

ANEXO IV: Tabla: Análisis paramétrico. Error INL

Tdelay	V_offset	Depend_offset	C1	C2	Error INL
0ns	0V	0	5pF	5pF	0.458658
2ns	0V	0	5pF	5pF	0.458658
10ns	0V	0	5pF	5pF	0.563960
100ns	0V	0	5pF	5pF	15.880831
1000ns	0V	0	5pF	5pF	35.687060
0ns	0V	0	4.75 pF	5pF	6.550538
0ns	0V	0	4.85pF	5pF	4.051613
0ns	0V	0	4.95pF	5pF	1.518280
0ns	0V	0	5.05pF	5pF	0.774045
0ns	0V	0	5.15pF	5pF	1.907601
0ns	0V	0	5.25pF	5pF	58.300853
2ns	0V	0	4.75pF	5pF	6.492473
2ns	0V	0	4.85pF	5pF	4.051613
2ns	0V	0	4.95pF	5pF	1.518280
2ns	0V	0	5.05pF	5pF	0.808157
2ns	0V	0	5.15pF	5pF	1.907601
2ns	0V	0	5.25pF	5pF	58.234260
10ns	0V	0	4.75pF	5pF	6.524731
10ns	0V	0	4.85pF	5pF	4.068817
10ns	0V	0	4.95pF	5pF	1.496774
10ns	0V	0	5.05pF	5pF	0.862885
10ns	0V	0	5.15pF	5pF	16.543190
10ns	0V	0	5.25pF	5pF	58.269040
100ns	0V	0	4.75pF	5pF	58.218094
100ns	0V	0	4.85pF	5pF	58.717316
100ns	0V	0	4.95pF	5pF	57.241453
100ns	0V	0	5.05pF	5pF	58.852280

100ns	0V	0	5.15pF	5pF	60.655469
100ns	0V	0	5.25pF	5pF	58.218094
1000ns	0V	0	4.75pF	5pF	55.970782
1000ns	0V	0	4.85pF	5pF	57.803115
1000ns	0V	0	4.95pF	5pF	57.109900
1000ns	0V	0	5.05pF	5pF	50.181387
1000ns	0V	0	5.15pF	5pF	61.190879
1000ns	0V	0	5.25pF	5pF	58.759881
0ns	0.0005V	0	5pF	5pF	0.458658
0ns	0.0025V	0	5pF	5pF	2.041083
0ns	0.0050V	0	5pF	5pF	57.094624
0ns	0.0075V	0	5pF	5pF	57.920160
0ns	0.0100V	0	5pF	5pF	55.604894
2ns	0.0005V	0	5pF	5pF	0.458658
2ns	0.0025V	0	5pF	5pF	2.041083
2ns	0.0050V	0	5pF	5pF	56.957879
2ns	0.0075V	0	5pF	5pF	57.024175
2ns	0.0100V	0	5pF	5pF	58.707304
10ns	0.0005V	0	5pF	5pF	0.582796
10ns	0.0025V	0	5pF	5pF	2.214905
10ns	0.0050V	0	5pF	5pF	57.193178
10ns	0.0075V	0	5pF	5pF	57.193178
10ns	0.0100V	0	5pF	5pF	56.937115
100ns	0.0005V	0	5pF	5pF	5.942084
100ns	0.0025V	0	5pF	5pF	5.712570
100ns	0.0050V	0	5pF	5pF	59.887356
100ns	0.0075V	0	5pF	5pF	59.433741
100ns	0.0100V	0	5pF	5pF	59.311012
1000ns	0.0005V	0	5pF	5pF	34.721542
1000ns	0.0025V	0	5pF	5pF	59.685799

1000ns	0.0050V	0	5pF	5pF	56.783611
1000ns	0.0075V	0	5pF	5pF	55.153801
1000ns	0.0100V	0	5pF	5pF	53.613571
0ns	0.0005V	0.002	5pF	5pF	0.458658
0ns	0.0005V	0.004	5pF	5pF	0.458658
0ns	0.0005V	0.006	5pF	5pF	0.458658
2ns	0.0005V	0.002	5pF	5pF	0.458658
2ns	0.0005V	0.004	5pF	5pF	0.458658
2ns	0.0005V	0.006	5pF	5pF	0.458658
10ns	0.0005V	0.002	5pF	5pF	0.582796
10ns	0.0005V	0.004	5pF	5pF	0.582796
10ns	0.0005V	0.006	5pF	5pF	0.582796
100ns	0.0005V	0.002	5pF	5pF	5.942084
100ns	0.0005V	0.004	5pF	5pF	5.942084
100ns	0.0005V	0.006	5pF	5pF	5.942084
0ns	0.0025V	0.002	5pF	5pF	2.041083
0ns	0.0025V	0.004	5pF	5pF	2.041083
0ns	0.0025V	0.006	5pF	5pF	2.090323
2ns	0.0025V	0.002	5pF	5pF	2.041083
2ns	0.0025V	0.004	5pF	5pF	2.041083
2ns	0.0025V	0.006	5pF	5pF	2.090323
10ns	0.0025V	0.002	5pF	5pF	2.214905
10ns	0.0025V	0.004	5pF	5pF	2.214905
10ns	0.0025V	0.006	5pF	5pF	2.191694
100ns	0.0025V	0.002	5pF	5pF	16.232258
100ns	0.0025V	0.004	5pF	5pF	16.362329
100ns	0.0025V	0.006	5pF	5pF	16.402002
0ns	0.0050V	0.002	5pF	5pF	57.240712
0ns	0.0050V	0.004	5pF	5pF	57.240712
0ns	0.0050V	0.006	5pF	5pF	57.035595

2ns	0.0050V	0.002	5pF	5pF	56.957879
2ns	0.0050V	0.004	5pF	5pF	57.162996
2ns	0.0050V	0.006	5pF	5pF	57.240712
10ns	0.0050V	0.002	5pF	5pF	57.339266
10ns	0.0050V	0.004	5pF	5pF	57.322284
10ns	0.0050V	0.006	5pF	5pF	57.322284
100ns	0.0050V	0.002	5pF	5pF	59.909010
100ns	0.0050V	0.004	5pF	5pF	58.658287
100ns	0.0050V	0.006	5pF	5pF	58.705006
0ns	0.0075V	0.002	5pF	5pF	57.135855
0ns	0.0075V	0.004	5pF	5pF	57.160920
0ns	0.0075V	0.006	5pF	5pF	57.135855
2ns	0.0075V	0.002	5pF	5pF	57.083204
2ns	0.0075V	0.004	5pF	5pF	57.160920
2ns	0.0075V	0.006	5pF	5pF	57.135855
10ns	0.0075V	0.002	5pF	5pF	57.193178
10ns	0.0075V	0.004	5pF	5pF	57.155803
10ns	0.0075V	0.006	5pF	5pF	57.113756
100ns	0.0075V	0.002	5pF	5pF	59.441379
100ns	0.0075V	0.004	5pF	5pF	58.235298
100ns	0.0075V	0.006	5pF	5pF	56.410456
0ns	0.0100V	0.002	5pF	5pF	56.972785
0ns	0.0100V	0.004	5pF	5pF	56.972785
0ns	0.0100V	0.006	5pF	5pF	56.972785
2ns	0.0100V	0.002	5pF	5pF	56.920133
2ns	0.0100V	0.004	5pF	5pF	56.972785
2ns	0.0100V	0.006	5pF	5pF	56.972785
10ns	0.0100V	0.002	5pF	5pF	56.957063
10ns	0.0100V	0.004	5pF	5pF	56.933704
10ns	0.0100V	0.006	5pF	5pF	58.663404

100ns	0.0100V	0.002	5pF	5pF	59.296626
100ns	0.0100V	0.004	5pF	5pF	57.524435
100ns	0.0100V	0.006	5pF	5pF	59.932814
0ns	0.0005V	0.002	4.75pF	5pF	6.430108
0ns	0.0005V	0.002	4.85pF	5pF	3.954839
0ns	0.0005V	0.002	4.95pF	5pF	1.516129
0ns	0.0005V	0.002	5.05pF	5pF	0.776863
0ns	0.0005V	0.002	5.15pF	5pF	1.931257
0ns	0.0005V	0.002	5.25pF	5pF	58.231072
2ns	0.0005V	0.002	4.75pF	5pF	6.430108
2ns	0.0005V	0.002	4.85pF	5pF	3.959140
2ns	0.0005V	0.002	4.95pF	5pF	1.518280
2ns	0.0005V	0.002	5.05pF	5pF	0.776863
2ns	0.0005V	0.002	5.15pF	5pF	1.931257
2ns	0.0005V	0.002	5.25pF	5pF	58.231072
10ns	0.0005V	0.002	4.75pF	5pF	6.505376
10ns	0.0005V	0.002	4.85pF	5pF	3.993548
10ns	0.0005V	0.002	4.95pF	5pF	61.086170
10ns	0.0005V	0.002	5.05pF	5pF	0.819874
10ns	0.0005V	0.002	5.15pF	5pF	2.004746
10ns	0.0005V	0.002	5.25pF	5pF	58.355951
100ns	0.0005V	0.002	4.75pF	5pF	6.950538
100ns	0.0005V	0.002	4.85pF	5pF	58.429466
100ns	0.0005V	0.002	4.95pF	5pF	56.515907
100ns	0.0005V	0.002	5.05pF	5pF	58.608528
100ns	0.0005V	0.002	5.15pF	5pF	61.158695
100ns	0.0005V	0.002	5.25pF	5pF	58.606748
0ns	0.0005V	0.004	4.75pF	5pF	6.430108
0ns	0.0005V	0.004	4.85pF	5pF	3.954839
0ns	0.0005V	0.004	4.95pF	5pF	1.516129

0ns	0.0005V	0.004	5.05pF	5pF	0.776863
0ns	0.0005V	0.004	5.15pF	5pF	1.931257
0ns	0.0005V	0.004	5.25pF	5pF	58.231072
2ns	0.0005V	0.004	4.75pF	5pF	6.430108
2ns	0.0005V	0.004	4.85pF	5pF	3.959140
2ns	0.0005V	0.004	4.95pF	5pF	1.518280
2ns	0.0005V	0.004	5.05pF	5pF	0.887060
2ns	0.0005V	0.004	5.15pF	5pF	1.931257
2ns	0.0005V	0.004	5.25pF	5pF	58.231072
10ns	0.0005V	0.004	4.75pF	5pF	6.505376
10ns	0.0005V	0.004	4.85pF	5pF	3.993548
10ns	0.0005V	0.004	4.95pF	5pF	61.086170
10ns	0.0005V	0.004	5.05pF	5pF	0.969003
10ns	0.0005V	0.004	5.15pF	5pF	2.004746
10ns	0.0005V	0.004	5.25pF	5pF	58.355951
100ns	0.0005V	0.004	4.75pF	5pF	6.950538
100ns	0.0005V	0.004	4.85pF	5pF	58.429466
100ns	0.0005V	0.004	4.95pF	5pF	56.515907
100ns	0.0005V	0.004	5.05pF	5pF	57.446867
100ns	0.0005V	0.004	5.15pF	5pF	61.158695
100ns	0.0005V	0.004	5.25pF	5pF	58.606748
0ns	0.0005V	0.006	4.75pF	5pF	6.430108
0ns	0.0005V	0.006	4.85pF	5pF	3.954839
0ns	0.0005V	0.006	4.95pF	5pF	1.516129
0ns	0.0005V	0.006	5.05pF	5pF	0.7768663
0ns	0.0005V	0.006	5.15pF	5pF	1.931257
0ns	0.0005V	0.006	5.25pF	5pF	58.231072
2ns	0.0005V	0.006	4.75pF	5pF	6.430108
2ns	0.0005V	0.006	4.85pF	5pF	3.959140
2ns	0.0005V	0.006	4.95pF	5pF	1.518280

2ns	0.0005V	0.006	5.05pF	5pF	0.776863
2ns	0.0005V	0.006	5.15pF	5pF	1.931257
2ns	0.0005V	0.006	5.25pF	5pF	58.231072
10ns	0.0005V	0.006	4.75pF	5pF	6.505376
10ns	0.0005V	0.006	4.85pF	5pF	3.993548
10ns	0.0005V	0.006	4.95pF	5pF	61.086170
10ns	0.0005V	0.006	5.05pF	5pF	0.969003
10ns	0.0005V	0.006	5.15pF	5pF	2.004746
10ns	0.0005V	0.006	5.25pF	5pF	58.355951
100ns	0.0005V	0.006	4.75pF	5pF	6.950538
100ns	0.0005V	0.006	4.85pF	5pF	58.429466
100ns	0.0005V	0.006	4.95pF	5pF	56.515907
100ns	0.0005V	0.006	5.05pF	5pF	58.608528
100ns	0.0005V	0.006	5.15pF	5pF	61.158695
100ns	0.0005V	0.006	5.25pF	5pF	58.606748
0ns	0.0025V	0.002	4.75pF	5pF	6.279570
0ns	0.0025V	0.002	4.85pF	5pF	4.002151
0ns	0.0025V	0.002	4.95pF	5pF	60.606229
0ns	0.0025V	0.002	5.05pF	5pF	14.559214
0ns	0.0025V	0.002	5.15pF	5pF	53.077419
0ns	0.0025V	0.002	5.25pF	5pF	58.274898
2ns	0.0025V	0.002	4.75pF	5pF	6.279570
2ns	0.0025V	0.002	4.85pF	5pF	58.693956
2ns	0.0025V	0.002	4.95pF	5pF	60.606229
2ns	0.0025V	0.002	5.05pF	5pF	0.829811
2ns	0.0025V	0.002	5.15pF	5pF	53.077419
2ns	0.0025V	0.002	5.25pF	5pF	58.222840
10ns	0.0025V	0.002	4.75pF	5pF	6.262366
10ns	0.0025V	0.002	4.85pF	5pF	58.685873
10ns	0.0025V	0.002	4.95pF	5pF	58.940527

10ns	0.0025V	0.002	5.05pF	5pF	0.969967
10ns	0.0025V	0.002	5.15pF	5pF	53.101075
10ns	0.0025V	0.002	5.25pF	5pF	58.500927
100ns	0.0025V	0.002	4.75pF	5pF	59.493585
100ns	0.0025V	0.002	4.85pF	5pF	58.428550
100ns	0.0025V	0.002	4.95pF	5pF	57.256581
100ns	0.0025V	0.002	5.05pF	5pF	58.965072
100ns	0.0025V	0.002	5.15pF	5pF	60.644420
100ns	0.0025V	0.002	5.25pF	5pF	58.325473
0ns	0.0025V	0.004	4.75pF	5pF	6.279570
0ns	0.0025V	0.004	4.85pF	5pF	4.002151
0ns	0.0025V	0.004	4.95pF	5pF	60.561216
0ns	0.0025V	0.004	5.05pF	5pF	14.559214
0ns	0.0025V	0.004	5.15pF	5pF	53.045161
0ns	0.0025V	0.004	5.25pF	5pF	58.216982
2ns	0.0025V	0.004	4.75pF	5pF	6.296774
2ns	0.0025V	0.004	4.85pF	5pF	58.693956
2ns	0.0025V	0.004	4.95pF	5pF	60.606229
2ns	0.0025V	0.004	5.05pF	5pF	14.456804
2ns	0.0025V	0.004	5.15pF	5pF	53.077419
2ns	0.0025V	0.004	5.25pF	5pF	58.103967
10ns	0.0025V	0.004	4.75pF	5pF	6.262366
10ns	0.0025V	0.004	4.85pF	5pF	58.673563
10ns	0.0025V	0.004	4.95pF	5pF	58.919985
10ns	0.0025V	0.004	5.05pF	5pF	0.969967
10ns	0.0025V	0.004	5.15pF	5pF	53.118280
10ns	0.0025V	0.004	5.25pF	5pF	58.500927
100ns	0.0025V	0.004	4.75pF	5pF	59.493585
100ns	0.0025V	0.004	4.85pF	5pF	58.428550
100ns	0.0025V	0.004	4.95pF	5pF	57.256581

100ns	0.0025V	0.004	5.05pF	5pF	58.714720
100ns	0.0025V	0.004	5.15pF	5pF	60.644420
100ns	0.0025V	0.004	5.25pF	5pF	58.325473
0ns	0.0025V	0.006	4.75pF	5pF	6.279570
0ns	0.0025V	0.006	4.85pF	5pF	4.002151
0ns	0.0025V	0.006	4.95pF	5pF	60.561216
0ns	0.0025V	0.006	5.05pF	5pF	14.559214
0ns	0.0025V	0.006	5.15pF	5pF	53.045161
0ns	0.0025V	0.006	5.25pF	5pF	58.216982
2ns	0.0025V	0.006	4.75pF	5pF	6.279570
2ns	0.0025V	0.006	4.85pF	5pF	58.693956
2ns	0.0025V	0.006	4.95pF	5pF	60.606229
2ns	0.0025V	0.006	5.05pF	5pF	14.451761
2ns	0.0025V	0.006	5.15pF	5pF	53.077419
2ns	0.0025V	0.006	5.25pF	5pF	58.103967
10ns	0.0025V	0.006	4.75pF	5pF	6.262366
10ns	0.0025V	0.006	4.85pF	5pF	58.609863
10ns	0.0025V	0.006	4.95pF	5pF	58.919985
10ns	0.0025V	0.006	5.05pF	5pF	0.900704
10ns	0.0025V	0.006	5.15pF	5pF	53.118280
10ns	0.0025V	0.006	5.25pF	5pF	58.669559
100ns	0.0025V	0.006	4.75pF	5pF	59.493585
100ns	0.0025V	0.006	4.85pF	5pF	58.450204
100ns	0.0025V	0.006	4.95pF	5pF	57.256581
100ns	0.0025V	0.006	5.05pF	5pF	58.965072
100ns	0.0025V	0.006	5.15pF	5pF	60.644420
100ns	0.0025V	0.006	5.25pF	5pF	58.406600

Tabla 1. Análisis paramétrico: error INL