Hfin	32	nm											
Tfin	6.5	nm											
Lp = Ln	7	nm											
Vuniq	438	mV	(arun)										
Note:	$W_{eff} = N_{FIN}$	× (2H _{FIN} + T _{FIN}))										
		_ Weff_PMOS	(W/L)		Weff_NMOS	(W/L)	(W/L)p			CMOS I	nverter		
SI. No	Nfin_P	(nm)	PMOS	Nfin_N	(nm)	NMOS						Ι	
		(1111)	FIVIOS		(11111)	1414103	(W/L)n	Vth (mV)	Id (uA)	Pavg (uW)	tpd (ps)	Av (Max)	f_pd (GHz)
1	7	493.50	70.50	7	493.50	70.50	1.000	344.8	113	9.776	0.6712	6.428	745
2	7	493.50	70.50	8	564.00	80.57	0.875	335.5	121.3	10.42	0.6971	6.439	717.2
3	7	493.50	70.50	9	634.50	90.64	0.778	327.4	128.7	11	0.7081	6.46	706.1
4	7	493.50	70.50	10	705.00	100.71	0.700	320.2	135.4	11.54	0.707	6.487	707.2
5	7	493.50	70.50	11	775.50	110.79	0.636	313.7	141.6	12.05	0.694	6.518	720.5
6	7	493.50	70.50	12	846.00	120.86	0.583	307.8	147.2	12.54	0.6852	6.554	729.7
7	7	493.50	70.50	13	916.50	130.93	0.538	302.4	152.4	12.99	0.6852	6.592	729.7
8	7	493.50	70.50	14	987.00	141.00	0.500	297.5	157.2	13.43	0.6923	6.63	722.2
9	7	493.50	70.50	15	1057.50	151.07	0.467	292.9	161.7	13.84	0.7048	6.671	709.4
10	7	493.50	70.50	16	1128.00	161.14	0.438	288.7	165.9	14.23	0.7216	6.711	692.9
11 12	7	493.50 493.50	70.50 70.50	17 18	1198.50 1269.00	171.21 181.29	0.412 0.389	284.8 281.1	169.8 173.5	14.6 14.95	0.741 0.7576	6.751 6.791	674.7 660
13	7	493.50	70.50	19	1339.50	191.36	0.368	277.7	176.9	15.28	0.7370	6.832	648
14	7	493.50	70.50	20	1410.00	201.43	0.350	274.5	180.2	15.26	0.7717	6.871	637.9
15	7	493.50	70.50	21	1480.50	211.50	0.333	274.5	183.2	15.55	0.7948	6.91	629.1
16	8	564.00	80.57	7	493.50	70.50	1.143	354	120	10.45	0.6586	6.429	759.2
17	8	564.00	80.57	8	564.00	80.57	1.000	344.8	129.2	11.17	0.6712	6.428	745
18	8	564.00	80.57	9	634.50	90.64	0.889	336.6	137.5	11.82	0.6947	6.437	719.7
19	8	564.00	80.57	10	705.00	100.71	0.800	329.3	145	12.41	0.7066	6.454	707.6
20	8	564.00	80.57	11	775.50	110.79	0.727	322.8	152	12.97	0.7086	6.477	705.6
21	8	564.00	80.57	12	846.00	120.86	0.667	316.8	158.4	13.49	0.7024	6.503	711.8
22	8	564.00	80.57	13	916.50	130.93	0.615	311.4	164.3	13.99	0.6895	6.532	725.2
23	8	564.00	80.57	14	987.00	141.00	0.571	306.4	169.8	14.46	0.6845	6.564	730.4
24	8	564.00	80.57	15	1057.50	151.07	0.533	301.7	174.9	14.91	0.6858	6.597	729.1
25	8	564.00	80.57	16	1128.00	161.14	0.500	297.5	179.7	15.34	0.6923	6.63	722.2
26	8	564.00	80.57	17	1198.50	171.21	0.471	293.5	184.2	15.76	0.7025	6.665	711.8
27	8	564.00	80.57	18	1269.00	181.29	0.444	289.7	188.4	16.15	0.717	6.7	697.3
28	8	564.00	80.57	19	1339.50	191.36	0.421	286.2	192.4	16.53	0.7339	6.736	681.3
29	8	564.00	80.57	20	1410.00	201.43	0.400	282.9	196.2	16.88	0.7497	6.771	666.9
30	8	564.00	80.57	21	1480.50	211.50	0.381	279.8	199.8	17.23	0.7631	6.807	655.2
31	9	634.50	90.64	7	493.50	70.50	1.286	362.1	126.2	11.06	0.6639	6.44	753.2
32	9	634.50	90.64	8	564.00	80.57	1.125	352.9	136.2	11.85	0.6591	6.428	758.6
33	9	634.50	90.64	9	634.50	90.64	1.000	344.8	145.3	12.57	0.6712	6.428	745
34	9	634.50	90.64	10	705.00	100.71	0.900	337.5	153.7	13.22	0.6926	6.436	721.9
35	9	634.50	90.64	11	775.50	110.79	0.818	330.9	161.3	13.82	0.7049	6.449	709.3
36	9	634.50	90.64	12	846.00	120.86	0.750	324.9	168.4	14.38	0.7089	6.468	705.3
37 38	9	634.50	90.64	13	916.50 987.00	130.93	0.692	319.4	175	14.92	0.7063	6.49	708 718.8
38	9	634.50 634.50	90.64	14 15	1057.50	141.00 151.07	0.643 0.600	314.3 309.7	181.2 186.9	15.43 15.91	0.6956 0.687	6.516 6.542	718.8
40	9	634.50	90.64	16	1128.00	161.14	0.563	305.3	192.3	16.38	0.6843	6.571	730.6
40	<u> </u>	034.30	30.04	10	1120.00	101.14	0.505	303.3	132.3	10.38	0.0643	0.5/1	/30.0

al a:	Nfin_P	Weff_PMOS (nm)	(W/L) PMOS		Weff_NMOS (nm)	(W/L) NMOS	(W/L)p	CMOS Inverter						
SI. No				Nfin_N			(W/L)n	Vth (mV)	Id (uA)	Pavg (uW)	tpd (ps)	Av (Max)	f_pd (GHz)	
41	9	634.50	90.64	17	1198.50	171.21	0.529	301.3	197.4	16.83	0.6863	6.6	728.5	
42	9	634.50	90.64	18	1269.00	181.29	0.500	297.5	202.1	17.26	0.6923	6.63	722.2	
43	9	634.50	90.64	19	1339.50	191.36	0.474	293.9	206.7	17.68	0.7012	6.662	713.1	
44	9	634.50	90.64	20	1410.00	201.43	0.450	290.5	210.9	18.07	0.7137	6.693	700.6	
45	9	634.50	90.64	21	1480.50	211.50	0.429	287.4	215	18.45	0.728	6.725	686.8	
46	10	705.00	100.71	7	493.50	70.50	1.429	369.3	131.8	11.6	0.6827	6.456	732.4	
47	10	705.00	100.71	8	564.00	80.57	1.250	360.2	142.6	12.47	0.6609	6.437	756.5	
48	10	705.00	100.71	9	634.50	90.64	1.111	352.1	152.4	13.25	0.6595	6.427	758.2	
49	10	705.00	100.71	10	705.00	100.71	1.000	344.8	161.5	13.97	0.6712	6.428	745	
50	10	705.00	100.71	11	775.50	110.79	0.909	338.2	169.8	14.62	0.6908	6.435	723.8	
51	10	705.00	100.71	12	846.00	120.86	0.833	332.2	177.6	15.22	0.7032	6.447	711.1	
52	10	705.00	100.71	13	916.50	130.93	0.769	326.6	184.8	15.8	0.7084	6.463	705.8	
53	10	705.00	100.71	14	987.00	141.00	0.714	321.5	191.6	16.34	0.708	6.481	706.2	
54	10	705.00	100.71	15	1057.50	151.07	0.667	316.8	197.9	16.86	0.7024	6.503	711.8	
55	10	705.00	100.71	16	1128.00	161.14	0.625	312.4	203.9	17.36	0.6914	6.526	723.2	
56	10	705.00	100.71	17	1198.50	171.21	0.588	308.3	209.5	17.84	0.6857	6.551	729.2	
57	10	705.00	100.71	18	1269.00	181.29	0.556	304.5	214.8	18.3	0.684	6.577	731	
58	10	705.00	100.71	19	1339.50	191.36	0.526	300.9	219.8	18.75	0.6868	6.604	728	
59	10	705.00	100.71	20	1410.00	201.43	0.500	297.5	224.6	19.18	0.6923	6.63	722.2	
60	10	705.00	100.71	21	1480.50	211.50	0.476	294.2	229.1	19.59	0.7002	6.659	714.1	
61	11	775.50	110.79	7	493.50	70.50	1.571	375.8	136.8	12.1	0.7094	6.477	704.8	
62	11	775.50	110.79	8	564.00	80.57	1.375	366.7	148.3	13.03	0.6742	6.449	741.6	
63	11	775.50	110.79	9	634.50	90.64	1.222	358.6	158.9	13.88	0.6592	6.434	758.5	
64	11	775.50	110.79	10	705.00	100.71	1.100	351.4	168.6	14.65	0.6601	6.428	757.5	
65	11	775.50	110.79	11	775.50	110.79	1.000	344.8	177.6	15.36	0.6712	6.428	745	
66	11	775.50	110.79	12	846.00	120.86	0.917	338.8	186	16.02	0.6893	6.434	725.4	
67	11	775.50	110.79	13	916.50	130.93	0.846	333.2	193.9	16.63	0.7015	6.444	712.7	
68	11	775.50	110.79	14	987.00	141.00	0.786	328.1	201.2	17.21	0.7076	6.457	706.6	
69	11	775.50	110.79	15	1057.50	151.07	0.733	323.4	208.1	17.76	0.7088	6.474	705.5	
70	11	775.50	110.79	16	1128.00	161.14	0.688	318.9	214.6	18.29	0.7057	6.493	708.5	
71	11	775.50	110.79	17	1198.50	171.21	0.647	314.8	220.8	18.8	0.6967	6.513	717.7	
72	11	775.50	110.79	18	1269.00	181.29	0.611	310.9	226.6	19.29	0.6888	6.534	726	
73	11	775.50	110.79	19	1339.50	191.36	0.579	307.3	232.1	19.77	0.6849	6.558	730	
74	11	775.50	110.79	20	1410.00	201.43	0.550	303.8	237.3	20.22	0.6843	6.582	730.7	
75	11	775.50	110.79	21	1480.50	211.50	0.524	300.5	242.3	20.67	0.6872	6.606	727.6	
76	12	846.00	120.86	7	493.50	70.50	1.714	381.6	141.4	12.56	0.7247	6.499	689.9	
77	12	846.00	120.86	8	564.00	80.57	1.500	372.6	153.6	13.55	0.6962	6.466	718.2	
78	12	846.00	120.86	9	634.50	90.64	1.333	364.6	164.8	14.46	0.6689	6.444	747.5	
78 79	12	846.00	120.86	10	705.00	100.71	1.200	357.4	175.1	15.29	0.6589	6.433	758.9	
80	12	846.00	120.86	11	775.50	110.79	1.091	350.8	184.8	16.05	0.6607	6.428	756.8	
81	12	846.00	120.86	12	846.00	120.86	1.000	344.8	193.8	16.76	0.6712	6.428	730.6	
82	12	846.00	120.86	13	916.50	130.93	0.923	339.2	202.2	17.41	0.6879	6.433	726.8	
83	12	846.00	120.86	14	987.00	141.00	0.323	334.1	210.1	18.03	0.0873	6.442	720.8	
84	12	846.00	120.86	15	1057.50	151.07	0.800	329.3	217.5	18.62	0.7066	6.454	707.6	
85	12	846.00	120.86	16	1128.00	161.14	0.300	324.9	224.6	19.18	0.7089	6.468	707.0	
86 86	12	846.00	120.86	17	1128.00	171.21	0.706	324.9	231.2	19.72	0.7089	6.485	705.3	
87	12	846.00	120.86	18	1269.00	181.29	0.700	316.8	237.5	20.23	0.7073	6.503	711.8	
88	12	846.00	120.86	19	1339.50	191.36	0.632	313.1	243.5	20.23	0.7024	6.522	721.7	

al .::		Weff_PMOS (nm)	(W/L) PMOS		Weff_NMOS	(W/L)	(W/L)p	CMOS Inverter						
SI. No	Nfin_P			Nfin_N	(nm)	NMOS	 (W/L)n	Vth (mV)	Id (uA)	Pavg (uW)	tpd (ps)	Av (Max)	f_pd (GHz)	
89	12	846.00	120.86	20	1410.00	201.43	0.600	309.7	249.2	21.22	0.687	6.542	727.8	
90	12	846.00	120.86	21	1480.50	211.50	0.571	306.4	254.6	21.69	0.6845	6.564	730.4	
91	13	916.50	130.93	7	493.50	70.50	1.857	387	145.6	12.98	0.7329	6.521	682.3	
92	13	916.50	130.93	8	564.00	80.57	1.625	378	158.4	14.03	0.7162	6.484	698.1	
93	13	916.50	130.93	9	634.50	90.64	1.444	370.1	170.2	14.99	0.6855	6.459	729.4	
94	13	916.50	130.93	10	705.00	100.71	1.300	362.9	181.2	15.88	0.6652	6.441	751.6	
95	13	916.50	130.93	11	775.50	110.79	1.182	356.3	191.4	16.7	0.6585	6.432	759.3	
96	13	916.50	130.93	12	846.00	120.86	1.083	350.3	201	17.45	0.6612	6.427	756.2	
97	13	916.50	130.93	13	916.50	130.93	1.000	344.8	209.9	18.16	0.6712	6.428	745	
98	13	916.50	130.93	14	987.00	141.00	0.929	339.7	218.4	18.81	0.6867	6.432	728.1	
99	13	916.50	130.93	15	1057.50	151.07	0.867	334.9	226.3	19.43	0.6985	6.44	715.8	
100	13	916.50	130.93	16	1128.00	161.14	0.813	330.4	233.9	20.03	0.7055	6.451	708.7	
101	13	916.50	130.93	17	1198.50	171.21	0.765	326.2	241	20.59	0.7086	6.463	705.6	
102	13	916.50	130.93	18	1269.00	181.29	0.722	322.3	247.8	21.14	0.7084	6.477	705.8	
103	13	916.50	130.93	19	1339.50	191.36	0.684	318.6	254.2	21.66	0.7053	6.494	708.9	
104	13	916.50	130.93	20	1410.00	201.43	0.650	315.1	260.4	22.17	0.6975	6.512	716.8	
105	13	916.50	130.93	21	1480.50	211.50	0.619	311.8	266.2	22.67	0.6902	6.529	724.4	
106	14	987.00	141.00	7	493.50	70.50	2.000	391.8	149.5	13.38	0.7364	6.545	678.9	
107	14	987.00	141.00	8	564.00	80.57	1.750	383	162.8	14.48	0.7273	6.504	687.5	
108	14	987.00	141.00	9	634.50	90.64	1.556	375.1	175.2	15.49	0.7071	6.474	707.1	
109	14	987.00	141.00	10	705.00	100.71	1.400	367.9	186.8	16.42	0.6778	6.453	737.7	
110	14	987.00	141.00	11	775.50	110.79	1.273	361.4	197.5	17.29	0.6627	6.439	754.5	
111	14	987.00	141.00	12	846.00	120.86	1.167	355.4	207.6	18.1	0.6584	6.431	759.4	
112	14	987.00	141.00	13	916.50	130.93	1.077	349.9	217.1	18.85	0.6617	6.427	755.6	
113	14	987.00	141.00	14	987.00	141.00	1.000	344.8	226.1	19.55	0.6712	6.428	745	
114	14	987.00	141.00	15	1057.50	151.07	0.933	340	234.5	20.21	0.6857	6.433	729.2	
115	14	987.00	141.00	16	1128.00	161.14	0.875	335.5	242.5	20.83	0.6971	6.439	717.2	
116	14	987.00	141.00	17	1198.50	171.21	0.824	331.4	250.1	21.43	0.7043	6.449	709.9	
117	14	987.00	141.00	18	1269.00	181.29	0.778	327.4	257.4	22.01	0.7081	6.46	706.1	
118	14	987.00	141.00	19	1339.50	191.36	0.737	323.7	264.3	22.56	0.7088	6.473	705.4	
119	14	987.00	141.00	20	1410.00	201.43	0.700	320.2	270.8	23.09	0.707	6.487	707.2	
120	14	987.00	141.00	21	1480.50	211.50	0.667	316.8	277.1	23.61	0.7024	6.503	711.8	
121	15	1057.50	151.07	7	493.50	70.50	2.143	396.4	153	13.76	0.7371	6.571	678.3	
122	15	1057.50	151.07	8	564.00	80.57	1.875	387.6	167	14.9	0.7335	6.525	681.6	
123	15	1057.50	151.07	9	634.50	90.64	1.667	379.7	179.9	15.95	0.7206	6.491	693.9	
124	15	1057.50	151.07	10	705.00	100.71	1.500	372.6	192	16.94	0.6962	6.466	718.2	
125	15	1057.50	151.07	11	775.50	110.79	1.364	366.2	203.3	17.85	0.6727	6.449	743.3	
126	15	1057.50	151.07	12	846.00	120.86	1.250	360.2	213.9	18.71	0.6609	6.437	756.5	
127	15	1057.50	151.07	13	916.50	130.93	1.154	354.7	223.9	19.5	0.6585	6.43	759.4	
128	15	1057.50	151.07	14	987.00	141.00	1.071	349.6	233.3	20.25	0.6622	6.428	755.1	
129	15	1057.50	151.07	15	1057.50	151.07	1.000	344.8	242.2	20.95	0.6712	6.428	745	
130	15	1057.50	151.07	16	1128.00	161.14	0.938	340.3	250.7	21.61	0.6846	6.432	730.4	
131	15	1057.50	151.07	17	1198.50	171.21	0.882	336.1	258.7	22.24	0.6959	6.439	718.5	
132	15	1057.50	151.07	18	1269.00	181.29	0.833	332.2	266.4	22.84	0.7032	6.447	710.3	
133	15	1057.50	151.07	19	1339.50	191.36	0.789	328.4	273.7	23.42	0.7032	6.457	706.8	
134	15	1057.50	151.07	20	1410.00	201.43	0.750	324.9	280.7	23.42	0.7074	6.468	705.3	
135	15	1057.50	151.07	21	1480.50	211.50	0.730	324.5	287.4	24.51	0.7083	6.481	705.3	
136	16	1128.00	161.14	7	493.50	70.50	2.286	400.5	156.4	14.1	0.7355	6.594	679.8	

	Nfin_P	Weff_PMOS (nm)	(W/L)		Weff_NMOS	(W/L)	(W/L)p	CMOS Inverter						
SI. No			PMOS	Nfin_N	(nm)	NMOS	(W/L)n	Vth (mV)	Id (uA)	Pavg (uW)	tpd (ps)	Av (Max)	f_pd (GHz)	
137	16	1128.00	161.14	8	564.00	80.57	2.000	391.8	170.8	15.29	0.7364	6.545	678.9	
138	16	1128.00	161.14	9	634.50	90.64	1.778	384.1	184.3	16.39	0.729	6.508	685.8	
139	16	1128.00	161.14	10	705.00	100.71	1.600	377	196.8	17.42	0.7132	6.481	701.1	
140	16	1128.00	161.14	11	775.50	110.79	1.455	370.5	208.6	18.38	0.6873	6.459	727.5	
141	16	1128.00	161.14	12	846.00	120.86	1.333	364.6	219.7	19.28	0.6689	6.444	747.5	
142	16	1128.00	161.14	13	916.50	130.93	1.231	359.1	230.2	20.12	0.6597	6.435	757.9	
143	16	1128.00	161.14	14	987.00	141.00	1.143	354	240.1	20.91	0.6586	6.429	759.2	
144	16	1128.00	161.14	15	1057.50	151.07	1.067	349.3	249.5	21.65	0.6626	6.427	754.6	
145	16	1128.00	161.14	16	1128.00	161.14	1.000	344.8	258.4	22.35	0.6712	6.428	745	
146	16	1128.00	161.14	17	1198.50	171.21	0.941	340.6	266.9	23.01	0.6836	6.431	731.4	
147	16	1128.00	161.14	18	1269.00	181.29	0.889	336.6	274.9	23.64	0.6947	6.437	719.7	
148	16	1128.00	161.14	19	1339.50	191.36	0.842	332.9	282.7	24.24	0.7021	6.444	712.2	
149	16	1128.00	161.14	20	1410.00	201.43	0.800	329.3	290.1	24.83	0.7066	6.454	707.6	
150	16	1128.00	161.14	21	1480.50	211.50	0.762	326	297.1	25.39	0.7087	6.464	705.5	
151	17	1198.50	171.21	7	493.50	70.50	2.429	404.4	159.5	14.44	0.7334	6.618	681.7	
152	17	1198.50	171.21	8	564.00	80.57	2.125	395.8	174.4	15.67	0.7372	6.566	678.3	
153	17	1198.50	171.21	9	634.50	90.64	1.889	388.1	188.3	16.81	0.734	6.527	681.2	
154	17	1198.50	171.21	10	705.00	100.71	1.700	381.1	201.4	17.87	0.7235	6.496	691	
155	17	1198.50	171.21	11	775.50	110.79	1.545	374.7	213.6	18.87	0.7055	6.473	708.7	
156	17	1198.50	171.21	12	846.00	120.86	1.417	368.8	225.2	19.81	0.6804	6.455	734.9	
157	17	1198.50	171.21	13	916.50	130.93	1.308	363.3	236.1	20.7	0.666	6.442	750.7	
158	17	1198.50	171.21	14	987.00	141.00	1.214	358.2	246.4	21.53	0.6593	6.434	758.3	
159	17	1198.50	171.21	15	1057.50	151.07	1.133	353.4	256.3	22.31	0.6588	6.429	758.9	
160	17	1198.50	171.21	16	1128.00	161.14	1.063	349	265.6	23.04	0.663	6.427	754.2	
161	17	1198.50	171.21	17	1198.50	171.21	1.000	344.8	274.5	23.74	0.6712	6.428	745	
162	17	1198.50	171.21	18	1269.00	181.29	0.944	340.8	283	24.4	0.6827	6.432	732.4	
163	17	1198.50	171.21	19	1339.50	191.36	0.895	337.1	291.1	25.04	0.6936	6.437	720.9	
164	17	1198.50	171.21	20	1410.00	201.43	0.850	333.5	298.9	25.64	0.701	6.443	713.3	
165	17	1198.50	171.21	21	1480.50	211.50	0.810	330.2	306.4	26.23	0.7058	6.452	708.4	
166	18	1269.00	181.29	7	493.50	70.50	2.571	408	162.4	14.75	0.7358	6.642	679.6	
167	18	1269.00	181.29	8	564.00	80.57	2.250	399.5	177.8	16.02	0.7364	6.588	679	
168	18	1269.00	181.29	9	634.50	90.64	2.000	391.8	192.2	17.21	0.7364	6.545	678.9	
169	18	1269.00	181.29	10	705.00	100.71	1.800	384.9	205.7	18.31	0.7303	6.512	684.7	
170	18	1269.00	181.29	11	775.50	110.79	1.636	378.5	218.4	19.34	0.7175	6.486	696.9	
171	18	1269.00	181.29	12	846.00	120.86	1.500	372.6	230.4	20.32	0.6962	6.466	718.2	
172	18	1269.00	181.29	13	916.50	130.93	1.385	367.2	241.7	21.24	0.6756	6.451	740.1	
173	18	1269.00	181.29	14	987.00	141.00	1.286	362.1	252.5	22.11	0.6639	6.44	753.2	
174	18	1269.00	181.29	15	1057.50	151.07	1.200	357.4	262.7	22.93	0.6589	6.433	758.9	
175	18	1269.00	181.29	16	1128.00	161.14	1.125	352.9	272.5	23.71	0.6591	6.428	758.6	
176	18	1269.00	181.29	17	1198.50	171.21	1.059	348.7	281.8	24.44	0.6634	6.427	753.7	
177	18	1269.00	181.29	18	1269.00	181.29	1.000	344.8	290.7	25.14	0.6712	6.428	745	
178	18	1269.00	181.29	19	1339.50	191.36	0.947	341	299.2	25.8	0.682	6.431	733.1	
179	18	1269.00	181.29	20	1410.00	201.43	0.900	337.5	307.3	26.44	0.6926	6.436	721.9	
180	18	1269.00	181.29	21	1480.50	211.50	0.857	334.1	315.1	27.05	0.7	6.442	714.3	
181	19	1339.50	191.36	7	493.50	70.50	2.714	411.4	165.1	15.05	0.7421	6.664	673.7	
182	19	1339.50	191.36	8	564.00	80.57	2.375	403	180.9	16.36	0.7335	6.609	681.6	
183	19	1339.50	191.36	9	634.50	90.64	2.111	395.4	195.8	17.58	0.7372	6.565	678.3	
184	19	1339.50	191.36	10	705.00	100.71	1.900	388.5	209.7	18.72	0.7343	6.529	680.9	

SI. No	Nfin_P	Weff_PMOS	(W/L)	NIE NI	Weff_NMOS	(W/L)	(W/L)p			CMOS I	nverter		
31. IVO		(nm)	PMOS	Nfin_N	(nm)	NMOS	(W/L)n	Vth (mV)	Id (uA)	Pavg (uW)	tpd (ps)	Av (Max)	f_pd (GHz)
185	19	1339.50	191.36	11	775.50	110.79	1.727	382.1	222.8	19.79	0.7257	6.5	689
186	19	1339.50	191.36	12	846.00	120.86	1.583	376.3	235.2	20.81	0.711	6.477	703.2
187	19	1339.50	191.36	13	916.50	130.93	1.462	370.9	247	21.76	0.6886	6.461	726.1
188	19	1339.50	191.36	14	987.00	141.00	1.357	365.8	258.2	22.67	0.6718	6.448	744.2
189	19	1339.50	191.36	15	1057.50	151.07	1.267	361.1	268.8	23.53	0.6622	6.438	755.1
190	19	1339.50	191.36	16	1128.00	161.14	1.188	356.7	279	24.34	0.6586	6.432	759.2
191	19	1339.50	191.36	17	1198.50	171.21	1.118	352.5	288.7	25.11	0.6594	6.429	758.3
192	19	1339.50	191.36	18	1269.00	181.29	1.056	348.5	297.9	25.84	0.6637	6.427	753.4
193	19	1339.50	191.36	19	1339.50	191.36	1.000	344.8	306.8	26.54	0.6712	6.428	745
194	19	1339.50	191.36	20	1410.00	201.43	0.950	341.2	315.3	27.2	0.6814	6.431	733.8
195	19	1339.50	191.36	21	1480.50	211.50	0.905	337.9	323.5	27.84	0.6917	6.435	722.9
196	20	1410.00	201.43	7	493.50	70.50	2.857	414.6	167.7	15.34	0.7519	6.686	665
197	20	1410.00	201.43	8	564.00	80.57	2.500	406.2	183.9	16.68	0.7341	6.63	681.1
198	20	1410.00	201.43	9	634.50	90.64	2.222	398.7	199.2	17.93	0.7367	6.583	678.7
199	20	1410.00	201.43	10	705.00	100.71	2.000	391.8	213.5	19.12	0.7364	6.545	678.9
200	20	1410.00	201.43	11	775.50	110.79	1.818	385.6	227.1	20.22	0.7312	6.516	683.8
201	20	1410.00	201.43	12	846.00	120.86	1.667	379.7	239.9	21.27	0.7206	6.491	693.9
202	20	1410.00	201.43	13	916.50	130.93	1.538	374.4	252	22.26	0.7044	6.471	709.8
203	20	1410.00	201.43	14	987.00	141.00	1.429	369.3	263.6	23.2	0.6827	6.456	732.4
204	20	1410.00	201.43	15	1057.50	151.07	1.333	364.6	274.6	24.09	0.6689	6.444	747.5
205	20	1410.00	201.43	16	1128.00	161.14	1.250	360.2	285.1	24.94	0.6609	6.437	756.5
206	20	1410.00	201.43	17	1198.50	171.21	1.176	356	295.2	25.75	0.6584	6.431	759.4
207	20	1410.00	201.43	18	1269.00	181.29	1.111	352.1	304.8	26.51	0.6595	6.427	758.2
208	20	1410.00	201.43	19	1339.50	191.36	1.053	348.3	314.1	27.24	0.664	6.427	753
209	20	1410.00	201.43	20	1410.00	201.43	1.000	344.8	323	27.93	0.6712	6.428	745
210	20	1410.00	201.43	21	1480.50	211.50	0.952	341.4	331.5	28.6	0.6809	6.43	734.4
211	21	1480.50	211.50	7	493.50	70.50	3.000	417.6	170.1	15.61	0.7644	6.708	654.1
212	21	1480.50	211.50	8	564.00	80.57	2.625	409.3	186.8	16.99	0.7376	6.65	677.9
213	21	1480.50	211.50	9	634.50	90.64	2.333	401.8	202.4	18.28	0.7343	6.602	680.9
214	21	1480.50	211.50	10	705.00	100.71	2.100	395	217.1	19.5	0.7372	6.563	678.3
215	21	1480.50	211.50	11	775.50	110.79	1.909	388.8	231.1	20.63	0.7345	6.53	680.7
216	21	1480.50	211.50	12	846.00	120.86	1.750	383	244.3	21.71	0.7273	6.504	687.5
217	21	1480.50	211.50	13	916.50	130.93	1.615	377.6	256.8	22.74	0.7151	6.483	699.2
218	21	1480.50	211.50	14	987.00	141.00	1.500	372.6	268.8	23.71	0.6962	6.466	718.2
219	21	1480.50	211.50	15	1057.50	151.07	1.400	367.9	280.1	24.64	0.6778	6.453	737.7
220	21	1480.50	211.50	16	1128.00	161.14	1.313	363.5	291	25.52	0.6665	6.442	750.2
221	21	1480.50	211.50	17	1198.50	171.21	1.235	359.4	301.5	26.36	0.6599	6.436	757.6
222	21	1480.50	211.50	18	1269.00	181.29	1.167	355.4	311.4	27.15	0.6584	6.431	759.4
223	21	1480.50	211.50	19	1339.50	191.36	1.105	351.7	321	27.91	0.6598	6.428	757.8
224	21	1480.50	211.50	20	1410.00	201.43	1.050	348.2	330.2	28.63	0.6643	6.427	752.7
225	21	1480.50	211.50	21	1480.50	211.50	1.000	344.8	339.1	29.33	0.6712	6.428	745