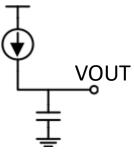
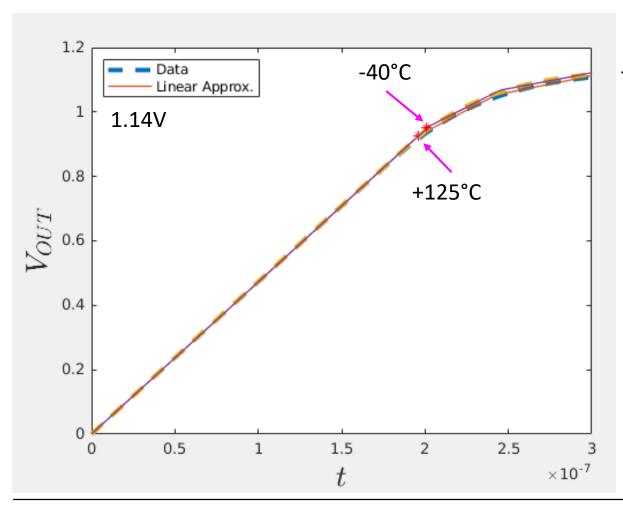
## **Ramp Generator**

## **Worse VT Corners**

-	-	Parameter			tps65isc_MISMATCH_TYP	tps65isc_MISMATCH_TYP_+5%_0	tps65isc_MISMATCH_TYP_+5%_1	tps65isc_MISMATCH_TYP5%_0	tps65isc_MISMATCH_TYP5%_1	
		BGR_DIODE_C			normal	normal	normal	normal	normal	
		DEVICE CHECK			off	off	off	off	off	
		HEADER.scs			MISMATCH_TYP	MISMATCH_TYP	MISMATCH_TYP	MISMATCH_TYP	MISMATCH_TYP	
		P1V2			1.2	1.26	1.26	1.14	1.14	
		temperature			27	-40	125	-40	125	
39/283160 r	POME						1			
						I				
Point		Output	Spec	Weight	tps65isc_MISMATCH_TYP	tps65isc_MISMATCH_TYP_+5%_0	tps65isc_MISMATCH_TYP_+5%_1	tps65isc_MISMATCH_TYP5%_0	tps65isc_MISMATCH_TYP5%_1	
						Filter	Filter	Filter	Filter	Filter
	: IBIAS1_N=10.7u, CSH			.w=20.43u, M						
4721	OP_DC_AC_N_DCM		< 220m		253.9 mV	174.9 mV	218.9 mV	294.9 mV	338.9 mV	
4721	OP_DC_AC_N_DCM		> 980m	8	946.1 mV	1.025 V	981.1 mV	905.1 mV	861.1 mV	
4721	OP_DC_AC_N_DCM	_	maximize 500M		617.3 MOhm	693.6 MOhm	522.5 MOhm	693.3 MOhm	522.2 MOhm	
4721	OP_DC_AC_N_DCM		range 0.99 1.01		999.9 mA/A	999.9 mA/A	1 A/A	999.8 mA/A	999.9 mA/A	
4721	OP_DC_AC_N_DCM		< 500n		62.45 nA	70.83 nA	54.27 nA	70.83 nA	54.26 nA	method:sta
4721	OP_DC_AC_N_DCM		< 2.6p		1.641 pA/sqrt(Hz)	1.544 pA/sqrt(Hz)	1.758 pA/sqrt(Hz)	1.545 pA/sqrt(Hz)	1.759 pA/sqrt(Hz)	current_noise
4721	OP_DC_AC_N_DCM		info		1.769 nA/V	1.605 nA/V	2.121 nA/V	1.547 nA/V	2.061 nA/V	
4721	OP_DC_AC_N_DCM	PSRRP_BW	info		647.4 MHz	651.9 MHz	639 MHz	650.5 MHz	634.6 MHz	
4721	OP_DC_AC_N_DCM		info		807.8 um2	807.8 um2	807.8 um2	807.8 um2	807.8 um2	
4721	OP_DC_AC_N_DCM									
4721	OP_DC_AC_N_DCM									
4721	OP_DC_AC_N_DCM									
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4721	OP_DC_AC_N_DCM									
4721	OP_DC_AC_N_DCM									
4721	OP_DC_AC_N_DCM									minimize
4721	TRAN	tmax	range 200n 21	9	200.4n	216.8n	208.1n	192.1n	182.8n	
4721	TRAN	lin_range	range 200n 21	8	207.7n	220.7n	215.8n	201.1n	196.2n	
4721	TRAN	t95	info		200n	215.3n	209.9n	189.7n	184n	
4721	TRAN	sigma_tmax_c	minimize 0	2	223 uV	218.2 uV	243.3 uV	205.6 uV	228.3 uV	analytic
4721	TRAN	jitter_tmax_calc	< 50p	7	48.56 psec	47.51 psec	52.99 psec	44.76 psec	49.71 psec	analytic
4721	TRAN									minimize
4721	TRAN									minimize
4721	TRAN	AREA_CAP	info		448.1 um2	448.1 um2	448.1 um2	448.1 um2	448.1 um2	
4721	TRAN	insd	info		1.641 pA/sqrt(Hz)	1.544 pA/sqrt(Hz)	1.758 pA/sqrt(Hz)	1.545 pA/sqrt(Hz)	1.759 pA/sqrt(Hz)	
						1 1 1 1 1 1 1	1 1 1 1			
					· ·	·	·		·	
4721 4721 4721	TRAN TRAN	CSH IBIAS1_N		info	info	info 2.33 pF	info 2.33 pF 2.33 pF	info 2.33 pF 2.33 pF 2.33 pF	info 2.33 pF 2.33 pF 2.33 pF 2.33 pF	info 2.33 pF 2.33 pF 2.33 pF 2.33 pF 2.33 pF



## Jitter/Noise, Area, Current



$$\frac{V}{t} = \frac{I}{C} = \frac{Noise}{Jitter} = \frac{1}{200n}$$

The ratio is pretty much fixed and defined by the TOT and VDD.