



OSA

**CONTIGUOUS BAND MULTIPLEXER
SIMULATION AND OPTIMIZATION**

OSA-84-MX-3-T

January 31, 1984

Optimization Systems Associates

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This is a simulation output from MXSOS organised as in OSA-84-MX-2-T but where simulation is requested by setting LMODE=1 and resetting the manifold spacings to the optimized values obtained.

FREQUENCY MHZ	RETURN LOSS COMMON PORT	INSERTION LOSS DB	FREQUENCY FOR GROUP DELAY	GROUP DELAY NANO SECS
11920.0	2.91	7.18	11919.75	102.29
11921.0	4.90	4.28	11920.75	102.07
11922.0	5.79	3.27	11921.75	77.51
11923.0	6.44	2.74	11922.75	61.70
11924.0	7.27	2.33	11923.75	53.93
11925.0	8.17	2.00	11924.75	49.39
11926.0	8.88	1.78	11925.75	45.79
11927.0	9.26	1.65	11926.75	42.51
11928.0	9.39	1.57	11927.75	39.57
11929.0	9.45	1.52	11928.75	37.15
11930.0	9.59	1.46	11929.75	35.30
11931.0	9.88	1.40	11930.75	34.01
11932.0	10.33	1.33	11931.75	33.16
11933.0	10.95	1.25	11932.75	32.64
11934.0	11.68	1.18	11933.75	32.31
11935.0	12.43	1.11	11934.75	32.07
11936.0	13.07	1.07	11935.75	31.83
11937.0	13.48	1.04	11936.75	31.57
11938.0	13.59	1.03	11937.75	31.28
11939.0	13.49	1.03	11938.75	30.99
11940.0	13.30	1.04	11939.75	30.75
11941.0	13.16	1.05	11940.75	30.62
11942.0	13.15	1.06	11941.75	30.64
11943.0	13.33	1.06	11942.75	30.84
11944.0	13.73	1.05	11943.75	31.23
11945.0	14.38	1.04	11944.75	31.82
11946.0	15.25	1.02	11945.75	32.58
11947.0	16.29	1.01	11946.75	33.48
11948.0	17.27	1.02	11947.75	34.49
11949.0	17.86	1.04	11948.75	35.60
11950.0	17.80	1.07	11949.75	36.82
11951.0	17.27	1.13	11950.75	38.22
11952.0	16.68	1.20	11951.75	39.94
11953.0	16.38	1.28	11952.75	42.18
11954.0	16.62	1.37	11953.75	45.25
11955.0	17.58	1.47	11954.75	49.55
11956.0	19.28	1.62	11955.75	55.64
11957.0	20.50	1.87	11956.75	64.41
11958.0	19.15	2.36	11957.75	77.71
11959.0	17.89	3.46	11958.75	99.36
11960.0	20.83	7.64	11959.75	106.27
11961.0	37.62	3.78	11960.75	120.82
11962.0	25.15	2.48	11961.75	93.16
11963.0	21.35	1.95	11962.75	73.27

11964.0	21.31	1.66	11963.75	61.58
11965.0	22.73	1.46	11964.75	54.26
11966.0	23.93	1.32	11965.75	49.18
11967.0	23.32	1.23	11966.75	45.35
11968.0	21.73	1.16	11967.75	42.33
11969.0	20.41	1.11	11968.75	39.91
11970.0	19.67	1.07	11969.75	37.99
11971.0	19.50	1.04	11970.75	36.48
11972.0	19.86	1.00	11971.75	35.31
11973.0	20.73	.97	11972.75	34.40
11974.0	22.10	.94	11973.75	33.69
11975.0	23.96	.91	11974.75	33.13
11976.0	26.06	.89	11975.75	32.68
11977.0	27.48	.88	11976.75	32.31
11978.0	27.10	.87	11977.75	32.02
11979.0	25.57	.87	11978.75	31.80
11980.0	24.07	.87	11979.75	31.65
11981.0	22.99	.88	11980.75	31.60
11982.0	22.38	.89	11981.75	31.66
11983.0	22.24	.90	11982.75	31.83
11984.0	22.56	.90	11983.75	32.13
11985.0	23.38	.91	11984.75	32.56
11986.0	24.79	.92	11985.75	33.12
11987.0	26.99	.94	11986.75	33.83
11988.0	30.44	.95	11987.75	34.69
11989.0	36.42	.98	11988.75	35.72
11990.0	44.20	1.01	11989.75	36.97
11991.0	35.79	1.06	11990.75	38.47
11992.0	31.38	1.12	11991.75	40.34
11993.0	29.13	1.19	11992.75	42.69
11994.0	27.99	1.28	11993.75	45.72
11995.0	27.56	1.41	11994.75	49.76
11996.0	27.78	1.58	11995.75	55.37
11997.0	29.38	1.83	11996.75	63.67
11998.0	34.92	2.28	11997.75	76.93
11999.0	27.33	3.31	11998.75	99.01
12000.0	20.05	8.04	11999.75	103.30
12001.0	17.82	4.02	12000.75	121.16
12002.0	18.14	2.61	12001.75	94.01
12003.0	20.15	2.01	12002.75	74.55
12004.0	22.97	1.68	12003.75	62.89
12005.0	24.80	1.48	12004.75	55.25
12006.0	24.21	1.34	12005.75	49.81
12007.0	22.87	1.25	12006.75	45.77
12008.0	22.00	1.18	12007.75	42.68
12009.0	21.79	1.12	12008.75	40.31
12010.0	22.20	1.07	12009.75	38.46
12011.0	23.24	1.02	12010.75	37.00

12012.0	24.98	.98	12011.75	35.84
12013.0	27.65	.95	12012.75	34.90
12014.0	31.69	.92	12013.75	34.12
12015.0	37.10	.91	12014.75	33.48
12016.0	36.02	.89	12015.75	32.95
12017.0	31.59	.88	12016.75	32.52
12018.0	28.82	.88	12017.75	32.20
12019.0	27.26	.88	12018.75	31.98
12020.0	26.53	.88	12019.75	31.87
12021.0	26.46	.88	12020.75	31.86
12022.0	27.00	.88	12021.75	31.96
12023.0	28.15	.88	12022.75	32.17
12024.0	29.94	.89	12023.75	32.48
12025.0	32.24	.90	12024.75	32.91
12026.0	34.07	.92	12025.75	33.44
12027.0	33.69	.94	12026.75	34.11
12028.0	31.97	.96	12027.75	34.92
12029.0	30.61	.99	12028.75	35.92
12030.0	30.17	1.03	12029.75	37.17
12031.0	30.93	1.07	12030.75	38.71
12032.0	33.51	1.13	12031.75	40.65
12033.0	39.79	1.20	12032.75	43.09
12034.0	38.87	1.29	12033.75	46.23
12035.0	31.28	1.42	12034.75	50.34
12036.0	27.81	1.60	12035.75	56.02
12037.0	27.36	1.86	12036.75	64.46
12038.0	32.40	2.33	12037.75	78.11
12039.0	28.41	3.42	12038.75	100.83
12040.0	20.05	7.68	12039.75	106.58
12041.0	17.93	3.88	12040.75	119.50
12042.0	19.05	2.55	12041.75	92.48
12043.0	22.27	1.97	12042.75	73.75
12044.0	25.52	1.66	12043.75	62.32
12045.0	25.20	1.47	12044.75	54.71
12046.0	23.53	1.34	12045.75	49.32
12047.0	22.70	1.24	12046.75	45.38
12048.0	22.89	1.17	12047.75	42.43
12049.0	24.05	1.10	12048.75	40.19
12050.0	26.32	1.05	12049.75	38.44
12051.0	30.09	1.00	12050.75	37.03
12052.0	34.81	.97	12051.75	35.86
12053.0	32.61	.94	12052.75	34.87
12054.0	28.23	.93	12053.75	34.04
12055.0	25.45	.92	12054.75	33.33
12056.0	23.81	.91	12055.75	32.77
12057.0	22.97	.90	12056.75	32.33
12058.0	22.78	.90	12057.75	32.04
12059.0	23.19	.89	12058.75	31.88

12060.0	24.24	.88	12059.75	31.84
12061.0	25.96	.88	12060.75	31.91
12062.0	28.21	.88	12061.75	32.07
12063.0	29.56	.88	12062.75	32.31
12064.0	27.97	.90	12063.75	32.62
12065.0	25.21	.92	12064.75	33.01
12066.0	22.92	.94	12065.75	33.48
12067.0	21.31	.97	12066.75	34.08
12068.0	20.34	1.00	12067.75	34.85
12069.0	19.97	1.04	12068.75	35.86
12070.0	20.22	1.07	12069.75	37.17
12071.0	21.13	1.11	12070.75	38.85
12072.0	22.67	1.16	12071.75	40.97
12073.0	24.19	1.23	12072.75	43.61
12074.0	23.88	1.33	12073.75	46.89
12075.0	21.91	1.47	12074.75	51.12
12076.0	20.42	1.66	12075.75	56.96
12077.0	20.77	1.95	12076.75	65.94
12078.0	24.71	2.46	12077.75	81.01
12079.0	22.23	3.74	12078.75	105.43
12080.0	15.23	6.95	12079.75	114.41
12081.0	13.34	3.74	12080.75	113.67
12082.0	14.23	2.55	12081.75	88.35
12083.0	15.09	2.02	12082.75	71.66
12084.0	14.60	1.76	12083.75	60.63
12085.0	13.72	1.61	12084.75	52.97
12086.0	13.16	1.51	12085.75	47.63
12087.0	13.05	1.42	12086.75	43.93
12088.0	13.27	1.34	12087.75	41.35
12089.0	13.64	1.26	12088.75	39.47
12090.0	13.95	1.20	12089.75	37.98
12091.0	13.96	1.16	12090.75	36.70
12092.0	13.59	1.15	12091.75	35.50
12093.0	12.96	1.15	12092.75	34.37
12094.0	12.27	1.17	12093.75	33.32
12095.0	11.66	1.20	12094.75	32.40
12096.0	11.19	1.22	12095.75	31.66
12097.0	10.90	1.23	12096.75	31.13
12098.0	10.76	1.23	12097.75	30.83
12099.0	10.76	1.23	12098.75	30.76
12100.0	10.86	1.22	12099.75	30.87
12101.0	10.98	1.21	12100.75	31.13
12102.0	11.03	1.20	12101.75	31.45
12103.0	10.92	1.22	12102.75	31.78
12104.0	10.61	1.26	12103.75	32.06
12105.0	10.12	1.32	12104.75	32.27
12106.0	9.54	1.40	12105.75	32.43

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