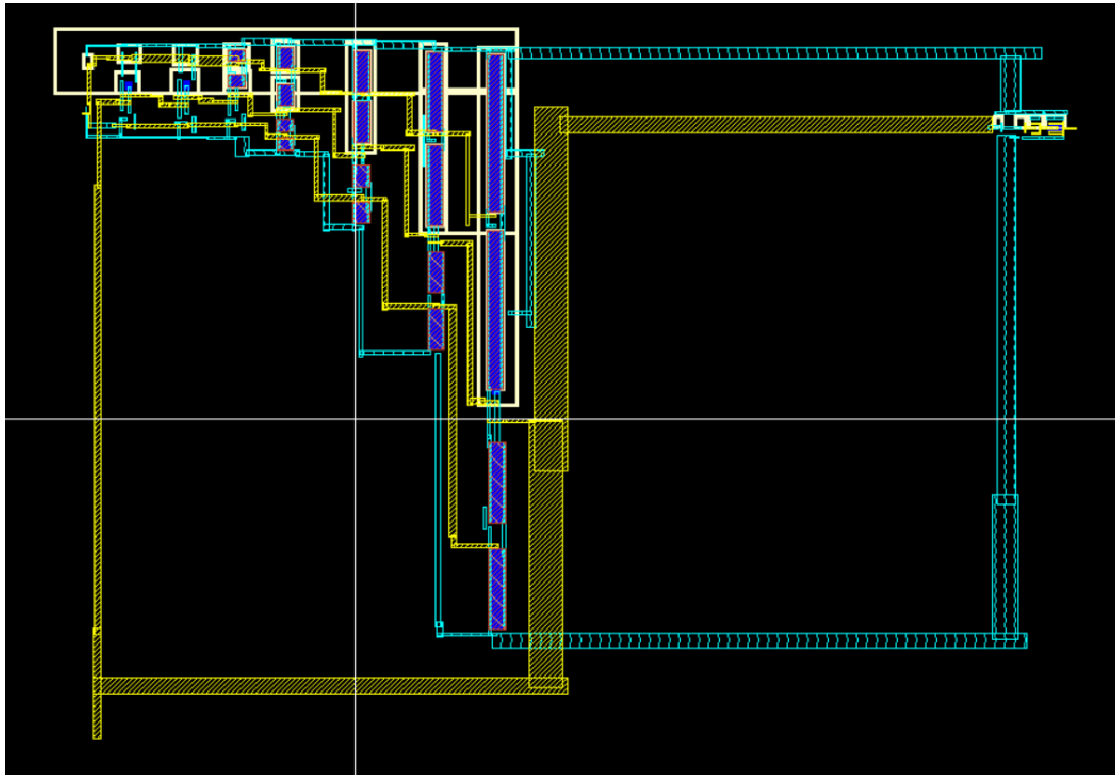
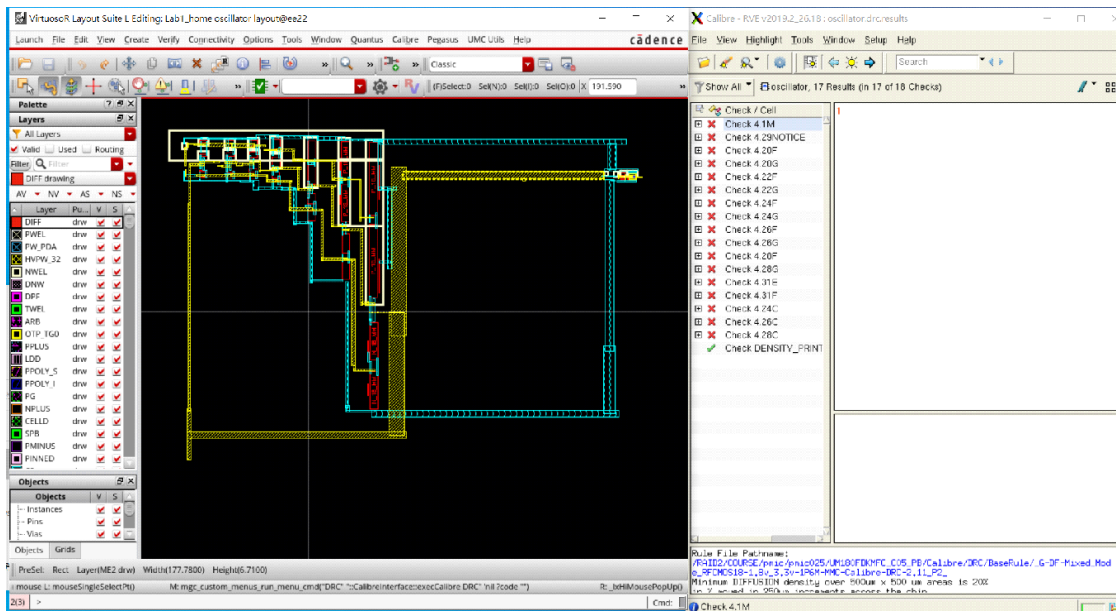


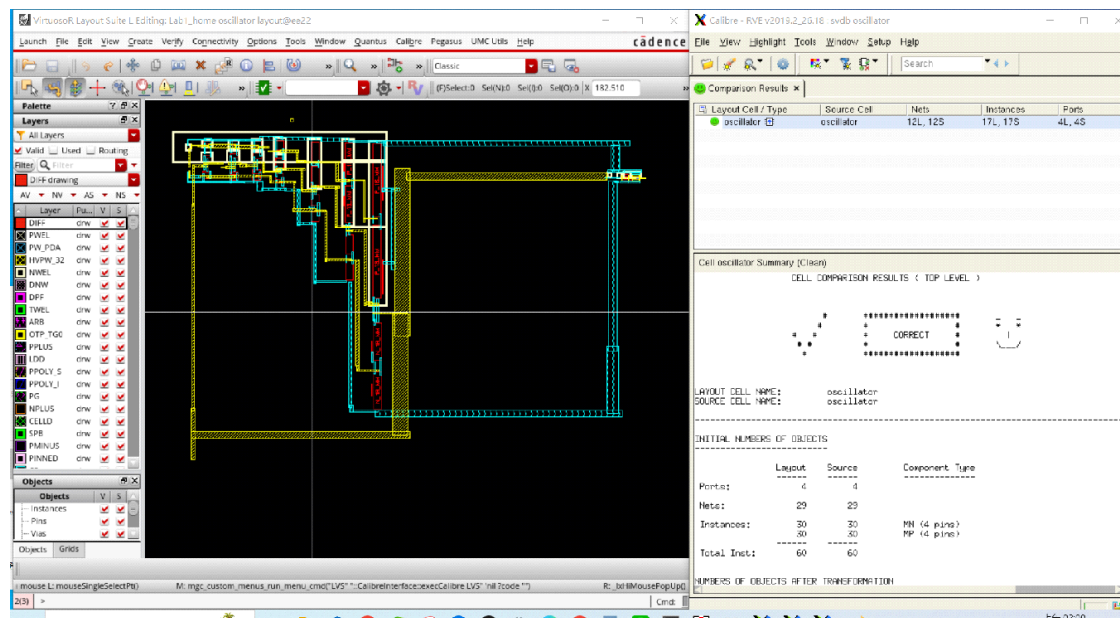
Layout



DRC



LVS



Post-sim($V=V_{CTRL}$)

12						
13	parameter	Target	pre-sim	post-sim	誤差	
14	VDD	1.8V	1.8V	1.8V		
15	Oscillator Range	fmin<0.6Mhz	4.745*10 ⁴ (1.5V)	4.594*10 ⁴ (1.5V)	0.031	
16	Oscillator Range	fmax>2.5Mhz	2.649*10 ⁶ (0.4V)	2.553*10 ⁶ (0.4V)	0.036	
17	Rising time	<0.5ns	29.7ps(1.5V)	45.12ps(1.5V)	0.52	
18	Rising time	<0.5ns	29.8ps(0.4V)	45.4ps(0.4V)	0.52	
19	Falling time	<0.5ns	22.15ps(1.5V)	38.46ps(1.5V)	0.74	
20	Falling time	<0.5ns	21.98ps(0.4v)	38.5ps(0.4v)	0.74	
21	Duty cycle	47%<D<53%	51.02(1.5V)	51.02(1.5V)	0	
22	Duty cycle	47%<D<53%	49.01(0.4V)	48.83(0.4V)	0.00367	
23	N	any		7	7	

**

pre-sim-0.4V

Virtuoso (R) Visualization & Analysis XL Table@ee22

frequency(v("/VOUT"?result "tran"))...

	Expression	Value	time (s)	dutyCycl...n")) (%)
1	frequency(v("/V...	2.649E6	3.609E-9	49.01

pre-sim-1.5V

	Expression	Value	time (s)	dutyCycl...n")) (%)
1	frequency(v"/V...	47.45E3	108.6E-9	51.02

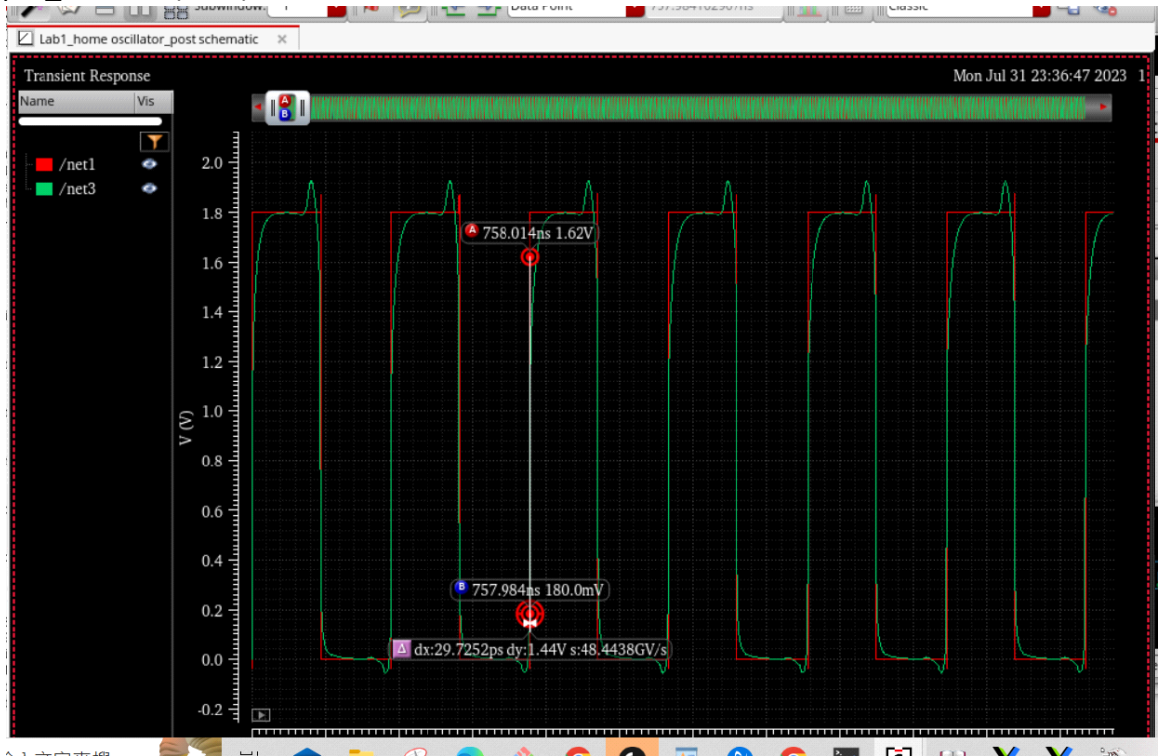
post-sim-0.4V

	Expression	Value	time (s)	dutyCycl...n")) (%)
1	frequency(v"/V...	2.553E6	3.959E-9	48.83

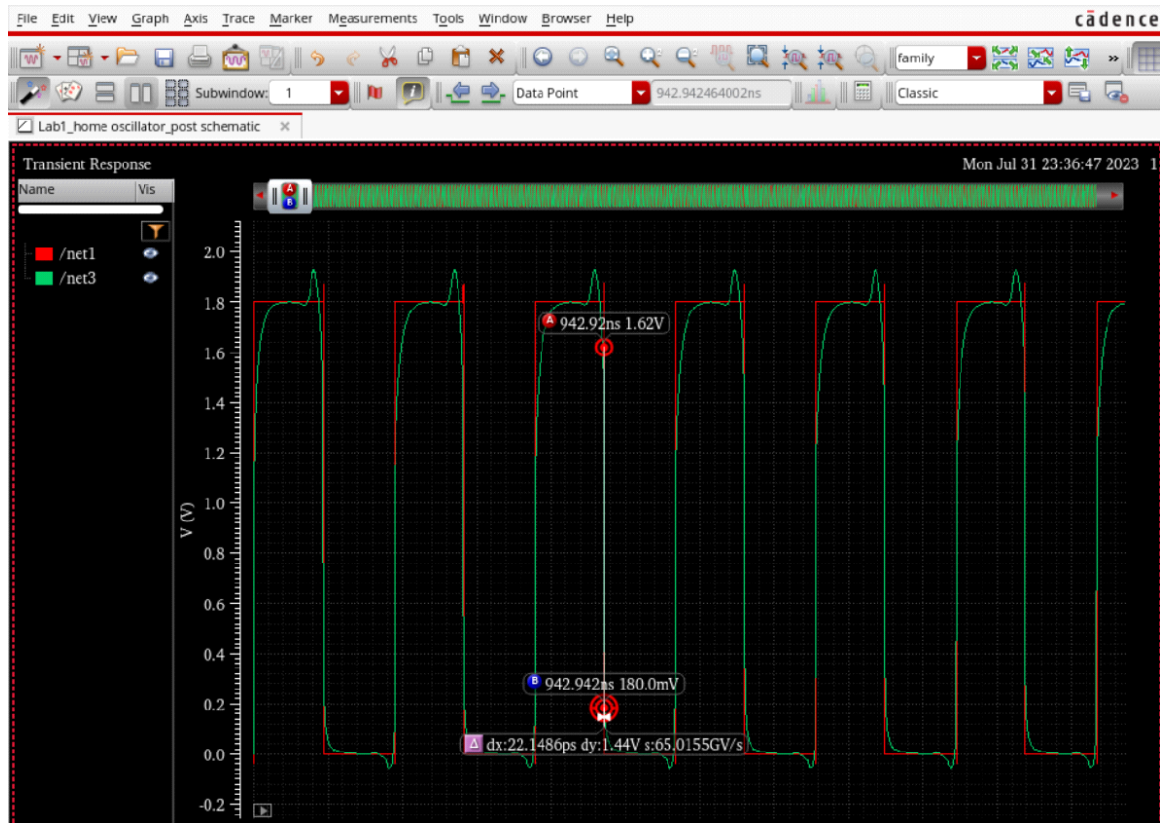
post-sim-1.5V

	Expression	Value	time (s)	dutyCycl...n")) (%)
1	frequency(v"/V...	45.94E3	131.1E-9	51.02

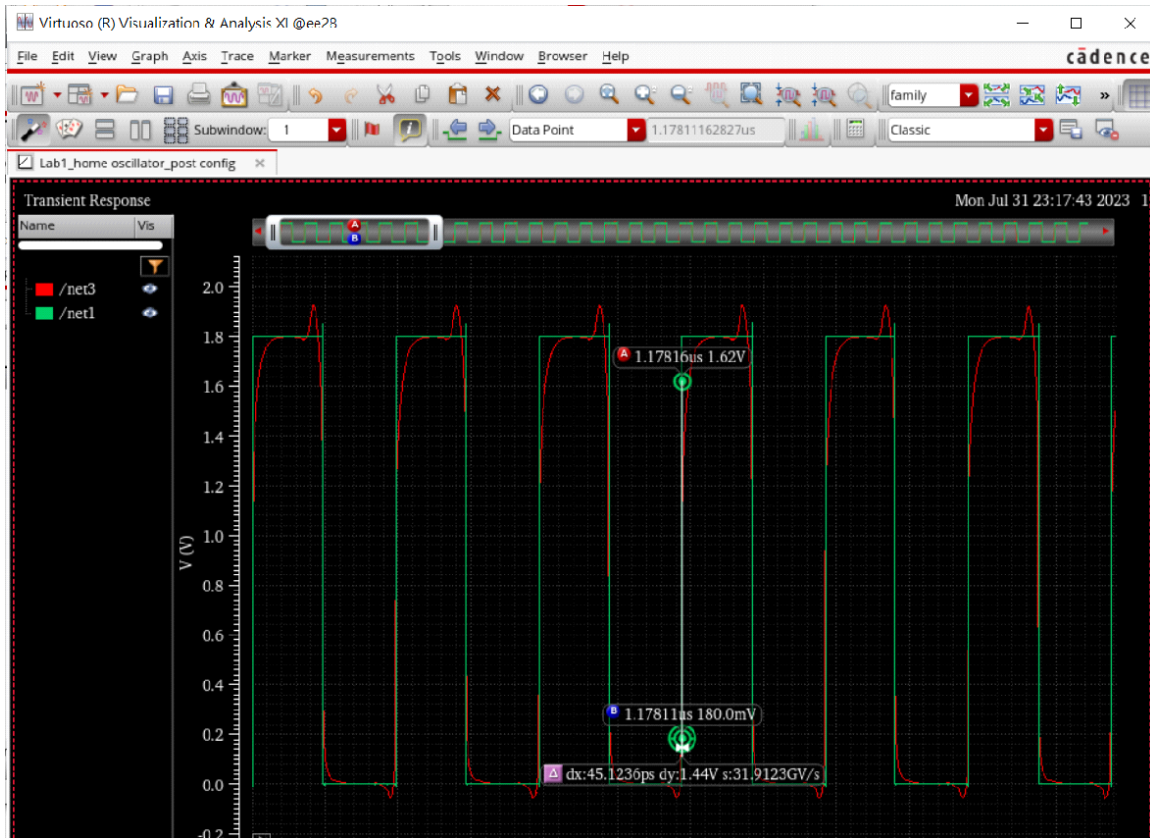
pre_riseTime(1.5V)



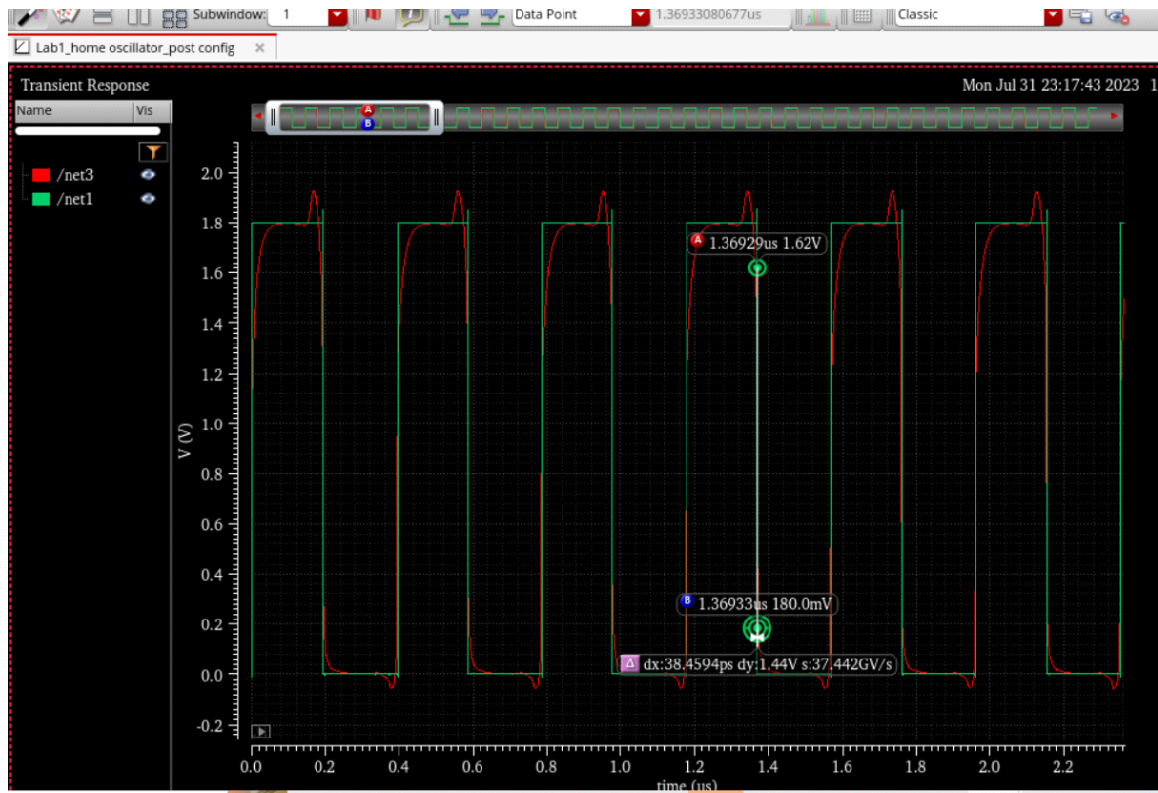
pre_falltime(1.5V)



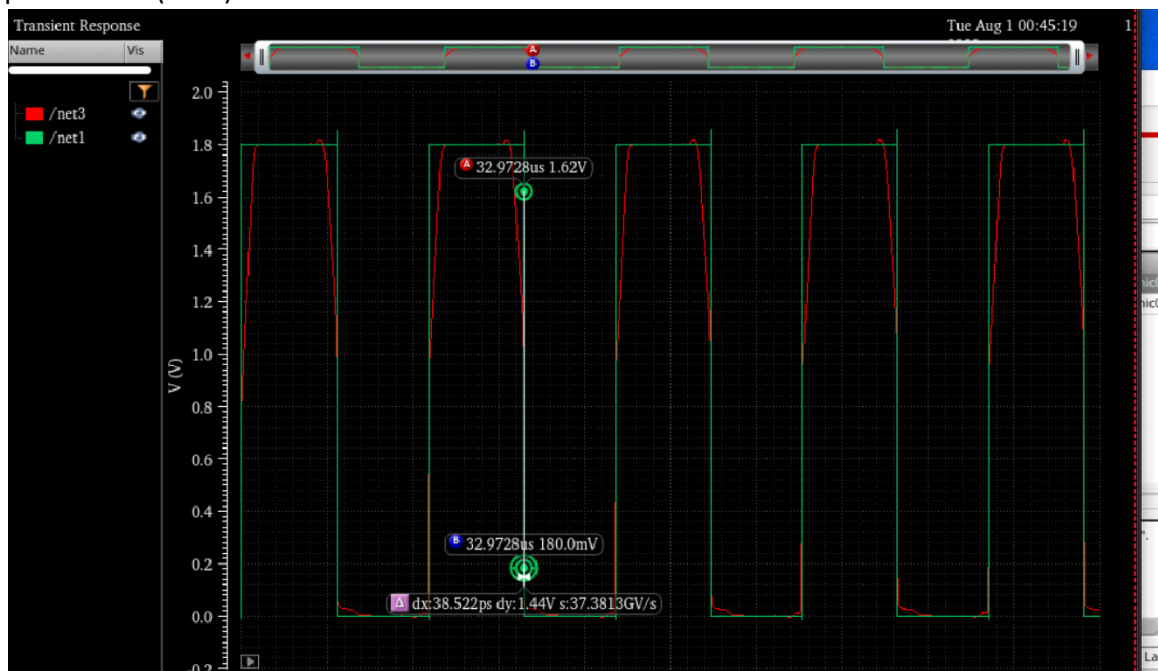
post_risetime(1.5V)



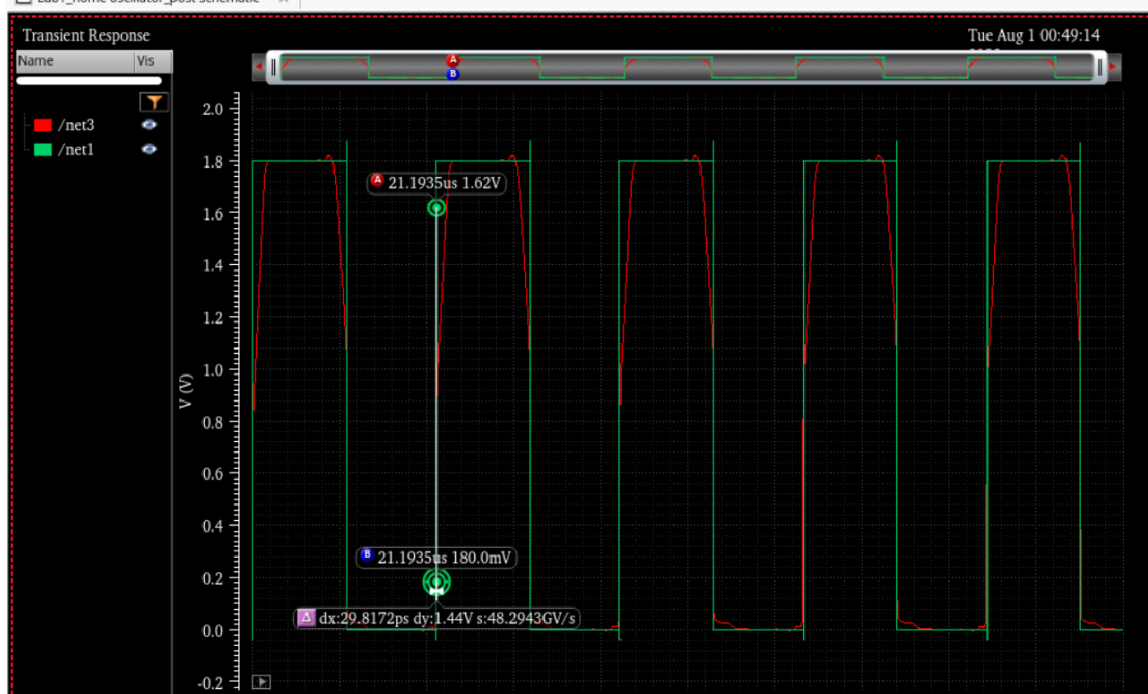
post_falltime(1.5V)



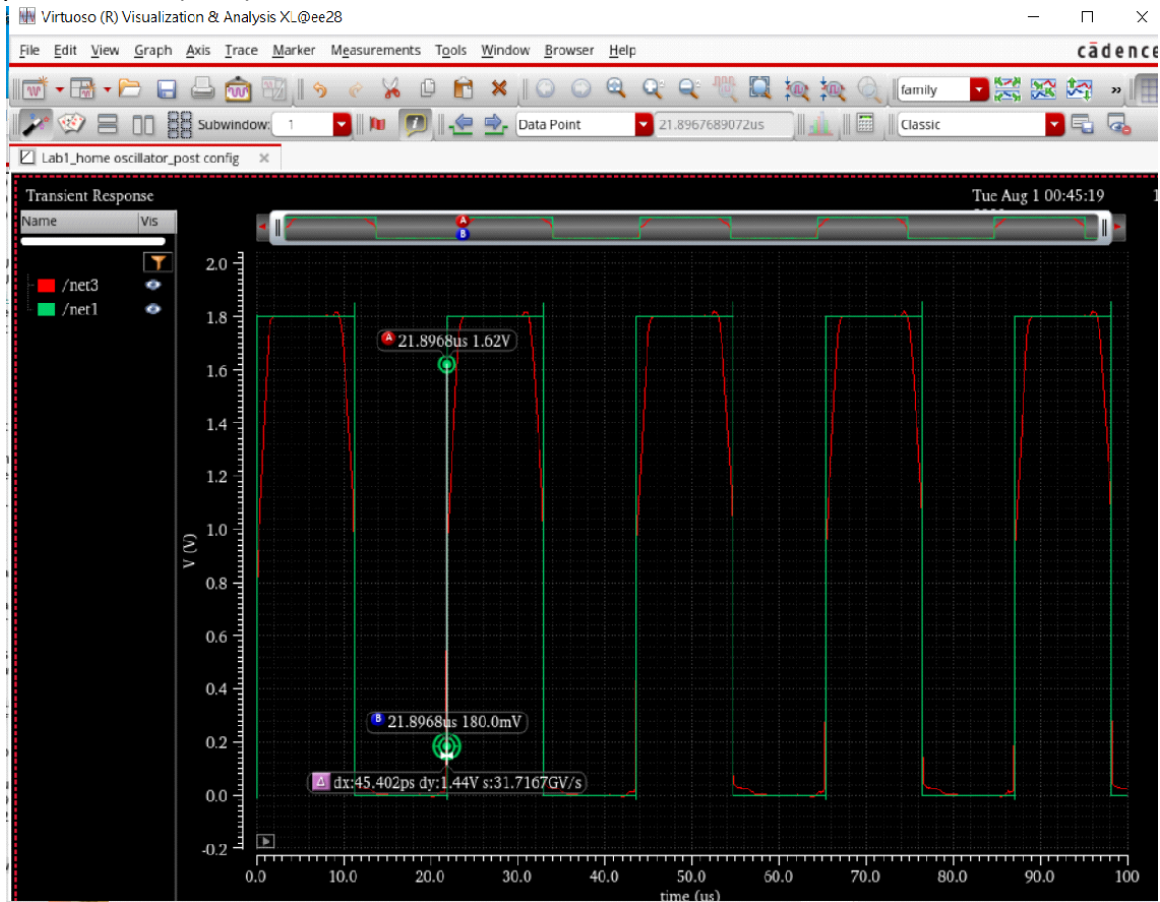
preFallTime(0.4V)



preRiseTime(0.4V)



postRiseTime(0.4V)



postFallTime(0.4V)

