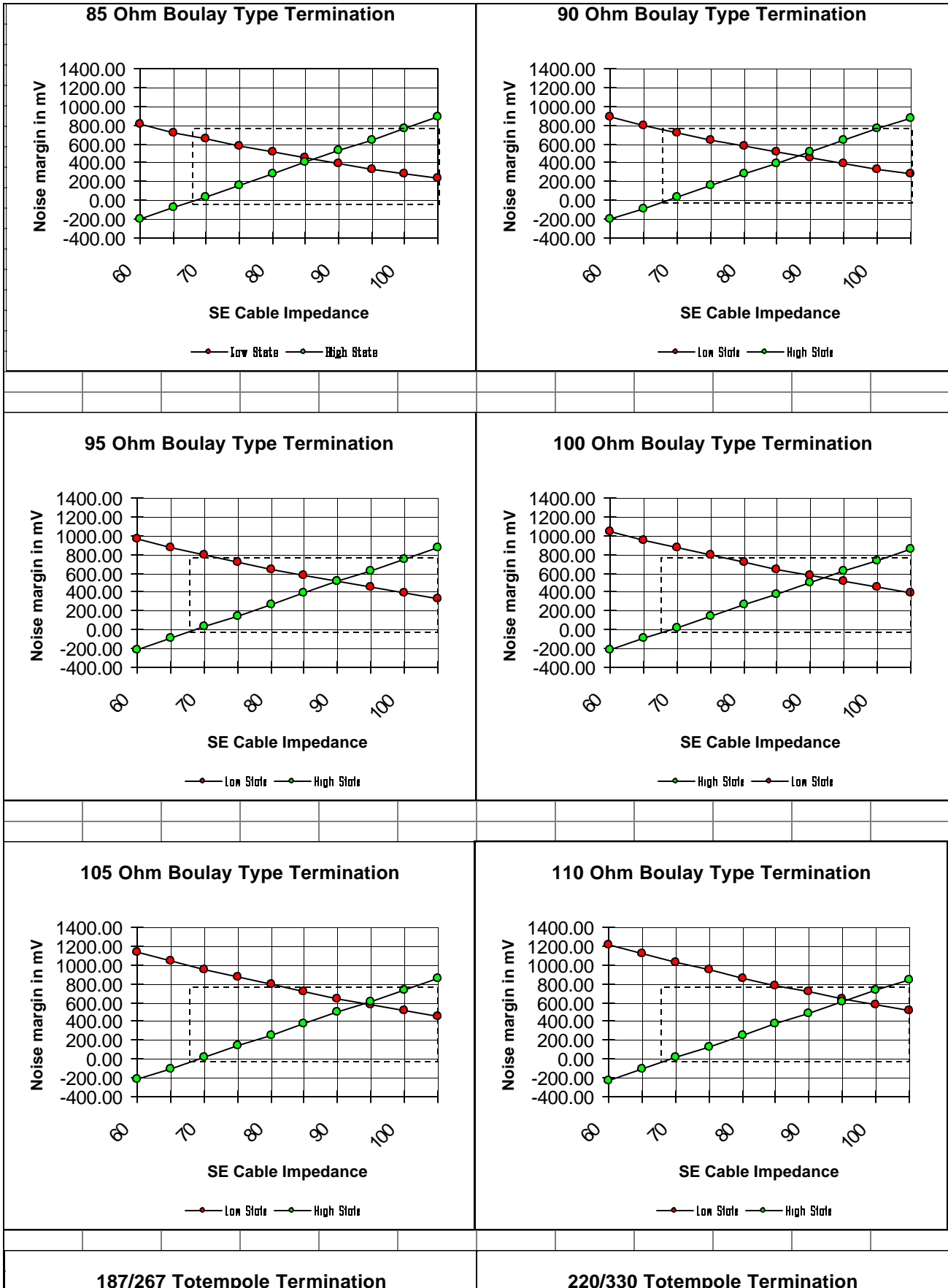


Normal configuration

Noise Margin analysis for System configuration as noted.											
Assumptions are :											
Percent of Offset Rload +/- 1%.....>		0									
Percent of Offset Vreg +/- 4%.....>		0									
Nominal Voltage of Vterm (mv).....>		4600 ..+5v -.4 one shotkey diode drop									
Percent Of Offset Vterm +/- 5%.....>		0									
Nominal Termination Assertion current of (ma).....>		22.4 Vreg adjusted to achive given current with Rload specified.									
VI-- Voltage Line is Asserted to voltage of (mv).....>		350									
Minimum Asserted Line Voltage(mv).....>		500									
Ghs--Guaranteed High State (mv).....>		2000									
Gls--Guaranteed Low State (Mv).....>		800									
Low State Margin =(Gls-(Vh-((Vh-VI)*(1+Rho)))											
High State Margin =(Ia*Z0)+VI-Ghs											
Rho=(RL-Z0)/RL+Z0)											
Nominal Rload Resistors			Offset Rload (RL)		Nominal Vreg/Vthev		Vreg / Vthev (Vh)		Actual Asserted Current (Ia)		
85			85		2404		2404		24.16		
90			90		2516		2516		24.07		
95			95		2628		2628		23.98		
100			100		2740		2740		23.90		
105			105		2852		2852		23.83		
110			110	R1/R2	2964	Vthevenin	2964	Vthevenin	23.76		
178	Rthevenin	95.27	178	0.54	4600.00	2462.14	4600.00	2462.14	23.88		
205			205	205							
187	Rthevenin	109.98	187	0.59	4600.00	2705.29	4600.00	2705.29	22.73		
267			267	267							
220	Rthevenin	132.00	220	0.60	4600.00	2760.00	4600.00	2760.00	19.32		
330			330	330							
Refelection coefficients (Rho) for Rload termination vs cable Impedance.											
Values of Rho for Cable impedances (Z0)											
Offset Rload (RL)	60	65	70	75	80	85	90	95	100	105	
85	0.17	0.13	0.10	0.06	0.03	0.00	-0.03	-0.06	-0.08	-0.11	
90	0.20	0.16	0.13	0.09	0.06	0.03	0.00	-0.03	-0.05	-0.08	
95	0.23	0.19	0.15	0.12	0.09	0.06	0.03	0.00	-0.03	-0.05	
100	0.25	0.21	0.18	0.14	0.11	0.08	0.05	0.03	0.00	-0.02	
105	0.27	0.24	0.20	0.17	0.14	0.11	0.08	0.05	0.02	0.00	
110	0.29	0.26	0.22	0.19	0.16	0.13	0.10	0.07	0.05	0.02	
95.27	0.23	0.19	0.15	0.12	0.09	0.06	0.03	0.00	-0.02	-0.05	
109.98	0.29	0.26	0.22	0.19	0.16	0.13	0.10	0.07	0.05	0.02	
132	0.38	0.34	0.31	0.28	0.25	0.22	0.19	0.16	0.14	0.11	
High and Low State Noise Margins											
Values for High State Noise Margin/ Value for Low State Noise Margin											
Offset Rload (RL)	60	65	70	75	80	85	90	95	100	105	
85	Low State	804.14	723.87	648.77	578.38	512.24	450.00	391.31	335.89	283.46	233.79
	High State	-200.12	-79.29	41.53	162.35	283.18	404.00	524.82	645.65	766.47	887.29
90	Low State	883.20	799.35	720.75	646.91	577.41	511.89	450.00	391.46	336.00	283.38
	High State	-206.00	-85.67	34.67	155.00	275.33	395.67	516.00	636.33	756.67	877.00
95	Low State	964.39	877.13	795.15	718.00	645.26	576.56	511.57	450.00	391.59	336.10
	High State	-211.26	-91.37	28.53	148.42	268.32	388.21	508.11	628.00	747.89	867.79
100	Low State	1047.50	956.97	871.76	791.43	715.56	643.78	575.79	511.28	450.00	391.71
	High State	-216.00	-96.50	23.00	142.50	262.00	381.50	501.00	620.50	740.00	859.50
105	Low State	1132.36	1038.71	950.40	867.00	788.11	713.37	642.46	575.10	511.02	450.00
	High State	-220.29	-101.14	18.00	137.14	256.29	375.43	494.57	613.71	732.86	852.00
110	Low State	1218.82	1122.17	1030.89	944.54	862.74	785.13	711.40	641.27	574.48	510.79
	High State	-224.18	-105.36	13.45	132.27	251.09	369.91	488.73	607.55	726.36	845.18
95.27	Low State	929.82	848.96	772.99	701.49	634.06	570.37	510.13	453.04	398.88	347.43
	High State	-217.42	-98.03	21.35	140.73	260.11	379.49	498.88	618.26	737.64	857.02
109.98	Low State	1142.49	1055.40	973.15	895.34	821.63	751.70	685.27	622.08	561.90	504.51
	High State	-286.36	-172.73	-59.09	54.55	168.18	281.82	395.45	509.09	622.73	736.36
132	Low State	1353.75	1269.64	1189.70	1113.62	1041.13	971.98	905.95	842.82	782.41	724.56
	High State	-490.91	-394.32	-297.73	-201.14	-104.55	-7.95	88.64	185.23	281.82	378.41

Normal configuration



Normal configuration

