gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs Library

Cell Groups
GF180MCU_OSU_SC_GP9T3V3__ADDF_1
GF180MCU_OSU_SC_GP9T3V3__ADDH_1
GF180MCU_OSU_SC_GP9T3V3__AND2_1
GF180MCU_OSU_SC_GP9T3V3__AOI21_1
GF180MCU_OSU_SC_GP9T3V3__AOI22_1
GF180MCU_OSU_SC_GP9T3V3__BUF_16
GF180MCU_OSU_SC_GP9T3V3__BUF_1
GF180MCU_OSU_SC_GP9T3V3__BUF_2
GF180MCU_OSU_SC_GP9T3V3__BUF_4
GF180MCU_OSU_SC_GP9T3V3__BUF_8
GF180MCU_OSU_SC_GP9T3V3__CLKBUF_16
GF180MCU_OSU_SC_GP9T3V3__CLKBUF_1
GF180MCU_OSU_SC_GP9T3V3__CLKBUF_2
GF180MCU_OSU_SC_GP9T3V3__CLKBUF_4
GF180MCU_OSU_SC_GP9T3V3__CLKBUF_8
GF180MCU_OSU_SC_GP9T3V3__CLKINV_16
GF180MCU_OSU_SC_GP9T3V3__CLKINV_1
GF180MCU_OSU_SC_GP9T3V3__CLKINV_2
GF180MCU_OSU_SC_GP9T3V3__CLKINV_4
GF180MCU_OSU_SC_GP9T3V3__CLKINV_8
GF180MCU_OSU_SC_GP9T3V3__DECAP_1
GF180MCU_OSU_SC_GP9T3V3__DFF_1
GF180MCU_OSU_SC_GP9T3V3__DLATN_1

GF180MCU_OSU_SC_GP9T3V3__DLAT_1
GF180MCU_OSU_SC_GP9T3V3__INV_16
GF180MCU_OSU_SC_GP9T3V3__INV_1
GF180MCU_OSU_SC_GP9T3V3__INV_2
GF180MCU_OSU_SC_GP9T3V3__INV_4
GF180MCU_OSU_SC_GP9T3V3__INV_8
GF180MCU_OSU_SC_GP9T3V3__MUX2_1
GF180MCU_OSU_SC_GP9T3V3__NAND2_1
GF180MCU_OSU_SC_GP9T3V3__NOR2_1
GF180MCU_OSU_SC_GP9T3V3__OAI21_1
GF180MCU_OSU_SC_GP9T3V3__OAI22_1
GF180MCU_OSU_SC_GP9T3V3__OAI31_1
GF180MCU_OSU_SC_GP9T3V3__OR2_1
GF180MCU_OSU_SC_GP9T3V3__TBUF_1
GF180MCU_OSU_SC_GP9T3V3__TIEH
GF180MCU_OSU_SC_GP9T3V3__TIEL
GF180MCU_OSU_SC_GP9T3V3__TINV_1
GF180MCU_OSU_SC_GP9T3V3__XNOR2_1
GF180MCU_OSU_SC_GP9T3V3__XOR2_1

GF180MCU_OSU_SC_GP9T3V3__ADDF_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT			OUTPUT	
A	B	CI	CO	S
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__addf_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	A	B	CI	CO	S
gf180mcu_osu_sc_gp9t3v3__addf_1	0.01750	0.01662	0.01139	1.55259	1.54311

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__addf_1	0.00000	0.00428	0.00452

Delay Information

Delay(ns) to CO rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addf_1	A->CO (RR)	0.16624	0.67957	7.19220
	B->CO (RR)	0.18257	0.78225	7.67004
	CI->CO (RR)	0.16433	0.72597	7.17176

Delay(ns) to CO falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addf_1	A->CO (FF)	0.19262	0.84874	7.97953
	B->CO (FF)	0.18776	0.94881	8.52463
	CI->CO (FF)	0.16306	0.92536	8.19900

Delay(ns) to S rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addf_1	A->S (-R)	0.33786	0.96915	8.33859
	B->S (-R)	0.33083	1.09588	9.07555
	CI->S (-R)	0.27761	1.01415	8.63681

Delay(ns) to S falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addf_1	A->S (-F)	0.19869	1.00367	8.92061
	B->S (-F)	0.23219	0.96030	8.61651
	CI->S (-F)	0.24209	0.88457	8.20690

Power Information

Internal switching power(pJ) to CO rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addf_1	A	0.02462	0.05791	0.35019
	A	0.07094	0.10287	0.38888
	B	0.03154	0.05833	0.31563
	B	0.07241	0.09942	0.35716
	CI	0.02550	0.05530	0.28164
	CI	0.05408	0.08416	0.31060

Internal switching power(pJ) to CO falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addf_1	A	0.08223	0.11394	0.39961
	A	0.04500	0.07681	0.36288
	B	0.07177	0.10148	0.36086
	B	0.02980	0.05964	0.31943
	CI	0.06533	0.09575	0.32676
	CI	0.03206	0.06264	0.29352

Internal switching power(pJ) to S rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addf_1	A	0.00473	0.04860	0.47080
	A	0.08880	0.13290	0.55491
	B	0.01008	0.06339	0.52307
	B	0.09066	0.14418	0.60269
	CI	0.01737	0.07510	0.59450
	CI	0.09432	0.15184	0.67099

Internal switching power(pJ) to S falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addf_1	A	0.09695	0.14614	0.56972
	A	0.00986	0.05935	0.48945
	B	0.09065	0.14444	0.60413
	B	0.01549	0.06925	0.52895
	CI	0.09521	0.15448	0.67949
	CI	0.02994	0.08917	0.61433

GF180MCU_OSU_SC_GP9T3V3__ADDH_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT	
A	B	CO	S
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__addh_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)	
	A	B	CO	S
gf180mcu_osu_sc_gp9t3v3__addh_1	0.00767	0.00695	1.56249	1.55390

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__addh_1	0.00000	0.00342	0.00370

Delay Information

Delay(ns) to CO rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addh_1	A->CO (RR)	0.12997	0.65553	7.33582
	B->CO (RR)	0.12818	0.72648	7.75113

Delay(ns) to CO falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addh_1	A->CO (FF)	0.11414	0.75557	7.65579
	B->CO (FF)	0.10529	0.69713	7.23518

Delay(ns) to S rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addh_1	A->S (RR)	!B	0.13167	0.69386	7.52892
	A->S (FR)	B	0.19268	0.85071	8.12221
	B->S (RR)	!A	0.10643	0.59011	6.90591
	B->S (FR)	A	0.20659	0.80438	7.66244

Delay(ns) to S falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__addh_1	A->S (FF)	!B	0.13708	0.71559	7.43376
	A->S (RF)	B	0.20805	0.65296	6.23259
	B->S (FF)	!A	0.12213	0.79313	7.94437
	B->S (RF)	A	0.20596	0.73335	6.77191

Power Information

Internal switching power(pJ) to CO rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addh_1	A	0.03120	0.07072	0.37099
	A	0.04948	0.08906	0.38985
	B	0.03588	0.07321	0.34637
	B	0.04781	0.08502	0.35823

Internal switching power(pJ) to CO falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__addh_1	A	0.05027	0.09324	0.39856
	A	0.03193	0.07492	0.38026
	B	0.04866	0.08482	0.35679
	B	0.03741	0.07369	0.34569

Internal switching power(pJ) to S rising (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__addh_1	A	B	0.05029	0.09335	0.39912
	A	B	0.03195	0.07502	0.38079
	A	!B	0.01388	0.07656	0.55697
	A	!B	0.06617	0.12859	0.60808
	B	A	0.04868	0.08480	0.35750
	B	A	0.03744	0.07369	0.34638
	B	!A	0.00832	0.06601	0.48259
	B	!A	0.04628	0.10382	0.52039

Internal switching power(pJ) to S falling (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__addh_1	A	B	0.03119	0.07058	0.37036
	A	B	0.04946	0.08889	0.38852
	A	!B	0.06308	0.12495	0.60523
	A	!B	0.01107	0.07309	0.55429
	B	A	0.03588	0.07304	0.34647
	B	A	0.04780	0.08468	0.35789
	B	!A	0.05472	0.11270	0.52793
	B	!A	0.01619	0.07451	0.49005

GF180MCU_OSU_SC_GP9T3V3__AND2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	x	0
1	0	0
1	1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__and2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__and2_1	0.00404	0.00402	1.54527

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__and2_1	0.00000	0.00144	0.00205

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__and2_1	A->Y (RR)	0.10008	0.65058	7.53305
	B->Y (RR)	0.10153	0.59073	7.15246

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__and2_1	A->Y (FF)	0.08578	0.62701	7.02332
	B->Y (FF)	0.09518	0.69271	7.47540

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	A	0.01762	0.09101	0.59660
	A	0.04078	0.11406	0.61869
	B	0.01677	0.09482	0.65715
	B	0.04503	0.12303	0.68475

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	A	0.03790	0.11196	0.61809
	A	0.01476	0.08887	0.59495
	B	0.04643	0.12731	0.68898
	B	0.01818	0.09926	0.66127

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	(!B * !Y)	-0.01408	-0.01413	-0.01414
	(!B * !Y)	0.00173	0.00174	0.00169

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	(!B * !Y)	0.01425	0.01424	0.01418
	(!B * !Y)	-0.00170	-0.00168	-0.00167

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	(!A * !Y)	-0.01353	-0.01358	-0.01352
	(!A * !Y)	0.00651	0.00654	0.00645

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__and2_1	(!A * !Y)	0.01368	0.01364	0.01355
	(!A * !Y)	-0.00633	-0.00651	-0.00645

GF180MCU_OSU_SC_GP9T3V3__AOI21_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT			OUTPUT
A0	A1	B	Y
0	x	0	1
x	x	1	0
1	0	0	1
1	1	x	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__aoi21_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	B	Y
gf180mcu_osu_sc_gp9t3v3__aoi21_1	0.00395	0.00398	0.00404	0.79012

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__aoi21_1	0.00000	0.00094	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	A0->Y (FR)	0.09730	0.86567	8.65083
	A1->Y (FR)	0.07889	0.83719	8.57820
	B->Y (FR)	0.07670	1.02567	9.92918

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	A0->Y (RF)	0.07487	0.59684	6.18081
	A1->Y (RF)	0.07279	0.73791	7.36600
	B->Y (RF)	0.03496	0.50264	5.39296

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	A0	0.04053	0.07772	0.28090
	A0	0.00258	0.03932	0.24276
	A1	0.03148	0.06606	0.25438
	A1	-0.00135	0.03301	0.22151
	B	0.02198	0.06875	0.29359
	B	-0.00050	0.04615	0.27237

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	A0	0.00406	0.03965	0.22583
	A0	0.04185	0.07738	0.26403
	A1	0.00456	0.03865	0.20029
	A1	0.03721	0.07166	0.23292
	B	-0.00380	0.03912	0.24719
	B	0.01870	0.06180	0.27360

Passive power(pJ) for A0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(A1 * B * !Y)	-0.01284	-0.01337	-0.01320
	(A1 * B * !Y)	0.00665	0.00659	0.00651
	(!A1 * B * !Y)	-0.01350	-0.01359	-0.01352
	(!A1 * B * !Y)	0.00653	0.00654	0.00646
	(!A1 * !B * Y)	-0.01348	-0.01358	-0.01352
	(!A1 * !B * Y)	0.00644	0.00654	0.00645

Passive power(pJ) for A0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(A1 * B * !Y)	0.01333	0.01337	0.01320
	(A1 * B * !Y)	-0.00648	-0.00653	-0.00648
	(!A1 * B * !Y)	0.01350	0.01364	0.01355
	(!A1 * B * !Y)	-0.00635	-0.00651	-0.00645
	(!A1 * !B * Y)	0.01369	0.01364	0.01355
	(!A1 * !B * Y)	-0.00634	-0.00651	-0.00645

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(B * !Y)	-0.01284	-0.01330	-0.01322
	(B * !Y)	0.00662	0.00658	0.00651
	(!A0 * !B * Y)	-0.01405	-0.01413	-0.01414
	(!A0 * !B * Y)	0.00173	0.00174	0.00169

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(B * !Y)	0.01322	0.01330	0.01322
	(B * !Y)	-0.00648	-0.00652	-0.00649
	(!A0 * !B * Y)	0.01425	0.01430	0.01418
	(!A0 * !B * Y)	-0.00168	-0.00169	-0.00167

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(A0 * A1 * !Y)	-0.00436	-0.00437	-0.00434
	(A0 * A1 * !Y)	0.00781	0.00782	0.00780

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi21_1	(A0 * A1 * !Y)	0.00456	0.00458	0.00441
	(A0 * A1 * !Y)	-0.00752	-0.00761	-0.00780

GF180MCU_OSU_SC_GP9T3V3__AOI22_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT				OUTPUT
A0	A1	B0	B1	Y
0	x	0	x	1
0	x	1	0	1
x	x	1	1	0
1	0	0	x	1
1	0	1	0	1
1	1	x	x	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__aoi22_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A0	A1	B0	B1	Y
gf180mcu_osu_sc_gp9t3v3__aoi22_1	0.00395	0.00398	0.00404	0.00402	0.77444

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__aoi22_1	0.00000	0.00121	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	A0->Y (FR)	0.12880	0.88750	8.55596
	A1->Y (FR)	0.11113	0.86044	8.48193
	B0->Y (FR)	0.08430	0.99912	9.65302
	B1->Y (FR)	0.10077	1.02669	9.70603

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	A0->Y (RF)	0.10596	0.63287	6.16342
	A1->Y (RF)	0.10368	0.77579	7.34229
	B0->Y (RF)	0.05504	0.70605	7.25918
	B1->Y (RF)	0.05600	0.56754	6.07086

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	A0	0.05022	0.08637	0.29637
	A0	0.00260	0.03858	0.24872
	A1	0.04137	0.07495	0.26886
	A1	-0.00134	0.03224	0.22575
	B0	0.02364	0.06137	0.23945
	B0	-0.00012	0.03738	0.21517
	B1	0.03198	0.07187	0.26331
	B1	0.00318	0.04302	0.23417

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	A0	0.01316	0.05062	0.25772
	A0	0.06048	0.09829	0.30506
	A1	0.01352	0.04879	0.23012
	A1	0.05580	0.09116	0.27278
	B0	-0.00098	0.03494	0.20703
	B0	0.02281	0.05900	0.23359
	B1	-0.00192	0.03614	0.23043
	B1	0.02695	0.06513	0.25927

Passive power(pJ) for A0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A1 * B0 * B1 * !Y)	-0.01275	-0.01324	-0.01317
	(A1 * B0 * B1 * !Y)	0.00655	0.00658	0.00651
	(!A1 * B0 * B1 * !Y)	-0.01352	-0.01359	-0.01352
	(!A1 * B0 * B1 * !Y)	0.00652	0.00653	0.00645
	(!A1 * B0 * !B1 * Y)	-0.01353	-0.01358	-0.01352
	(!A1 * B0 * !B1 * Y)	0.00652	0.00653	0.00645
	(!A1 * !B0 * Y)	-0.01353	-0.01358	-0.01352
	(!A1 * !B0 * Y)	0.00652	0.00653	0.00645

Passive power(pJ) for A0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A1 * B0 * B1 * !Y)	0.01323	0.01324	0.01317
	(A1 * B0 * B1 * !Y)	-0.00648	-0.00651	-0.00648
	(!A1 * B0 * B1 * !Y)	0.01366	0.01364	0.01355
	(!A1 * B0 * B1 * !Y)	-0.00635	-0.00651	-0.00645
	(!A1 * B0 * !B1 * Y)	0.01369	0.01364	0.01355
	(!A1 * B0 * !B1 * Y)	-0.00632	-0.00651	-0.00645
	(!A1 * !B0 * Y)	0.01369	0.01364	0.01355
	(!A1 * !B0 * Y)	-0.00632	-0.00651	-0.00645

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(B0 * B1 * !Y)	-0.01290	-0.01321	-0.01316
	(B0 * B1 * !Y)	0.00660	0.00658	0.00651
	(!A0 * B0 * !B1 * Y)	-0.01406	-0.01413	-0.01414
	(!A0 * B0 * !B1 * Y)	0.00173	0.00174	0.00169
	(!A0 * !B0 * Y)	-0.01406	-0.01413	-0.01414
	(!A0 * !B0 * Y)	0.00173	0.00174	0.00169

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(B0 * B1 * !Y)	0.01328	0.01321	0.01316
	(B0 * B1 * !Y)	-0.00650	-0.00651	-0.00648
	(!A0 * B0 * !B1 * Y)	0.01424	0.01424	0.01418
	(!A0 * B0 * !B1 * Y)	-0.00168	-0.00168	-0.00167
	(!A0 * !B0 * Y)	0.01424	0.01424	0.01418
	(!A0 * !B0 * Y)	-0.00168	-0.00168	-0.00167

Passive power(pJ) for B0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A0 * A1 * !Y)	-0.00433	-0.00436	-0.00434
	(A0 * A1 * !Y)	0.00776	0.00782	0.00780
	(!A1 * !B1 * Y)	-0.01408	-0.01406	-0.01415
	(!A1 * !B1 * Y)	0.00176	0.00173	0.00169
	(!A0 * A1 * !B1 * Y)	-0.01417	-0.01406	-0.01415
	(!A0 * A1 * !B1 * Y)	0.00176	0.00173	0.00169

Passive power(pJ) for B0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A0 * A1 * !Y)	0.00466	0.00464	0.00442
	(A0 * A1 * !Y)	-0.00748	-0.00752	-0.00780
	(!A1 * !B1 * Y)	0.01408	0.01428	0.01417
	(!A1 * !B1 * Y)	-0.00165	-0.00169	-0.00167
	(!A0 * A1 * !B1 * Y)	0.01426	0.01428	0.01417
	(!A0 * A1 * !B1 * Y)	-0.00172	-0.00169	-0.00167

Passive power(pJ) for B1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A0 * A1 * !Y)	-0.00437	-0.00437	-0.00434
	(A0 * A1 * !Y)	0.00783	0.00782	0.00780
	(!A1 * !B0 * Y)	-0.01353	-0.01359	-0.01352
	(!A1 * !B0 * Y)	0.00647	0.00650	0.00643
	(!A0 * A1 * !B0 * Y)	-0.01352	-0.01357	-0.01352
	(!A0 * A1 * !B0 * Y)	0.00651	0.00654	0.00646

Passive power(pJ) for B1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__aoi22_1	(A0 * A1 * !Y)	0.00463	0.00465	0.00442
	(A0 * A1 * !Y)	-0.00744	-0.00753	-0.00780
	(!A1 * !B0 * Y)	0.01353	0.01362	0.01355
	(!A1 * !B0 * Y)	-0.00636	-0.00650	-0.00643
	(!A0 * A1 * !B0 * Y)	0.01352	0.01362	0.01355
	(!A0 * A1 * !B0 * Y)	-0.00636	-0.00651	-0.00645

GF180MCU_OSU_SC_GP9T3V3__BUF_16

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__buf_16	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__buf_16	0.00404	24.81270

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__buf_16	0.00000	0.01253	0.01497

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_16	A->Y (RR)	0.33118	0.80766	7.94602

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_16	A->Y (FF)	0.35663	0.97567	8.60477

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_16	A	0.71814	0.69925	1.11797
	A	0.74012	0.72015	1.12246

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_16	A	0.77222	0.70547	1.08418
	A	0.75017	0.68549	1.06402

GF180MCU_OSU_SC_GP9T3V3__BUF_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__buf_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__buf_1	0.00404	1.56183

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__buf_1	0.00000	0.00147	0.00147

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_1	A->Y (RR)	0.07237	0.52605	6.92433

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_1	A->Y (FF)	0.08030	0.67280	7.57978

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_1	A	0.01395	0.10083	0.69385
	A	0.03584	0.12268	0.71572

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_1	A	0.03608	0.12557	0.71671
	A	0.01421	0.10379	0.69504

GF180MCU_OSU_SC_GP9T3V3__BUF_2

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__buf_2	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__buf_2	0.00405	3.08932

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__buf_2	0.00000	0.00221	0.00237

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_2	A->Y (RR)	0.08752	0.48294	6.95331

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_2	A->Y (FF)	0.09595	0.63966	7.61657

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_2	A	0.03376	0.12088	0.71179
	A	0.05570	0.14275	0.73365

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_2	A	0.05411	0.14301	0.73125
	A	0.03214	0.12129	0.70976

GF180MCU_OSU_SC_GP9T3V3__BUF_4

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__buf_4	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__buf_4	0.00404	6.25541

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__buf_4	0.00000	0.00369	0.00417

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_4	A->Y (RR)	0.12041	0.50670	7.21626

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_4	A->Y (FF)	0.13090	0.67038	7.86985

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_4	A	0.08283	0.16886	0.75444
	A	0.10487	0.19074	0.77293

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_4	A	0.10191	0.18740	0.76527
	A	0.07978	0.16567	0.74680

GF180MCU_OSU_SC_GP9T3V3__BUF_8

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__buf_8	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__buf_8	0.00404	12.43057

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__buf_8	0.00000	0.00663	0.00777

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_8	A->Y (RR)	0.18684	0.60257	7.45900

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__buf_8	A->Y (FF)	0.20242	0.77233	8.11941

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_8	A	0.22666	0.30286	0.85034
	A	0.24862	0.32435	0.86927

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__buf_8	A	0.24821	0.30991	0.84795
	A	0.22622	0.28807	0.82882

GF180MCU_OSU_SC_GP9T3V3__CLKBUF_16

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	0.00404	24.81270

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	0.00000	0.01253	0.01497

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	A->Y (RR)	0.33118	0.80766	7.94602

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	A->Y (FF)	0.35663	0.97567	8.60477

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	A	0.71814	0.69925	1.11797
	A	0.74012	0.72015	1.12246

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_16	A	0.77222	0.70547	1.08418
	A	0.75017	0.68549	1.06402

GF180MCU_OSU_SC_GP9T3V3__CLKBUF_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	0.00404	1.56183

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	0.00000	0.00147	0.00147

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	A->Y (RR)	0.07237	0.52605	6.92433

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	A->Y (FF)	0.08030	0.67280	7.57978

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	A	0.01395	0.10083	0.69385
	A	0.03584	0.12268	0.71572

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_1	A	0.03608	0.12557	0.71671
	A	0.01421	0.10379	0.69504

GF180MCU_OSU_SC_GP9T3V3__CLKBUF_2

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	0.00405	3.08932

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	0.00000	0.00221	0.00237

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	A->Y (RR)	0.08752	0.48294	6.95331

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	A->Y (FF)	0.09595	0.63966	7.61657

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	A	0.03376	0.12088	0.71179
	A	0.05570	0.14275	0.73365

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_2	A	0.05411	0.14301	0.73125
	A	0.03214	0.12129	0.70976

GF180MCU_OSU_SC_GP9T3V3__CLKBUF_4

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	0.00404	6.25541

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	0.00000	0.00369	0.00417

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	A->Y (RR)	0.12041	0.50670	7.21626

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	A->Y (FF)	0.13090	0.67038	7.86985

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	A	0.08283	0.16886	0.75444
	A	0.10487	0.19074	0.77293

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_4	A	0.10191	0.18740	0.76527
	A	0.07978	0.16567	0.74680

GF180MCU_OSU_SC_GP9T3V3__CLKBUF_8

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	0
1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	0.00404	12.43057

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	0.00000	0.00663	0.00777

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	A->Y (RR)	0.18684	0.60257	7.45900

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	A->Y (FF)	0.20242	0.77233	8.11941

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	A	0.22666	0.30286	0.85034
	A	0.24862	0.32435	0.86927

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkbuf_8	A	0.24821	0.30991	0.84795
	A	0.22622	0.28807	0.82882

GF180MCU_OSU_SC_GP9T3V3__CLKINV_16

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkinv_16	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkinv_16	0.06464	23.91367

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkinv_16	0.00000	0.01179	0.01439

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_16	A->Y (FR)	0.03131	0.50233	9.96778

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_16	A->Y (RF)	0.02338	0.30697	8.48214

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_16	A	0.32288	1.38292	4.05284
	A	-0.02715	1.03082	3.70202

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_16	A	-0.05369	0.94917	3.33969
	A	0.29683	1.30015	3.69319

GF180MCU_OSU_SC_GP9T3V3__CLKINV_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkinv_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkinv_1	0.00404	1.49452

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkinv_1	0.00000	0.00074	0.00090

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_1	A->Y (FR)	0.03884	0.86545	9.96663

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_1	A->Y (RF)	0.03101	0.67477	8.48110

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_1	A	0.01996	0.06727	0.25333
	A	-0.00193	0.04512	0.23141

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_1	A	-0.00447	0.03960	0.20772
	A	0.01741	0.06147	0.22981

GF180MCU_OSU_SC_GP9T3V3__CLKINV_2

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkinv_2	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkinv_2	0.00808	2.98961

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkinv_2	0.00000	0.00147	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_2	A->Y (FR)	0.03428	0.74723	9.96782

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_2	A->Y (RF)	0.02639	0.55683	8.48218

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_2	A	0.04013	0.14466	0.50660
	A	-0.00359	0.10046	0.46275

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_2	A	-0.00875	0.08979	0.41540
	A	0.03487	0.13379	0.45959

GF180MCU_OSU_SC_GP9T3V3__CLKINV_4

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkinv_4	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkinv_4	0.01616	5.97979

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkinv_4	0.00000	0.00295	0.00360

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_4	A->Y (FR)	0.03179	0.65044	9.96843

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_4	A->Y (RF)	0.02387	0.45825	8.48274

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_4	A	0.08081	0.30987	1.01313
	A	-0.00689	0.22231	0.92543

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_4	A	-0.01755	0.19917	0.83075
	A	0.07000	0.28726	0.91913

GF180MCU_OSU_SC_GP9T3V3__CLKINV_8

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__clkinv_8	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__clkinv_8	0.03231	11.96018

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__clkinv_8	0.00000	0.00590	0.00720

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_8	A->Y (FR)	0.03047	0.56908	9.96874

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__clkinv_8	A->Y (RF)	0.02255	0.37546	8.48302

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_8	A	0.16190	0.65708	2.02619
	A	-0.01341	0.48156	1.85080

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__clkinv_8	A	-0.03503	0.43346	1.66145
	A	0.14047	0.60937	1.83822

GF180MCU_OSU_SC_GP9T3V3__DECAP_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__decap_1	0.00000

Pin Capacitance Information
Leakage Information

Cell Name	Leakage(nW)		
	Min.	**Avg**	**Max.**
gf180mcu_osu_sc_gp9t3v3__decap_1	0.00000	0.00000	0.00000

GF180MCU_OSU_SC_GP9T3V3__DFF_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT	
D	CLK	Q	QN
0	R	0	1
1	R	1	0
x	x	IQ	IQN

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__dff_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)	
	D	CLK	Q	QN
gf180mcu_osu_sc_gp9t3v3__dff_1	0.00394	0.01198	1.56840	1.56586

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__dff_1	0.00000	100780.00000	174312.00000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK->Q (RR)	0.27150	0.92074	13.08360
	QN->Q (FR)	0.03884	0.88004	10.28000

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK->Q (RF)	0.55842	1.35136	16.23090
	QN->Q (RF)	0.03101	0.68776	8.76306

Delay(ns) to QN rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK->QN (RR)	0.52956	0.77422	6.88610

Delay(ns) to QN falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK->QN (RF)	0.23832	0.28205	2.71221

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	hold	CLK (R)	-0.07631	-0.21868	1.65278
	setup	CLK (R)	0.38399	0.92262	6.15921

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	hold	CLK (R)	-0.38362	-1.27500	5.97774
	setup	CLK (R)	0.51260	1.27917	12.43920

Constraints(ns) for CLK rising (conditional):

Cell Name	Timing Check	Ref Pin(trans)	When	Reference Slew Rate(ns)		
				first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	min_pulse_width	CLK ()	D	0.19909	1.38794	16.50020
	min_pulse_width	CLK ()	!D	0.11719	1.38794	16.50020

Constraints(ns) for CLK falling (conditional):

Cell Name	Timing Check	Ref Pin(trans)	When	Reference Slew Rate(ns)		
				first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	min_pulse_width	CLK ()	D	0.40013	1.38794	18.18180
	min_pulse_width	CLK ()	!D	0.35794	1.38794	17.77850

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	0.06159	0.08953	0.48356
	CLK	0.08454	0.11230	0.50740

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	0.10665	0.10801	0.49856
	CLK	0.13213	0.13350	0.52358

Internal switching power(pJ) to QN rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	0.10668	0.10804	0.49706
	CLK	0.13215	0.13354	0.52261

Internal switching power(pJ) to QN falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	0.06150	0.08947	0.48171
	CLK	0.08445	0.11224	0.50514

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	-0.01304	-0.01332	-0.01327
	CLK	0.00657	0.00656	0.00648
	(!CLK * Q * !QN) + (!CLK * !Q * QN)	0.15069	0.32881	1.46223
	(!CLK * Q * !QN) + (!CLK * !Q * QN)	0.19132	0.36946	1.50255

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	CLK	0.01331	0.01332	0.01327
	CLK	-0.00640	-0.00650	-0.00646
	(!CLK * Q * !QN) + (!CLK * !Q * QN)	0.22889	0.41027	1.58488
	(!CLK * Q * !QN) + (!CLK * !Q * QN)	0.18837	0.36981	1.54458

Passive power(pJ) for CLK rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	(D * Q * !QN)	-0.00252	0.07884	0.66540
	(D * Q * !QN)	0.04233	0.12347	0.70992
	(!D * !Q * QN)	-0.00469	0.07718	0.66378
	(!D * !Q * QN)	0.04799	0.13035	0.71695

Passive power(pJ) for CLK falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dff_1	(D * Q * !QN)	0.04153	0.12850	0.71523
	(D * Q * !QN)	-0.00308	0.08374	0.67051
	(D * !Q * QN)	0.20292	0.23312	0.91692
	(D * !Q * QN)	0.17085	0.20085	0.88646
	(!D * Q * !QN)	0.22910	0.23335	0.99561
	(!D * Q * !QN)	0.16548	0.16898	0.93078
	(!D * !Q * QN)	0.05103	0.13364	0.71880
	(!D * !Q * QN)	-0.00200	0.08038	0.66575

GF180MCU_OSU_SC_GP9T3V3__DLATN_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
D	CLK	Q
0	0	0
x	1	IQ
1	0	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__dlatn_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	CLK	Q
gf180mcu_osu_sc_gp9t3v3__dlatn_1	0.00395	0.00404	1.55952

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__dlatn_1	0.00000	0.00481	0.00529

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK->Q (FR)	0.28835	0.94657	8.29615
	D->Q (RR)	0.24487	0.70237	6.83801

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK->Q (FF)	0.33963	0.93469	7.54434
	D->Q (FF)	0.27121	0.85964	7.58049

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	hold	CLK (R)	-0.08541	-0.14082	-0.58079
	setup	CLK (R)	0.09417	0.15705	2.73287

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	hold	CLK (R)	-0.07386	-0.14910	-1.15756
	setup	CLK (R)	0.08718	0.15324	1.16739

Constraints(ns) for CLK falling (conditional):

Cell Name	Timing Check	Ref Pin(trans)	When	Reference Slew Rate(ns)		
				first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	min_pulse_width	CLK ()	D	0.14449	1.38794	16.50020
	min_pulse_width	CLK ()	!D	0.15938	1.38794	16.50020

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK	0.12994	0.23356	0.90869
	CLK	0.10885	0.21259	0.88754
	D	0.07447	0.15440	0.74622
	D	0.09594	0.17553	0.76728

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK	0.13590	0.23157	0.85857
	CLK	0.11353	0.20944	0.83647
	D	0.10325	0.18299	0.77342
	D	0.08171	0.16172	0.75235

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK	-0.01301	-0.01348	-0.01342
	CLK	0.00681	0.00654	0.00647

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	CLK	0.01344	0.01348	0.01342
	CLK	-0.00641	-0.00649	-0.00645

Passive power(pJ) for CLK rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	(D * Q)	0.02683	0.11860	0.74915
	(D * Q)	0.04852	0.14041	0.77090
	(!D * !Q)	0.02999	0.12211	0.75303
	(!D * !Q)	0.05207	0.14432	0.77506

Passive power(pJ) for CLK falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlatn_1	(D * Q)	0.04875	0.14239	0.77195
	(D * Q)	0.02696	0.12061	0.75019
	(!D * !Q)	0.05243	0.14540	0.77492
	(!D * !Q)	0.03034	0.12330	0.75285

GF180MCU_OSU_SC_GP9T3V3__DLAT_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
D	CLK	Q
x	0	IQ
0	1	0
1	1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__dlat_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	CLK	Q
gf180mcu_osu_sc_gp9t3v3__dlat_1	0.00395	0.00813	1.56250

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__dlat_1	0.00000	0.00412	0.00471

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dlat_1	CLK->Q (RR)	0.21637	0.69852	6.75077
	D->Q (RR)	0.24367	0.70328	6.85186

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__dlat_1	CLK->Q (RF)	0.27946	0.67165	6.12558
	D->Q (FF)	0.27142	0.86008	7.59221

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	hold	CLK (F)	-0.13987	-0.31684	-2.19423
	setup	CLK (F)	0.15001	0.46223	7.19235

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Reference Slew Rate(ns)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	hold	CLK (F)	-0.12562	-0.15531	0.22566
	setup	CLK (F)	0.13845	0.15953	-0.22169

Constraints(ns) for CLK rising (conditional):

Cell Name	Timing Check	Ref Pin(trans)	When	Reference Slew Rate(ns)		
				first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	min_pulse_width	CLK ()	D	0.12215	1.38794	16.50020
	min_pulse_width	CLK ()	!D	0.14945	1.38794	16.50020

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	CLK	0.06685	0.21792	1.08734
	CLK	0.11134	0.26244	1.13218
	D	0.06826	0.14811	0.73497
	D	0.09598	0.17552	0.76234

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	CLK	0.08976	0.17654	0.79741
	CLK	0.11630	0.20332	0.82334
	D	0.10997	0.18979	0.78050
	D	0.08168	0.16174	0.75316

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	!CLK	-0.01301	-0.01348	-0.01342
	!CLK	0.00676	0.00650	0.00643

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	!CLK	0.01344	0.01348	0.01342
	!CLK	-0.00634	-0.00647	-0.00643

Passive power(pJ) for CLK rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	(D * Q)	-0.00467	0.08069	0.66952
	(D * Q)	0.02977	0.11536	0.70404
	(!D * !Q)	-0.00464	0.08124	0.66950
	(!D * !Q)	0.03309	0.11897	0.70725

Passive power(pJ) for CLK falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__dlat_1	(D * Q)	0.03258	0.12060	0.70886
	(D * Q)	-0.00189	0.08595	0.67442
	(!D * !Q)	0.03544	0.12187	0.70985
	(!D * !Q)	-0.00235	0.08388	0.67203

GF180MCU_OSU_SC_GP9T3V3__INV_16

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__inv_16	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__inv_16	0.06464	23.91367

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__inv_16	0.00000	0.01179	0.01439

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_16	**A->Y (FR)**	0.03131	0.50233	9.96778

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_16	**A->Y (RF)**	0.02338	0.30697	8.48214

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_16	A	0.32288	1.38292	4.05284
	A	-0.02715	1.03082	3.70202

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_16	A	-0.05369	0.94917	3.33969
	A	0.29683	1.30015	3.69319

GF180MCU_OSU_SC_GP9T3V3__INV_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__inv_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__inv_1	0.00404	1.49452

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__inv_1	0.00000	0.00074	0.00090

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_1	A->Y (FR)	0.03884	0.86545	9.96663

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_1	A->Y (RF)	0.03101	0.67477	8.48110

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_1	A	0.01996	0.06727	0.25333
	A	-0.00193	0.04512	0.23141

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_1	A	-0.00447	0.03960	0.20772
	A	0.01741	0.06147	0.22981

GF180MCU_OSU_SC_GP9T3V3__INV_2

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__inv_2	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__inv_2	0.00808	2.98961

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__inv_2	0.00000	0.00147	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_2	A->Y (FR)	0.03428	0.74723	9.96782

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_2	A->Y (RF)	0.02639	0.55683	8.48218

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_2	A	0.04013	0.14466	0.50660
	A	-0.00359	0.10046	0.46275

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_2	A	-0.00875	0.08979	0.41540
	A	0.03487	0.13379	0.45959

GF180MCU_OSU_SC_GP9T3V3__INV_4

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__inv_4	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__inv_4	0.01616	5.97979

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__inv_4	0.00000	0.00295	0.00360

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_4	A->Y (FR)	0.03179	0.65044	9.96843

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_4	A->Y (RF)	0.02387	0.45825	8.48274

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_4	A	0.08081	0.30987	1.01313
	A	-0.00689	0.22231	0.92543

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_4	A	-0.01755	0.19917	0.83075
	A	0.07000	0.28726	0.91913

GF180MCU_OSU_SC_GP9T3V3__INV_8

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__inv_8	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
gf180mcu_osu_sc_gp9t3v3__inv_8	0.03231	11.96018

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__inv_8	0.00000	0.00590	0.00720

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_8	A->Y (FR)	0.03047	0.56908	9.96874

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__inv_8	A->Y (RF)	0.02255	0.37546	8.48302

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_8	A	0.16190	0.65708	2.02619
	A	-0.01341	0.48156	1.85080

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__inv_8	A	-0.03503	0.43346	1.66145
	A	0.14047	0.60937	1.83822

GF180MCU_OSU_SC_GP9T3V3__MUX2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT			OUTPUT
A	**B**	**Sel**	**Y**
0	**0**	**x**	**0**
0	**1**	**0**	**0**
x	**1**	**1**	**1**
1	**x**	**0**	**1**
1	**0**	**1**	**0**

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__mux2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	**B**	**Sel**	**Y**
gf180mcu_osu_sc_gp9t3v3__mux2_1	0.24320	0.24320	0.00808	0.24185

Leakage Information

Cell Name	Leakage(nW)		
	Min.	**Avg**	**Max.**
gf180mcu_osu_sc_gp9t3v3__mux2_1	0.00000	0.00197	0.00201

Delay Information

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__mux2_1	A->Y (RR)	-	0.01761	0.11241	0.79961
	B->Y (RR)	-	0.01924	0.11329	0.80049
	Sel->Y (RR)	(!A * B)	0.06279	0.21871	0.80492
	Sel->Y (FR)	(A * !B)	0.04415	0.39586	2.56324

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__mux2_1	A->Y (FF)	-	0.02157	0.11912	0.83783
	B->Y (FF)	-	0.01939	0.11804	0.83676
	Sel->Y (FF)	(!A * B)	0.07324	0.39418	2.05074
	Sel->Y (RF)	(A * !B)	0.03647	0.23699	1.44541

Power Information

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	A	-	-0.01950	-0.01953	-0.01954
	A	-	0.00677	0.00678	0.00678
	B	-	-0.01286	-0.01291	-0.01292
	B	-	0.01752	0.01756	0.01757
	Sel	(A * !B)	0.01690	0.10461	0.69455
	Sel	(A * !B)	0.00285	0.09046	0.68056
	Sel	(!A * B)	-0.01420	0.06979	0.65823
	Sel	(!A * B)	0.04385	0.12851	0.71924

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	A	-	0.01950	0.01956	0.01957
	A	-	-0.00677	-0.00678	-0.00678
	B	-	0.01288	0.01293	0.01293
	B	-	-0.01752	-0.01756	-0.01757
	Sel	(A * !B)	0.00500	0.09082	0.68051
	Sel	(A * !B)	0.01900	0.10542	0.69717
	Sel	(!A * B)	0.05063	0.13562	0.72393
	Sel	(!A * B)	-0.00733	0.07755	0.66635

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(B * Sel * Y) + (!B * Sel * !Y)	-0.00347	-0.00349	-0.00347
	(B * Sel * Y) + (!B * Sel * !Y)	0.00261	0.00264	0.00263

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(B * Sel * Y) + (!B * Sel * !Y)	0.00350	0.00349	0.00347
	(B * Sel * Y) + (!B * Sel * !Y)	-0.00261	-0.00264	-0.00263

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(A * !Sel * Y) + (!A * !Sel * !Y)	-0.00476	-0.00478	-0.00476
	(A * !Sel * Y) + (!A * !Sel * !Y)	0.00200	0.00201	0.00200

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(A * !Sel * Y) + (!A * !Sel * !Y)	0.00476	0.00478	0.00476
	(A * !Sel * Y) + (!A * !Sel * !Y)	-0.00200	-0.00201	-0.00200

Passive power(pJ) for Sel rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(A * B * Y)	-0.00473	0.08098	0.66951
	(A * B * Y)	0.03308	0.11900	0.70727
	(!A * !B * !Y)	-0.00469	0.08073	0.66952
	(!A * !B * !Y)	0.02965	0.11509	0.70390

Passive power(pJ) for Sel falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__mux2_1	(A * B * Y)	0.03551	0.12272	0.70967
	(A * B * Y)	-0.00235	0.08479	0.67183
	(!A * !B * !Y)	0.03225	0.11997	0.70865
	(!A * !B * !Y)	-0.00201	0.08545	0.67441

GF180MCU_OSU_SC_GP9T3V3__NAND2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	x	1
1	0	1
1	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__nand2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__nand2_1	0.00404	0.00402	1.04886

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__nand2_1	0.00000	0.00078	0.00115

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__nand2_1	A->Y (FR)	0.04438	0.75520	7.95688
	B->Y (FR)	0.05432	0.77580	7.99415

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__nand2_1	A->Y (RF)	0.05013	0.80578	9.03333
	B->Y (RF)	0.05099	0.66316	7.87851

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	A	0.02143	0.06217	0.23628
	A	-0.00176	0.03863	0.21153
	B	0.02963	0.07399	0.26134
	B	0.00152	0.04554	0.23167

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	A	-0.00169	0.03698	0.20692
	A	0.02146	0.06015	0.23062
	B	-0.00267	0.03925	0.23266
	B	0.02550	0.06788	0.26190

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	(!B * Y)	-0.01411	-0.01414	-0.01414
	(!B * Y)	0.00174	0.00174	0.00169

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	(!B * Y)	0.01418	0.01424	0.01418
	(!B * Y)	-0.00168	-0.00168	-0.00167

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	(!A * Y)	-0.01349	-0.01357	-0.01352
	(!A * Y)	0.00646	0.00650	0.00647

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nand2_1	(!A * Y)	0.01358	0.01364	0.01355
	(!A * Y)	-0.00637	-0.00650	-0.00645

GF180MCU_OSU_SC_GP9T3V3__NOR2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
x	1	0
1	x	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__nor2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__nor2_1	0.00398	0.00405	0.79081

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__nor2_1	0.00000	0.00082	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__nor2_1	A->Y (FR)	0.07306	0.86128	8.77513
	B->Y (FR)	0.05981	1.00661	9.91471

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__nor2_1	A->Y (RF)	0.04990	0.52570	5.40405
	B->Y (RF)	0.03601	0.49079	5.33543

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	A	0.03015	0.07447	0.31949
	A	-0.00172	0.04247	0.28716
	B	0.02161	0.06287	0.26228
	B	-0.00083	0.04037	0.23962

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	A	0.00227	0.04319	0.24535
	A	0.03406	0.07504	0.28091
	B	-0.00330	0.03355	0.21469
	B	0.01920	0.05611	0.24117

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	(B * !Y)	-0.01289	-0.01334	-0.01330
	(B * !Y)	0.00687	0.00659	0.00651

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	(B * !Y)	0.01338	0.01334	0.01330
	(B * !Y)	-0.00650	-0.00650	-0.00648

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	(A * !Y)	-0.00435	-0.00436	-0.00434
	(A * !Y)	0.00779	0.00781	0.00780

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__nor2_1	(A * !Y)	0.00456	0.00452	0.00440
	(A * !Y)	-0.00768	-0.00769	-0.00780

GF180MCU_OSU_SC_GP9T3V3__OAI21_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT			OUTPUT
A0	A1	B	Y
0	0	x	1
x	1	0	1
x	1	1	0
1	x	0	1
1	x	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__oai21_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	B	Y
gf180mcu_osu_sc_gp9t3v3__oai21_1	0.00395	0.00402	0.00404	0.78358

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__oai21_1	0.00000	0.00096	0.00152

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai21_1	A0->Y (FR)	0.09884	0.86415	8.60127
	A1->Y (FR)	0.08322	1.01081	9.76361
	B->Y (FR)	0.04408	0.69747	6.76956

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai21_1	A0->Y (RF)	0.07780	0.59620	6.13968
	A1->Y (RF)	0.05674	0.55783	6.05829
	B->Y (RF)	0.07430	0.75284	7.43170

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	A0	0.04047	0.07747	0.28324
	A0	0.00229	0.03935	0.24496
	A1	0.03121	0.06617	0.23313
	A1	0.00260	0.03752	0.20447
	B	0.02129	0.06947	0.30183
	B	-0.00190	0.04619	0.27795

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	A0	0.00486	0.04062	0.22768
	A0	0.04287	0.07869	0.26566
	A1	-0.00155	0.03149	0.19988
	A1	0.02719	0.06023	0.22860
	B	-0.00144	0.04438	0.26661
	B	0.02177	0.06757	0.28978

Passive power(pJ) for A0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(A1 * B * !Y)	-0.01283	-0.01334	-0.01329
	(A1 * B * !Y)	0.00691	0.00659	0.00651
	(A1 * !B * Y)	-0.01316	-0.01332	-0.01329
	(A1 * !B * Y)	0.00658	0.00659	0.00651
	(!A1 * !B * Y)	-0.01354	-0.01358	-0.01352
	(!A1 * !B * Y)	0.00650	0.00649	0.00645

Passive power(pJ) for A0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(A1 * B * !Y)	0.01331	0.01334	0.01329
	(A1 * B * !Y)	-0.00649	-0.00650	-0.00648
	(A1 * !B * Y)	0.01328	0.01332	0.01329
	(A1 * !B * Y)	-0.00650	-0.00651	-0.00649
	(!A1 * !B * Y)	0.01357	0.01359	0.01355
	(!A1 * !B * Y)	-0.00635	-0.00649	-0.00645

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(A0 * B * !Y)	-0.00435	-0.00436	-0.00434
	(A0 * B * !Y)	0.00781	0.00781	0.00780
	(!B * Y)	-0.01317	-0.01337	-0.01326
	(!B * Y)	0.00657	0.00654	0.00651

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(A0 * B * !Y)	0.00451	0.00451	0.00440
	(A0 * B * !Y)	-0.00760	-0.00766	-0.00780
	(!B * Y)	0.01318	0.01341	0.01326
	(!B * Y)	-0.00645	-0.00653	-0.00649

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(!A0 * !A1 * Y)	-0.01408	-0.01410	-0.01414
	(!A0 * !A1 * Y)	0.00177	0.00176	0.00169

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai21_1	(!A0 * !A1 * Y)	0.01420	0.01430	0.01418
	(!A0 * !A1 * Y)	-0.00168	-0.00169	-0.00167

GF180MCU_OSU_SC_GP9T3V3__OAI22_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT				OUTPUT
A0	A1	B0	B1	Y
0	0	x	x	1
x	1	0	0	1
x	1	x	1	0
x	1	1	x	0
1	x	0	0	1
1	x	x	1	0
1	x	1	x	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__oai22_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A0	A1	B0	B1	Y
gf180mcu_osu_sc_gp9t3v3__oai22_1	0.00395	0.00402	0.00404	0.00398	0.78001

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__oai22_1	0.00000	0.00125	0.00180

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai22_1	A0->Y (FR)	0.11943	0.89103	8.65489
	A1->Y (FR)	0.10316	1.03886	9.80719
	B0->Y (FR)	0.06706	0.99572	9.74856
	B1->Y (FR)	0.08110	0.84900	8.58490

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai22_1	A0->Y (RF)	0.11047	0.62983	6.15087
	A1->Y (RF)	0.08800	0.59435	6.07083
	B0->Y (RF)	0.08026	0.73010	7.26259
	B1->Y (RF)	0.10181	0.76712	7.32943

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	A0	0.05466	0.09143	0.29766
	A0	0.00698	0.04597	0.27060
	A1	0.04544	0.08008	0.24753
	A1	0.00717	0.04442	0.22694
	B0	0.02308	0.06004	0.23633
	B0	-0.00064	0.03626	0.21255
	B1	0.03185	0.07113	0.28591
	B1	-0.00140	0.03781	0.25237

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	A0	0.00483	0.04061	0.23070
	A0	0.04804	0.08385	0.27407
	A1	-0.00156	0.03167	0.20214
	A1	0.04603	0.07698	0.24566
	B0	-0.00013	0.03369	0.19841
	B0	0.02364	0.05759	0.22313
	B1	0.00553	0.04232	0.22440
	B1	0.03859	0.07547	0.25820

Passive power(pJ) for A0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B0 * !Y)	-0.01280	-0.01334	-0.01327
	(A1 * B0 * !Y)	0.00692	0.00659	0.00651
	(A1 * !B0 * B1 * !Y)	-0.01282	-0.01334	-0.01328
	(A1 * !B0 * B1 * !Y)	0.00692	0.00659	0.00651
	(A1 * !B0 * !B1 * Y)	-0.01316	-0.01333	-0.01328
	(A1 * !B0 * !B1 * Y)	0.00657	0.00659	0.00651
	(!A1 * !B0 * !B1 * Y)	-0.01354	-0.01356	-0.01352
	(!A1 * !B0 * !B1 * Y)	0.00647	0.00646	0.00643

Passive power(pJ) for A0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B0 * !Y)	0.01338	0.01334	0.01327
	(A1 * B0 * !Y)	-0.00650	-0.00651	-0.00648
	(A1 * !B0 * B1 * !Y)	0.01329	0.01334	0.01328
	(A1 * !B0 * B1 * !Y)	-0.00648	-0.00651	-0.00648
	(A1 * !B0 * !B1 * Y)	0.01337	0.01333	0.01328
	(A1 * !B0 * !B1 * Y)	-0.00651	-0.00651	-0.00649
	(!A1 * !B0 * !B1 * Y)	0.01365	0.01359	0.01355
	(!A1 * !B0 * !B1 * Y)	-0.00631	-0.00646	-0.00643

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A0 * B0 * !Y)	-0.00443	-0.00436	-0.00434
	(A0 * B0 * !Y)	0.00788	0.00781	0.00780
	(A0 * !B0 * B1 * !Y)	-0.00433	-0.00436	-0.00434
	(A0 * !B0 * B1 * !Y)	0.00777	0.00781	0.00780
	(!B0 * !B1 * Y)	-0.01316	-0.01319	-0.01317
	(!B0 * !B1 * Y)	0.00656	0.00655	0.00651

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A0 * B0 * !Y)	0.00455	0.00453	0.00440
	(A0 * B0 * !Y)	-0.00763	-0.00768	-0.00780
	(A0 * !B0 * B1 * !Y)	0.00450	0.00451	0.00440
	(A0 * !B0 * B1 * !Y)	-0.00760	-0.00766	-0.00780
	(!B0 * !B1 * Y)	0.01317	0.01319	0.01317
	(!B0 * !B1 * Y)	-0.00649	-0.00652	-0.00649

Passive power(pJ) for B0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B1 * !Y)	-0.00439	-0.00436	-0.00434
	(A1 * B1 * !Y)	0.00780	0.00781	0.00780
	(A0 * !A1 * B1 * !Y)	-0.00439	-0.00437	-0.00434
	(A0 * !A1 * B1 * !Y)	0.00780	0.00782	0.00779
	(!A0 * !A1 * Y)	-0.01376	-0.01399	-0.01387
	(!A0 * !A1 * Y)	0.00163	0.00164	0.00163

Passive power(pJ) for B0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B1 * !Y)	0.00451	0.00454	0.00440
	(A1 * B1 * !Y)	-0.00761	-0.00770	-0.00780
	(A0 * !A1 * B1 * !Y)	0.00450	0.00454	0.00440
	(A0 * !A1 * B1 * !Y)	-0.00761	-0.00769	-0.00779
	(!A0 * !A1 * Y)	0.01391	0.01399	0.01387
	(!A0 * !A1 * Y)	-0.00156	-0.00158	-0.00162

Passive power(pJ) for B1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B0 * !Y)	-0.01285	-0.01333	-0.01328
	(A1 * B0 * !Y)	0.00687	0.00658	0.00651
	(A0 * !A1 * B0 * !Y)	-0.01283	-0.01343	-0.01332
	(A0 * !A1 * B0 * !Y)	0.00688	0.00658	0.00651
	(!A0 * !A1 * Y)	-0.01378	-0.01405	-0.01399
	(!A0 * !A1 * Y)	0.00163	0.00164	0.00163

Passive power(pJ) for B1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai22_1	(A1 * B0 * !Y)	0.01332	0.01333	0.01328
	(A1 * B0 * !Y)	-0.00648	-0.00650	-0.00648
	(A0 * !A1 * B0 * !Y)	0.01339	0.01348	0.01332
	(A0 * !A1 * B0 * !Y)	-0.00650	-0.00652	-0.00649
	(!A0 * !A1 * Y)	0.01416	0.01405	0.01399
	(!A0 * !A1 * Y)	-0.00158	-0.00156	-0.00162

GF180MCU_OSU_SC_GP9T3V3__OAI31_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT				OUTPUT
A0	A1	A2	B	Y
0	0	0	x	1
0	x	1	0	1
0	x	1	1	0
x	1	x	0	1
x	1	x	1	0
1	x	x	0	1
1	x	x	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__oai31_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A0	A1	A2	B	Y
gf180mcu_osu_sc_gp9t3v3__oai31_1	0.00395	0.00402	0.00395	0.00404	0.53719

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__oai31_1	0.00000	0.00101	0.00216

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai31_1	A0->Y (FR)	0.14848	1.04018	9.03899
	A1->Y (FR)	0.10811	1.12824	9.85373
	A2->Y (FR)	0.16634	0.94927	8.27716
	B->Y (FR)	0.04396	0.62561	5.50154

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__oai31_1	A0->Y (RF)	0.08385	0.48801	4.38182
	A1->Y (RF)	0.06078	0.45141	4.30157
	A2->Y (RF)	0.09126	0.51847	4.47432
	B->Y (RF)	0.08519	0.68952	5.80147

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	A0	0.04255	0.07298	0.26558
	A0	0.00398	0.03432	0.22684
	A1	0.03321	0.06492	0.23308
	A1	0.00410	0.03571	0.20389
	A2	0.05197	0.08466	0.32667
	A2	0.00403	0.03667	0.27866
	B	0.02124	0.07518	0.36539
	B	-0.00196	0.05193	0.34019

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	A0	0.00631	0.03564	0.21549
	A0	0.04489	0.07426	0.25508
	A1	-0.00103	0.02766	0.19094
	A1	0.02824	0.05699	0.22125
	A2	0.01219	0.04340	0.24445
	A2	0.05982	0.09106	0.29353
	B	-0.00130	0.04976	0.32738
	B	0.02186	0.07299	0.35218

Passive power(pJ) for A0 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A1 * B * !Y) + (!A1 * A2 * B * !Y)	-0.00695	-0.00697	-0.00694
	(A1 * B * !Y) + (!A1 * A2 * B * !Y)	0.00692	0.00687	0.00652
	(A1 * !B * Y)	-0.00788	-0.00785	-0.00778
	(A1 * !B * Y)	0.00654	0.00654	0.00651
	(!A1 * !B * Y)	-0.01316	-0.01320	-0.01319
	(!A1 * !B * Y)	0.00656	0.00653	0.00651

Passive power(pJ) for A0 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A1 * B * !Y) + (!A1 * A2 * B * !Y)	0.00695	0.00697	0.00694
	(A1 * B * !Y) + (!A1 * A2 * B * !Y)	-0.00649	-0.00652	-0.00649
	(A1 * !B * Y)	0.00788	0.00785	0.00778
	(A1 * !B * Y)	-0.00647	-0.00654	-0.00649
	(!A1 * !B * Y)	0.01319	0.01320	0.01319
	(!A1 * !B * Y)	-0.00648	-0.00651	-0.00649

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A0 * B * !Y)	-0.00435	-0.00436	-0.00434
	(A0 * B * !Y)	0.00780	0.00781	0.00780
	(A0 * !B * Y)	-0.01302	-0.01324	-0.01324
	(A0 * !B * Y)	0.00655	0.00659	0.00651
	(!A0 * A2 * B * !Y)	-0.00427	-0.00427	-0.00414
	(!A0 * A2 * B * !Y)	0.00781	0.00781	0.00779
	(!A0 * !B * Y)	-0.01165	-0.01253	-0.01254
	(!A0 * !B * Y)	0.00648	0.00651	0.00651

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A0 * B * !Y)	0.00448	0.00452	0.00440
	(A0 * B * !Y)	-0.00758	-0.00768	-0.00780
	(A0 * !B * Y)	0.01328	0.01324	0.01324
	(A0 * !B * Y)	-0.00651	-0.00651	-0.00649
	(!A0 * A2 * B * !Y)	0.00439	0.00440	0.00414
	(!A0 * A2 * B * !Y)	-0.00726	-0.00734	-0.00778
	(!A0 * !B * Y)	0.01253	0.01253	0.01254
	(!A0 * !B * Y)	-0.00648	-0.00650	-0.00649

Passive power(pJ) for A2 rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A0 * A1 * B * !Y)	-0.01308	-0.01333	-0.01329
	(A0 * A1 * B * !Y)	0.00655	0.00659	0.00651
	(A0 * !B * Y)	-0.01311	-0.01333	-0.01327
	(A0 * !B * Y)	0.00652	0.00653	0.00651
	(A0 * !A1 * B * !Y) + (!A0 * A1 * B * !Y)	-0.01306	-0.01333	-0.01327
	(A0 * !A1 * B * !Y) + (!A0 * A1 * B * !Y)	0.00655	0.00659	0.00651
	(!A0 * A1 * !B * Y)	-0.01220	-0.01294	-0.01286
	(!A0 * A1 * !B * Y)	0.00654	0.00658	0.00651
	(!A0 * !A1 * !B * Y)	-0.01351	-0.01358	-0.01352
	(!A0 * !A1 * !B * Y)	0.00644	0.00651	0.00644

Passive power(pJ) for A2 falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(A0 * A1 * B * !Y)	0.01340	0.01333	0.01329
	(A0 * A1 * B * !Y)	-0.00650	-0.00651	-0.00649
	(A0 * !B * Y)	0.01329	0.01333	0.01327
	(A0 * !B * Y)	-0.00650	-0.00652	-0.00649
	(A0 * !A1 * B * !Y) + (!A0 * A1 * B * !Y)	0.01329	0.01333	0.01327
	(A0 * !A1 * B * !Y) + (!A0 * A1 * B * !Y)	-0.00650	-0.00652	-0.00649
	(!A0 * A1 * !B * Y)	0.01290	0.01294	0.01286
	(!A0 * A1 * !B * Y)	-0.00648	-0.00653	-0.00649
	(!A0 * !A1 * !B * Y)	0.01365	0.01359	0.01355
	(!A0 * !A1 * !B * Y)	-0.00631	-0.00648	-0.00644

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(!A0 * !A1 * !A2 * Y)	-0.01404	-0.01406	-0.01413
	(!A0 * !A1 * !A2 * Y)	0.00180	0.00179	0.00170

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__oai31_1	(!A0 * !A1 * !A2 * Y)	0.01420	0.01423	0.01418
	(!A0 * !A1 * !A2 * Y)	-0.00168	-0.00168	-0.00167

GF180MCU_OSU_SC_GP9T3V3__OR2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	0
x	1	1
1	x	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__or2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__or2_1	0.00406	0.00398	1.56314

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__or2_1	0.00000	0.00164	0.00237

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__or2_1	A->Y (RR)	0.07718	0.45676	6.24750
	B->Y (RR)	0.09175	0.55211	6.84492

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__or2_1	A->Y (FF)	0.11277	0.82608	8.41619
	B->Y (FF)	0.12748	0.75733	7.95850

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	A	0.01533	0.08224	0.55249
	A	0.03782	0.10469	0.57334
	B	0.02113	0.09738	0.65504
	B	0.05301	0.12907	0.68663

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	A	0.03944	0.10729	0.57363
	A	0.01685	0.08512	0.55115
	B	0.04828	0.12256	0.67814
	B	0.01626	0.09074	0.64677

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	(B * Y)	-0.00437	-0.00436	-0.00434
	(B * Y)	0.00781	0.00781	0.00780

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	(B * Y)	0.00456	0.00453	0.00440
	(B * Y)	-0.00765	-0.00768	-0.00780

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	(A * Y)	-0.01283	-0.01334	-0.01328
	(A * Y)	0.00691	0.00659	0.00651

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__or2_1	(A * Y)	0.01340	0.01334	0.01328
	(A * Y)	-0.00650	-0.00650	-0.00648

GF180MCU_OSU_SC_GP9T3V3__TBUF_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	EN	Y
-	0	HiZ
0	1	0
1	1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__tbuf_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	EN	Y
gf180mcu_osu_sc_gp9t3v3__tbuf_1	0.00404	0.00535	0.81769

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__tbuf_1	0.00000	0.00183	0.00201

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	A->Y (RR)	0.12633	0.66603	6.67578
	EN->Y (FR)	0.06129	0.90566	6.56566
	EN->Y (RR)	0.07388	0.61402	6.77906

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	A->Y (FF)	0.11799	0.71078	6.31116
	EN->Y (FF)	0.07420	0.90566	6.56566
	EN->Y (RF)	0.02524	0.58369	7.01858

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	A	0.03269	0.11775	0.71131
	A	0.04948	0.13448	0.72787
	EN	0.01571	0.10130	0.69684
	EN	0.03896	0.12450	0.71752

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	A	0.04264	0.13042	0.72093
	A	0.02589	0.11381	0.70427
	EN	0.00835	0.09489	0.68773
	EN	0.03741	0.12414	0.71718

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	!EN	0.00884	0.09302	0.68118
	!EN	0.03079	0.11503	0.70318

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	!EN	0.02630	0.11192	0.69957
	!EN	0.00426	0.08972	0.67755

Passive power(pJ) for EN rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	(A * Y)	0.00790	0.09413	0.68309
	(A * Y)	0.03224	0.11863	0.70742
	(!A * !Y)	0.00001	0.08721	0.67705
	(!A * !Y)	0.02841	0.11571	0.70550

Passive power(pJ) for EN falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tbuf_1	(A * Y)	0.02080	0.10721	0.69554
	(A * Y)	-0.00360	0.08290	0.67115
	(!A * !Y)	0.02114	0.11053	0.69979
	(!A * !Y)	-0.00726	0.08209	0.67135

GF180MCU_OSU_SC_GP9T3V3__TIEH

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__tieh	0.00000

Pin Capacitance Information

Cell Name	Max Cap(pf)
	Y
gf180mcu_osu_sc_gp9t3v3__tieh	3.44203

Leakage Information

Cell Name	Leakage(nW)		
	Min.	**Avg**	**Max.**
gf180mcu_osu_sc_gp9t3v3__tieh	0.00000	0.00000	0.00000

GF180MCU_OSU_SC_GP9T3V3__TIEL

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__tiel	0.00000

Pin Capacitance Information

Cell Name	Max Cap(pf)
	Y
gf180mcu_osu_sc_gp9t3v3__tiel	5.16285

Leakage Information

Cell Name	Leakage(nW)		
	Min.	**Avg**	**Max.**
gf180mcu_osu_sc_gp9t3v3__tiel	0.00000	0.00000	0.00000

GF180MCU_OSU_SC_GP9T3V3__TINV_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	EN	Y
-	0	HiZ
0	1	1
1	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__tinv_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	EN	Y
gf180mcu_osu_sc_gp9t3v3__tinv_1	0.00395	0.00535	0.79857

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__tinv_1	0.00000	0.00109	0.00144

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__tinv_1	A->Y (FR)	0.08898	0.85957	8.71085
	EN->Y (FR)	0.06129	0.90566	6.56566
	EN->Y (RR)	0.07395	0.60644	6.62184

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)		
		First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__tinv_1	A->Y (RF)	0.06774	0.59122	6.22409
	EN->Y (FF)	0.07410	0.90566	6.56566
	EN->Y (RF)	0.02525	0.57553	6.88421

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	A	0.03691	0.07425	0.27777
	A	0.01032	0.04768	0.25091
	EN	0.01571	0.10128	0.69406
	EN	0.03845	0.12398	0.71649

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	A	0.00149	0.03764	0.22145
	A	0.02799	0.06424	0.24873
	EN	0.00745	0.09400	0.68693
	EN	0.03742	0.12387	0.71782

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	!EN	-0.01329	-0.01346	-0.01341
	!EN	0.00650	0.00652	0.00644

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	!EN	0.01346	0.01346	0.01341
	!EN	-0.00634	-0.00649	-0.00644

Passive power(pJ) for EN rising (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	(A * !Y)	-0.00021	0.08699	0.67683
	(A * !Y)	0.02841	0.11570	0.70550
	(!A * Y)	0.00790	0.09414	0.68309
	(!A * Y)	0.03214	0.11853	0.70733

Passive power(pJ) for EN falling (conditional):

Cell Name	When	Power(pJ)		
		first	mid	last
gf180mcu_osu_sc_gp9t3v3__tinv_1	(A * !Y)	0.02133	0.11077	0.69998
	(A * !Y)	-0.00726	0.08208	0.67135
	(!A * Y)	0.02080	0.10720	0.69554
	(!A * Y)	-0.00352	0.08298	0.67123

GF180MCU_OSU_SC_GP9T3V3__XNOR2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__xnor2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__xnor2_1	0.00806	0.00799	0.78175

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__xnor2_1	0.00000	0.00284	0.00353

Delay Information

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__xnor2_1	A->Y (RR)	B	0.12004	0.64704	6.36776
	A->Y (FR)	!B	0.08507	1.01482	9.75768
	B->Y (RR)	A	0.09899	0.64073	6.54829
	B->Y (FR)	!A	0.09581	0.86378	8.59055

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__xnor2_1	A->Y (FF)	B	0.13115	0.73590	6.32167
	A->Y (RF)	!B	0.05709	0.55666	6.04812
	B->Y (FF)	A	0.10269	0.70172	6.28868
	B->Y (RF)	!A	0.07507	0.59587	6.13415

Power Information

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__xnor2_1	A	B	0.02340	0.10794	0.70167
	A	B	0.05618	0.14067	0.73350
	A	!B	0.04939	0.17259	0.93300
	A	!B	0.00528	0.12804	0.88887
	B	A	0.00522	0.09073	0.68425
	B	A	0.04557	0.13113	0.72426
	B	!A	0.05879	0.18342	0.98367
	B	!A	0.00510	0.12977	0.92988

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__xnor2_1	A	B	0.05893	0.14402	0.73478
	A	B	0.02777	0.11277	0.70387
	A	!B	0.01411	0.13193	0.89238
	A	!B	0.05790	0.17572	0.93610
	B	A	0.05442	0.14087	0.73348
	B	A	0.01391	0.10032	0.69332
	B	!A	0.01492	0.13670	0.91723
	B	!A	0.06784	0.18979	0.97020

GF180MCU_OSU_SC_GP9T3V3__XOR2_1

gf180mcu_osu_sc_gp9t3v3_TT_25C.ccs
Cell Library: Process , Voltage 3.30,
Temp 25.00

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

Footprint

Cell Name	Area
gf180mcu_osu_sc_gp9t3v3__xor2_1	0.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
gf180mcu_osu_sc_gp9t3v3__xor2_1	0.00799	0.00802	0.79300

Leakage Information

Cell Name	Leakage(nW)		
	Min.	Avg	Max.
gf180mcu_osu_sc_gp9t3v3__xor2_1	0.00000	0.00284	0.00327

Delay Information

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__xor2_1	A->Y (RR)	!B	0.09909	0.64527	6.63814
	A->Y (FR)	B	0.09777	0.86911	8.68038
	B->Y (RR)	!A	0.12659	0.67062	6.65931
	B->Y (FR)	A	0.07989	0.83723	8.60252

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)		
			First	Mid	Last
gf180mcu_osu_sc_gp9t3v3__xor2_1	A->Y (FF)	!B	0.10263	0.70512	6.36004
	A->Y (RF)	B	0.07347	0.59968	6.20453
	B->Y (FF)	!A	0.10717	0.69128	6.14295
	B->Y (RF)	A	0.07304	0.74347	7.39249

Power Information

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__xor2_1	A	B	0.06409	0.18847	0.98823
	A	B	0.01538	0.13985	0.93926
	A	!B	0.00377	0.08934	0.68332
	A	!B	0.04495	0.13050	0.72428
	B	A	0.05751	0.17884	0.96223
	B	A	0.01377	0.13498	0.91836
	B	!A	0.01341	0.09658	0.68956
	B	!A	0.04952	0.13268	0.72551

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)		
			first	mid	last
gf180mcu_osu_sc_gp9t3v3__xor2_1	A	B	0.00881	0.13070	0.90912
	A	B	0.05816	0.18038	0.95919
	A	!B	0.05571	0.14212	0.73462
	A	!B	0.01460	0.10093	0.69416
	B	A	0.00936	0.12816	0.88453
	B	A	0.05360	0.17272	0.92879
	B	!A	0.06048	0.14716	0.73980
	B	!A	0.02346	0.11014	0.70279