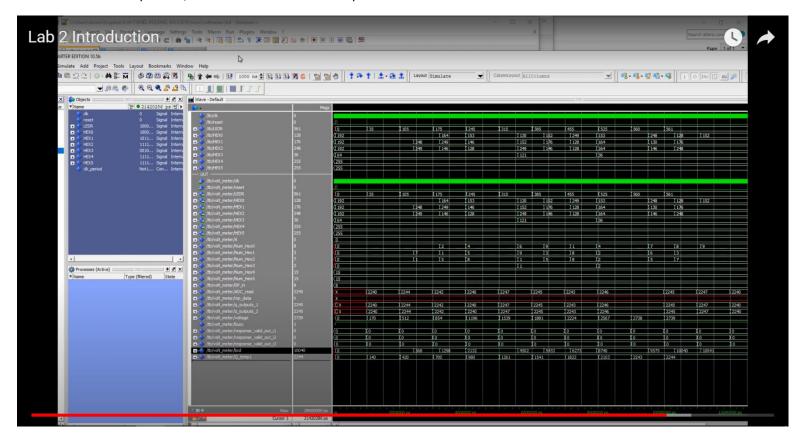
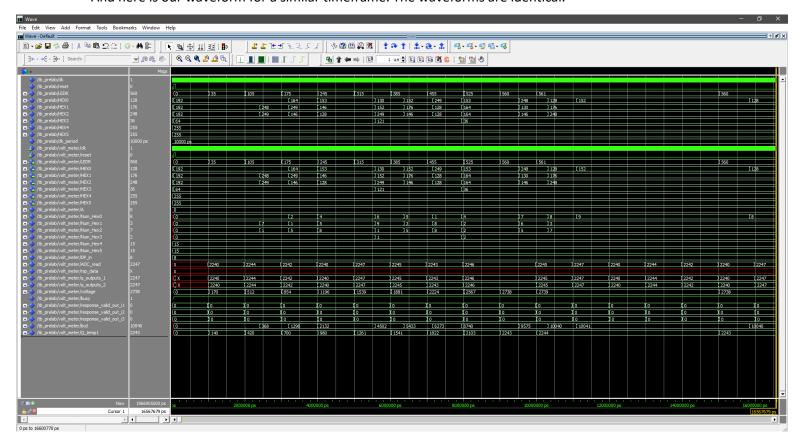
Lab 2 - Prelab

For comparison, here is a screenshot of the prelab waveform taken from Dr. Onen's demonstration...



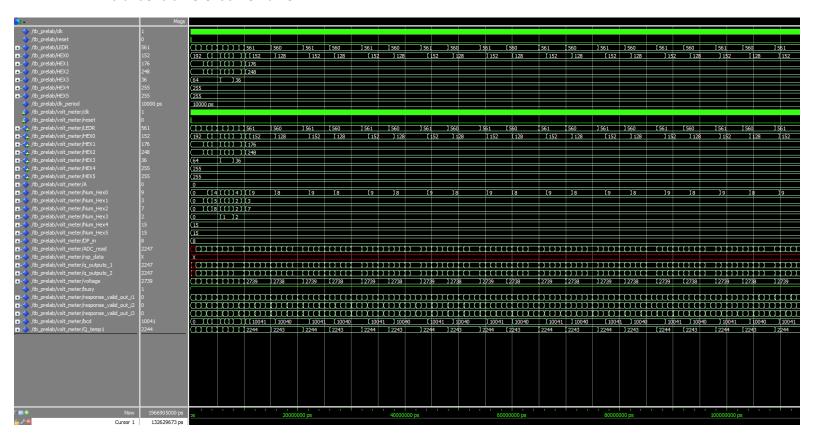
And here is our waveform for a similar timeframe. The waveforms are identical.



Here's a more zoomed-in version...

€ 1 •	Msgs	;														
→ /tb prelab/dk	1												_			
→ /tb_prelab/reset	0	0.0														
# /tb_prelab/LEDR	560	(o	35	105	175	245	315		385	455	525	560		561		
∓-◆ /tb prelab/HEX0	128	() 192			164	153		1130	Ĭ 152	1 249	1153		248	128	152	
T-4 /tb_prelab/HEX1	176	(192		1 248	X 249	146		1152	176	X 128	164		130	176		
→ /tb_prelab/HEX2	248	() 192		(249	1146	128		249	146	1128	164		146	248		
# /tb_prelab/HEX3	36	() 192 () 64						121			X 36					
→ /tb_prelab/HEX4	255	255														
	255	255														
/tb_prelab/dk_period	10000 ps	10000 ps														
/tb_prelab/volt_meter/dk	1															
/tb_prelab/volt_meter/reset	0	J.														
<u>+</u> -4 /tb_prelab/volt_meter/LEDR	560	(o	35	105	175	245	315		385	455	525	560		561		
/tb_prelab/volt_meter/HEX0	128	192			(164	153		130	(152	249	(153		248	128	(152	
#── /tb_prelab/volt_meter/HEX1	176	() 192		(248	(249	146		152	(176	(128	(164		130	(176		
<u>+</u> <u>+</u> <u>+</u> <u>+</u> /tb_prelab/volt_meter/HEX2	248	() 192 () 64		(249	(146	128		249	(146	128	(164		146	248		
<u>→</u> /tb_prelab/volt_meter/HEX3	36	() 64						121			(36					
<u>+</u> <u>-</u>	255	255														
<u>+</u> <u>→</u> /tb_prelab/volt_meter/HEX5	255	255														
<u>→</u> /tb_prelab/volt_meter/A	0	0														
<u>∓</u> → /tb_prelab/volt_meter/Num_Hex0	8	((O			(2	4),6	(9)	(1) 4		7	(8)	(9	
/tb_prelab/volt_meter/Num_Hex1	3	((o		X.7	(1	5		(9	(3	(8), <u>2</u>		(6	(3		
	7	((O		X i	(5	8) 1	(5	8).	χ2		∑5	(7		
/tb_prelab/volt_meter/Num_Hex3	2	((o) 1) 2					
/tb_prelab/volt_meter/Num_Hex4	15	15														
→ /tb_prelab/volt_meter/Num_Hex5	15	15														
<u>■</u> → /tb_prelab/volt_meter/DP_in	8	8														
→ /tb_prelab/volt_meter/ADC_read → /tb_prelab/volt_meter/ADC_read	2247	X	2240	2244	2242	2240	2247		2245	2243	2246			2245	2247	2240
	Х	X														
→ /tb_prelab/volt_meter/q_outputs_1	2247	(Cx	22-10	2244	2242	2240	2247		2245	2243	2246			2245	2247	2240
→ /tb_prelab/volt_meter/q_outputs_2	2247	() X	2240	2244	2242	2240	2247		2245	2243	2246			2245	2247	2240
	2738	-(0	170	512	854	1196	1539		1881	2224	2567	2738		2739	- حساد	وسنوس
/tb_prelab/volt_meter/busy	1	_														
<u>+</u> → /tb_prelab/volt_meter/response_valid_out_i1	0	0	X o	X.o	X O	X.o	Хo		0	X o	Χo	(0		0	XO .	0
	0	0	X 0	X o	<u> </u>	Xo .	X O		X 0	Xo	X O	X o		X O	XO .	XO .
	0	(0	0	XO.	X O	0	X 0		X.O	(0	X o	X o		XO.	Χo	X 0
	10040	(0		(368	(1298	2132		4502		(6273	(8740		9575	10040	(10041	
+	2243	<u>(0</u>	140	420	700	980	1261		1541	1822	2103	2243		2244		

And under a different time frame...



Next, we modified the testbench to trigger reset every 5 μ s. Here are a couple screenshots of this modified design...

