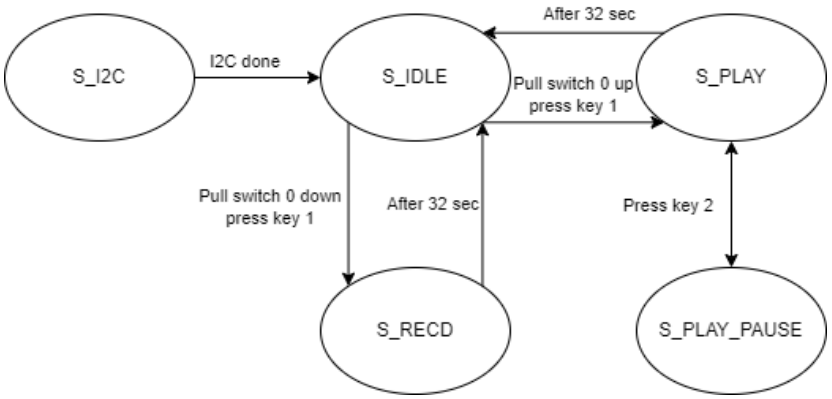
File Scructure

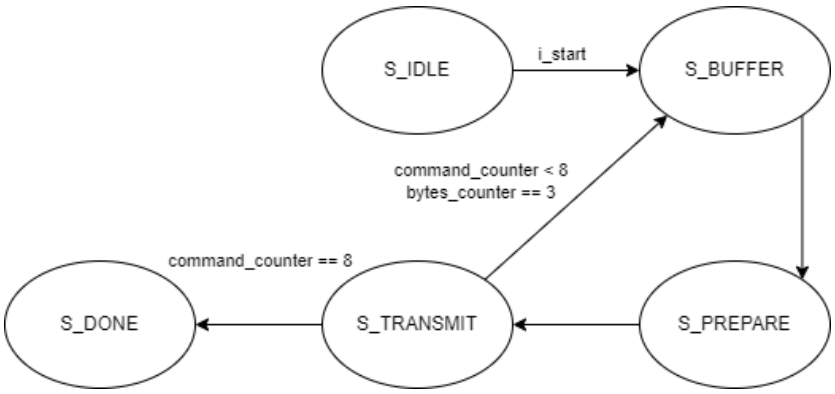
```
team01_lab3
│  Report.pdf
│
└─src
    │  I2C.sv
    │  Player.sv
    │  Recorder.sv
    │  Top.sv
    │
    ├─Altpll_qsys
    │  │  Altpll.bsf
    │  │  Altpll.cmp
    │  │  Altpll.html
    │  │  Altpll.xml
    │  │  Altpll_bb.v
    │  │  Altpll_generation.rpt
    │  │  Altpll_inst.v
    │  │  Altpll_inst.vhd
    │  │
    │  └─synthesis
    │      │  Altpll.debuginfo
    │      │  Altpll.qip
    │      │  Altpll.v
    │      │
    │      └─submodules
    │              altera_reset_controller.sdc
    │              altera_reset_controller.v
    │              altera_reset_synchronizer.v
    │              Altpll_altpll_0.v
    │
    └─DE2_115
            DE2_115.qsf
            DE2_115.sdc
            DE2_115.sv
            DE2_115.sv.bak
            Debounce.sv
            FiveDecoder.sv
            SevenHexDecoder.sv
```

Hardware Scheduling

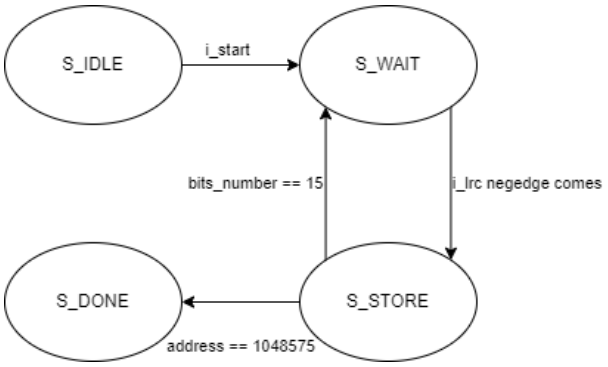
Top FSM:



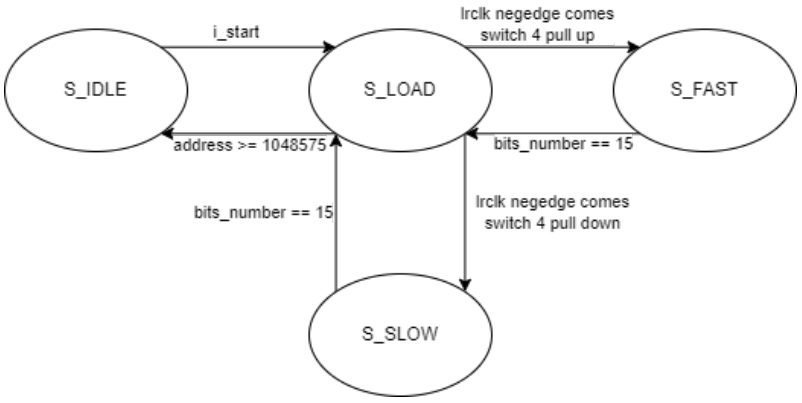
I2C FSM:



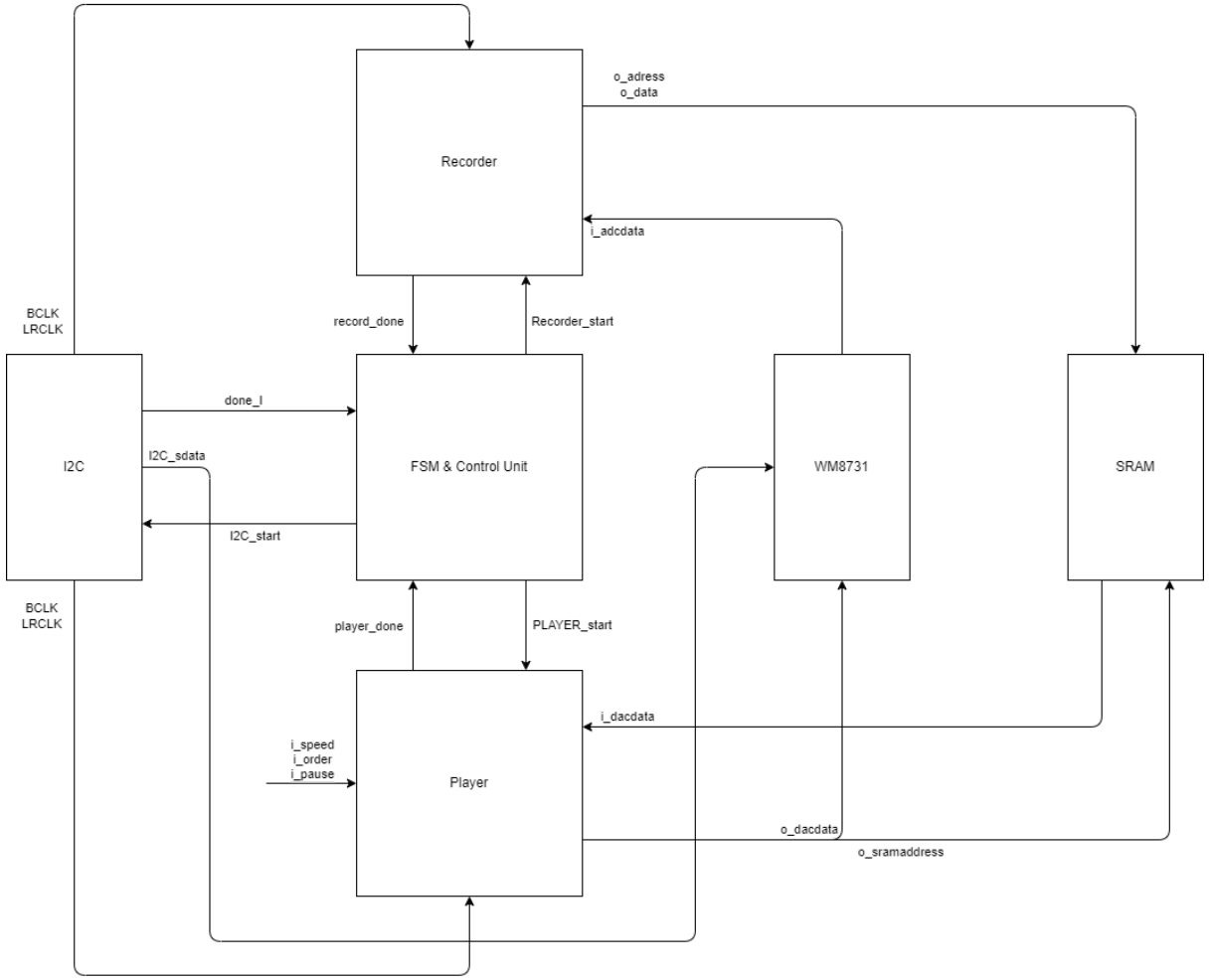
Recorder FSM:



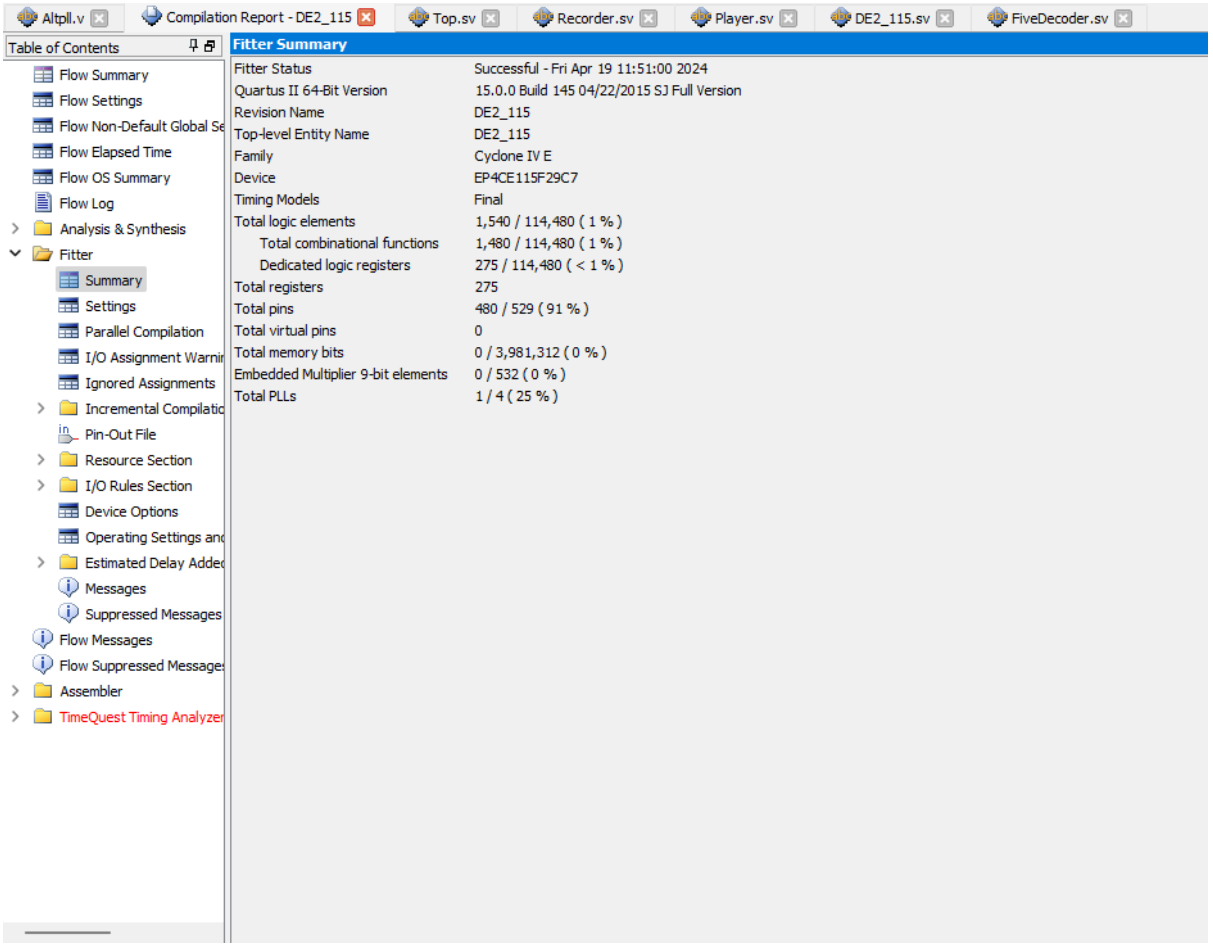
Player FSM:



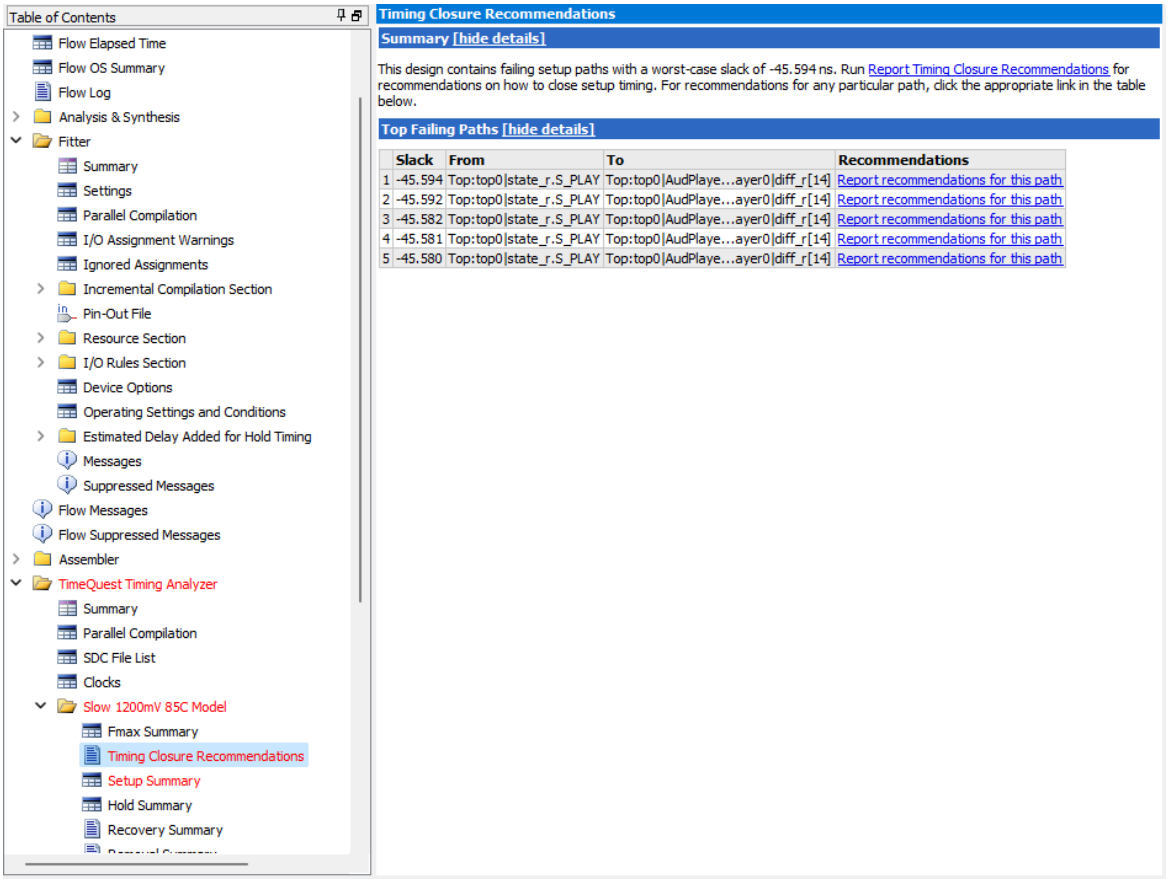
System Architecture

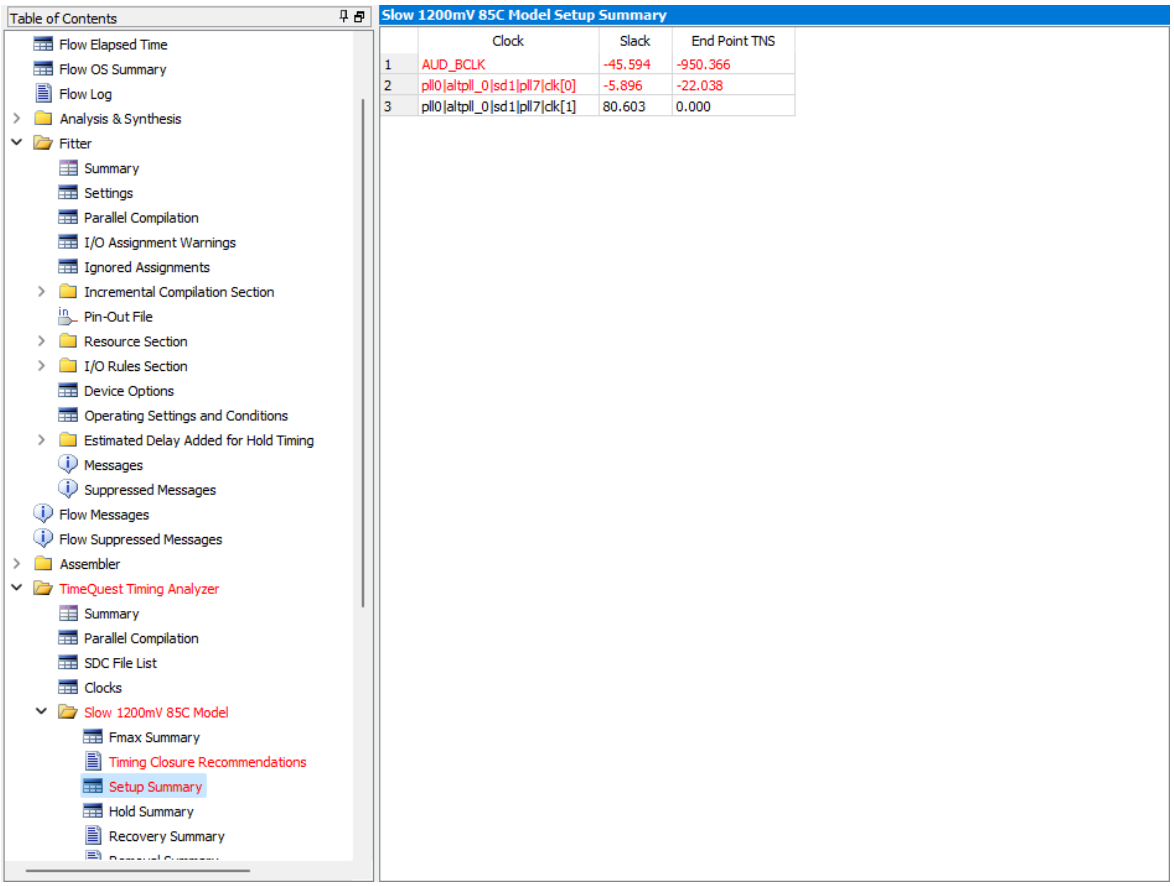


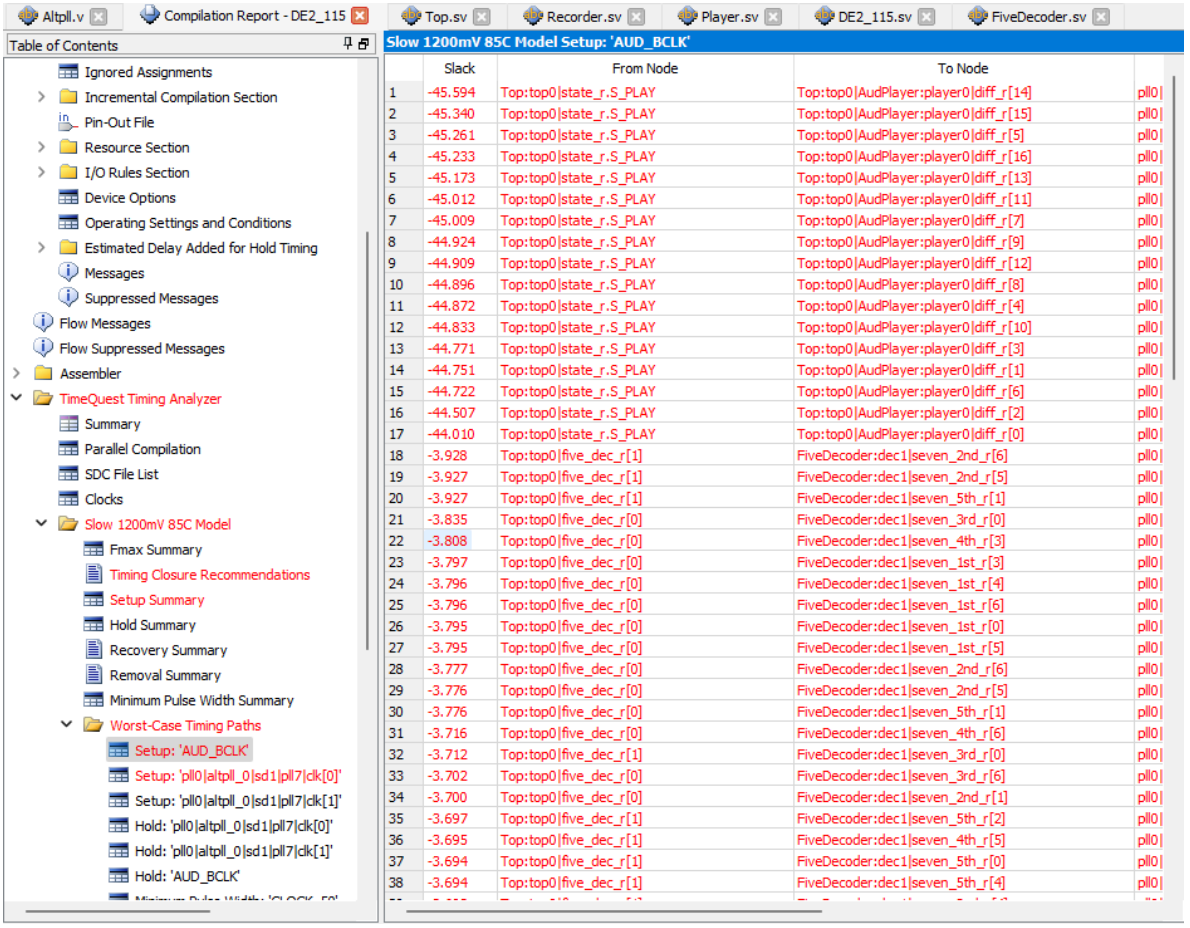
Fitter Summary



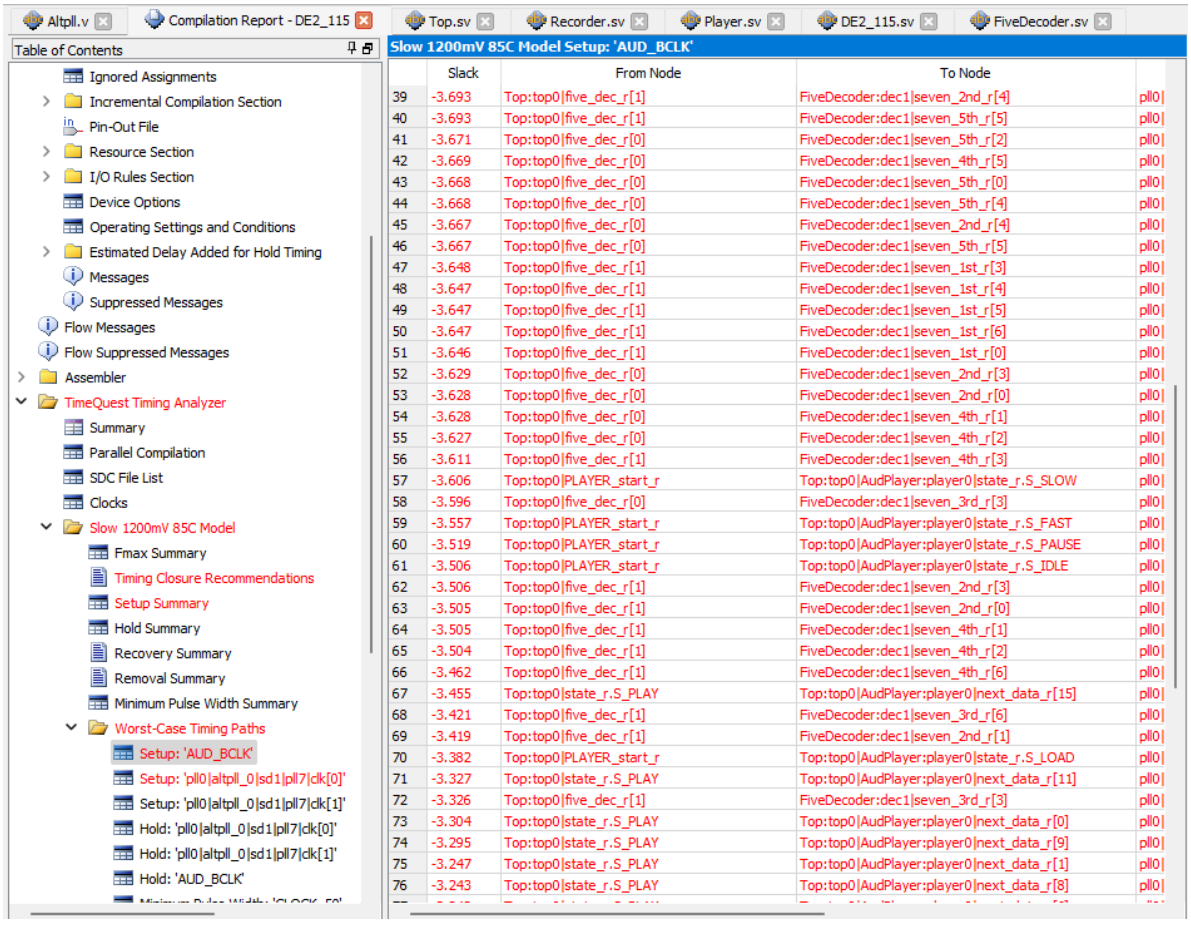
Timing Analyzer



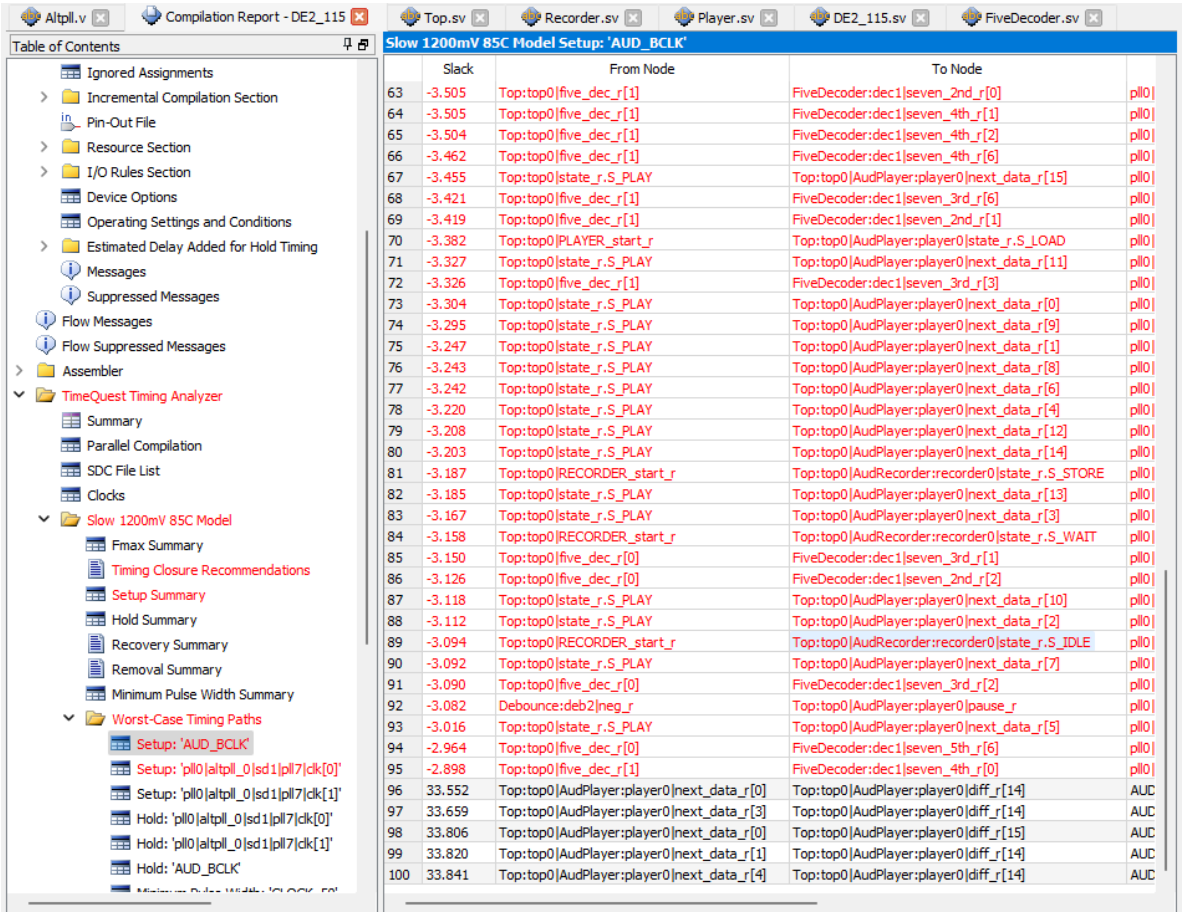




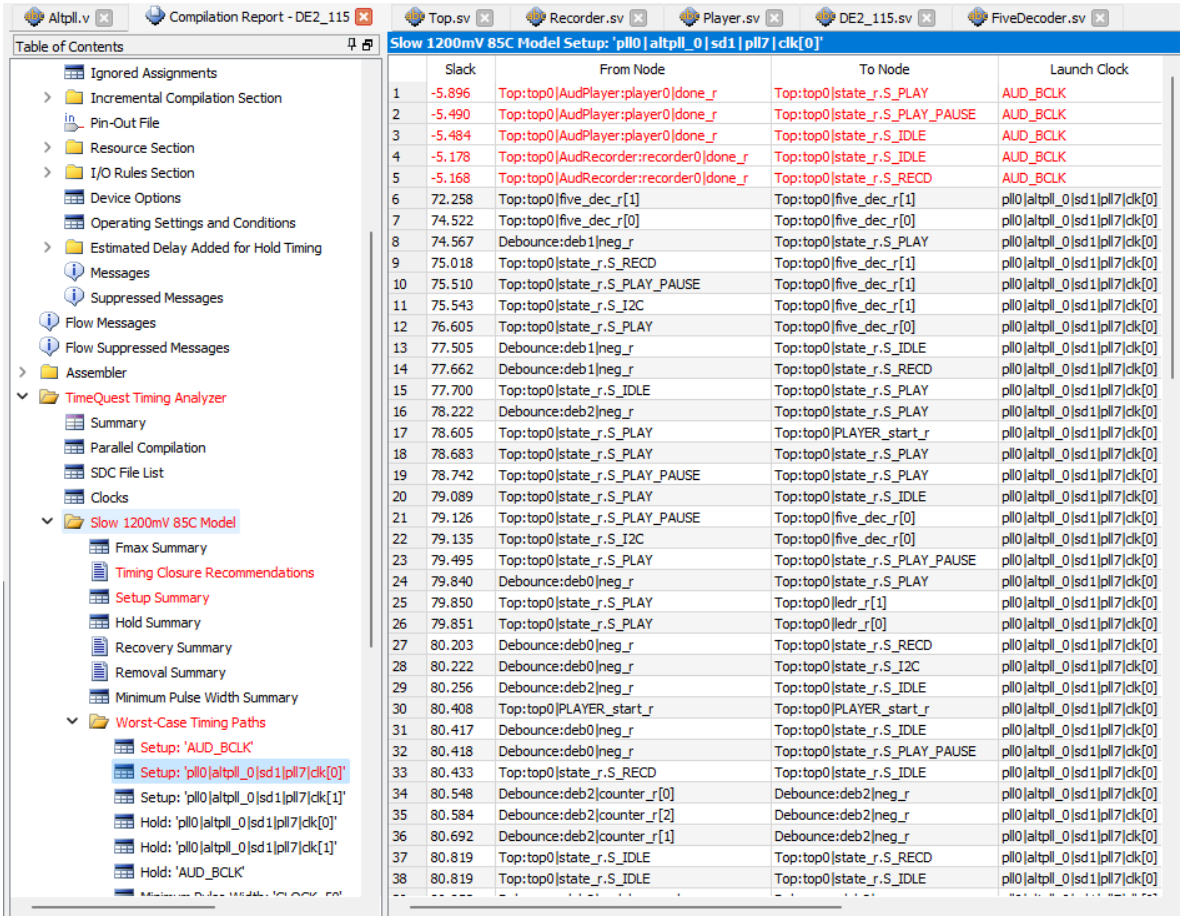
	Slack	From Node	To Node	
1	-45.594	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[14]	pll0|
2	-45.340	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[15]	pll0|
3	-45.261	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[5]	pll0|
4	-45.233	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[16]	pll0|
5	-45.173	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[13]	pll0|
6	-45.012	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[11]	pll0|
7	-45.009	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[7]	pll0|
8	-44.924	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[9]	pll0|
9	-44.909	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[12]	pll0|
10	-44.896	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[8]	pll0|
11	-44.872	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[4]	pll0|
12	-44.833	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[10]	pll0|
13	-44.771	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[3]	pll0|
14	-44.751	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[1]	pll0|
15	-44.722	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[6]	pll0|
16	-44.507	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[2]	pll0|
17	-44.010	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[0]	pll0|
18	-3.928	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[6]	pll0|
19	-3.927	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[5]	pll0|
20	-3.927	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[1]	pll0|
21	-3.835	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[0]	pll0|
22	-3.808	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[3]	pll0|
23	-3.797	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[3]	pll0|
24	-3.796	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[4]	pll0|
25	-3.796	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[6]	pll0|
26	-3.795	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[0]	pll0|
27	-3.795	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[5]	pll0|
28	-3.777	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[6]	pll0|
29	-3.776	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[5]	pll0|
30	-3.776	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[1]	pll0|
31	-3.716	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
32	-3.712	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[0]	pll0|
33	-3.702	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
34	-3.700	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
35	-3.697	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[2]	pll0|
36	-3.695	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[5]	pll0|
37	-3.694	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[0]	pll0|
38	-3.694	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[4]	pll0|



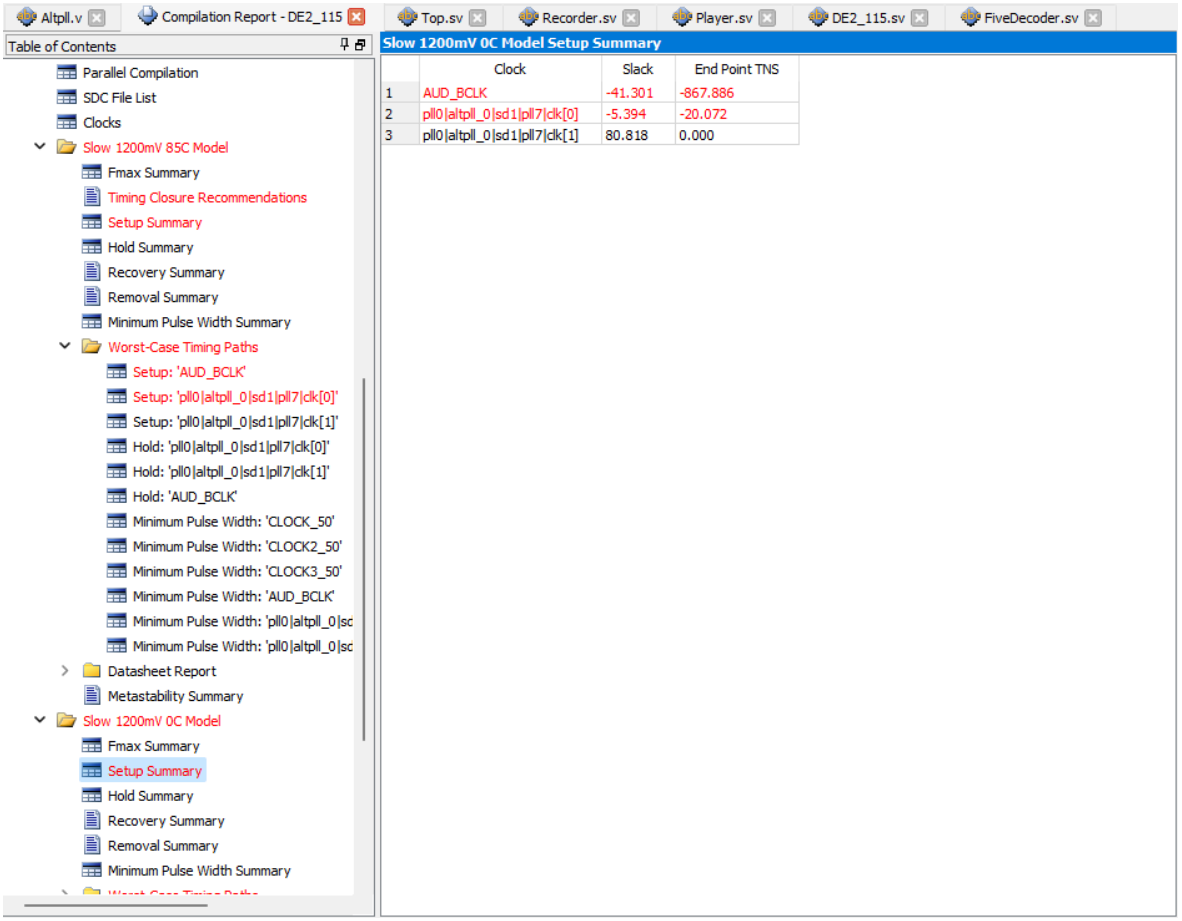
	Slack	From Node	To Node	
39	-3.693	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
40	-3.693	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[5]	pll0|
41	-3.671	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[2]	pll0|
42	-3.669	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[5]	pll0|
43	-3.668	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[0]	pll0|
44	-3.668	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[4]	pll0|
45	-3.667	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
46	-3.667	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[5]	pll0|
47	-3.648	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[3]	pll0|
48	-3.647	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[4]	pll0|
49	-3.647	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[5]	pll0|
50	-3.647	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[6]	pll0|
51	-3.646	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[0]	pll0|
52	-3.629	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[3]	pll0|
53	-3.628	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[0]	pll0|
54	-3.628	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[1]	pll0|
55	-3.627	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
56	-3.611	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[3]	pll0|
57	-3.606	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_SLOW	pll0|
58	-3.596	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
59	-3.557	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_FAST	pll0|
60	-3.519	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_PAUSE	pll0|
61	-3.506	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_IDLE	pll0|
62	-3.506	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[3]	pll0|
63	-3.505	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[0]	pll0|
64	-3.505	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[1]	pll0|
65	-3.504	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
66	-3.462	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
67	-3.455	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[15]	pll0|
68	-3.421	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
69	-3.419	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
70	-3.382	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_LOAD	pll0|
71	-3.327	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[11]	pll0|
72	-3.326	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
73	-3.304	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[0]	pll0|
74	-3.295	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[9]	pll0|
75	-3.247	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[1]	pll0|
76	-3.243	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[8]	pll0|



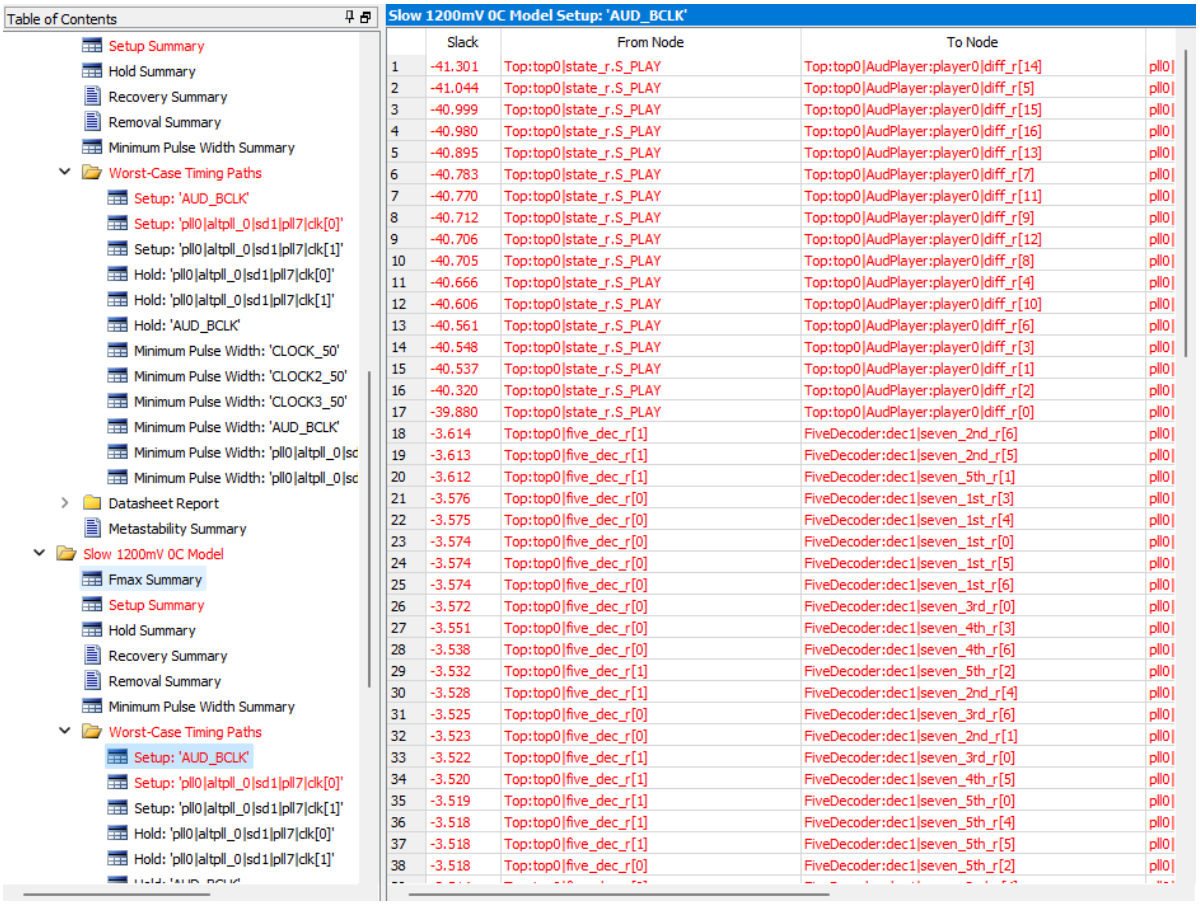
	Slack	From Node	To Node	
63	-3.505	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[0]	pll0|
64	-3.505	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[1]	pll0|
65	-3.504	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
66	-3.462	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
67	-3.455	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[15]	pll0|
68	-3.421	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
69	-3.419	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
70	-3.382	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_LOAD	pll0|
71	-3.327	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[11]	pll0|
72	-3.326	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
73	-3.304	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[0]	pll0|
74	-3.295	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[9]	pll0|
75	-3.247	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[1]	pll0|
76	-3.243	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[8]	pll0|
77	-3.242	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[6]	pll0|
78	-3.220	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[4]	pll0|
79	-3.208	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[12]	pll0|
80	-3.203	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[14]	pll0|
81	-3.187	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_STORE	pll0|
82	-3.185	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[13]	pll0|
83	-3.167	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[3]	pll0|
84	-3.158	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_WAIT	pll0|
85	-3.150	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[1]	pll0|
86	-3.126	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[2]	pll0|
87	-3.118	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[10]	pll0|
88	-3.112	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[2]	pll0|
89	-3.094	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_IDLE	pll0|
90	-3.092	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[7]	pll0|
91	-3.090	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[2]	pll0|
92	-3.082	Debounce:deb2|neg_r	Top:top0|AudPlayer:player0|pause_r	pll0|
93	-3.016	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[5]	pll0|
94	-2.964	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[6]	pll0|
95	-2.898	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[0]	pll0|
96	33.552	Top:top0|AudPlayer:player0|next_data_r[0]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
97	33.659	Top:top0|AudPlayer:player0|next_data_r[3]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
98	33.806	Top:top0|AudPlayer:player0|next_data_r[0]	Top:top0|AudPlayer:player0|diff_r[15]	AUD
99	33.820	Top:top0|AudPlayer:player0|next_data_r[1]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
100	33.841	Top:top0|AudPlayer:player0|next_data_r[4]	Top:top0|AudPlayer:player0|diff_r[14]	AUD



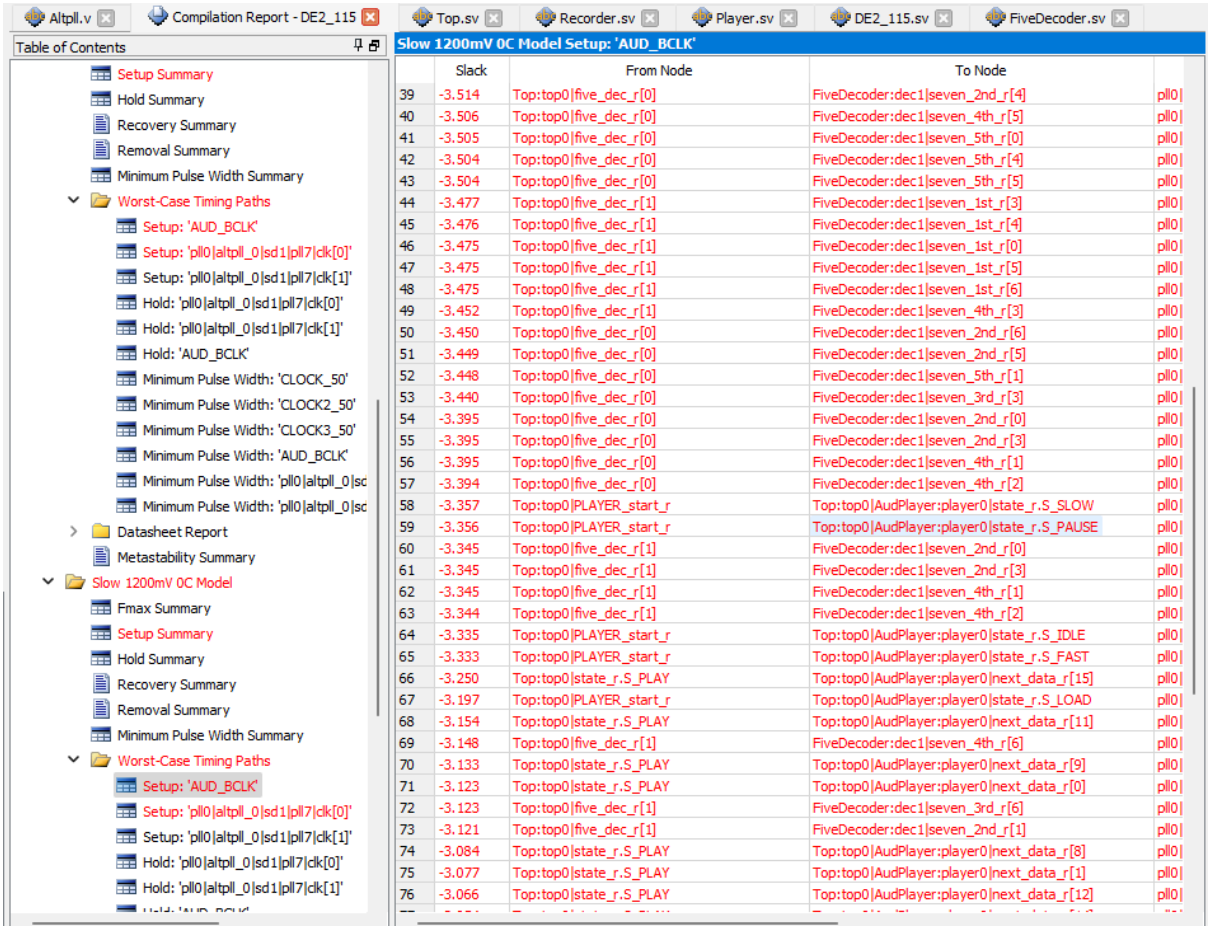
	Slack	From Node	To Node	Launch Clock
1	-5.896	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY	AUD_BCLK
2	-5.490	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY_PAUSE	AUD_BCLK
3	-5.484	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
4	-5.178	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
5	-5.168	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_RECD	AUD_BCLK
6	72.258	Top:top0|five_dec_r[1]	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
7	74.522	Top:top0|five_dec_r[0]	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
8	74.567	Debounce:deb1|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
9	75.018	Top:top0|state_r.S_RECD	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
10	75.510	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
11	75.543	Top:top0|state_r.S_I2C	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
12	76.605	Top:top0|state_r.S_PLAY	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
13	77.505	Debounce:deb1|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
14	77.662	Debounce:deb1|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
15	77.700	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
16	78.222	Debounce:deb2|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
17	78.605	Top:top0|state_r.S_PLAY	Top:top0|PLAYER_start_r	pll0|altpll_0|sd1|pll7|clk[0]
18	78.683	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
19	78.742	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
20	79.089	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
21	79.126	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
22	79.135	Top:top0|state_r.S_I2C	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
23	79.495	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
24	79.840	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
25	79.850	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
26	79.851	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
27	80.203	Debounce:deb0|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
28	80.222	Debounce:deb0|neg_r	Top:top0|state_r.S_I2C	pll0|altpll_0|sd1|pll7|clk[0]
29	80.256	Debounce:deb2|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
30	80.408	Top:top0|PLAYER_start_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
31	80.417	Debounce:deb0|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
32	80.418	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
33	80.433	Top:top0|state_r.S_RECD	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
34	80.548	Debounce:deb2|counter_r[0]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
35	80.584	Debounce:deb2|counter_r[2]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
36	80.692	Debounce:deb2|counter_r[1]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
37	80.819	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
38	80.819	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]



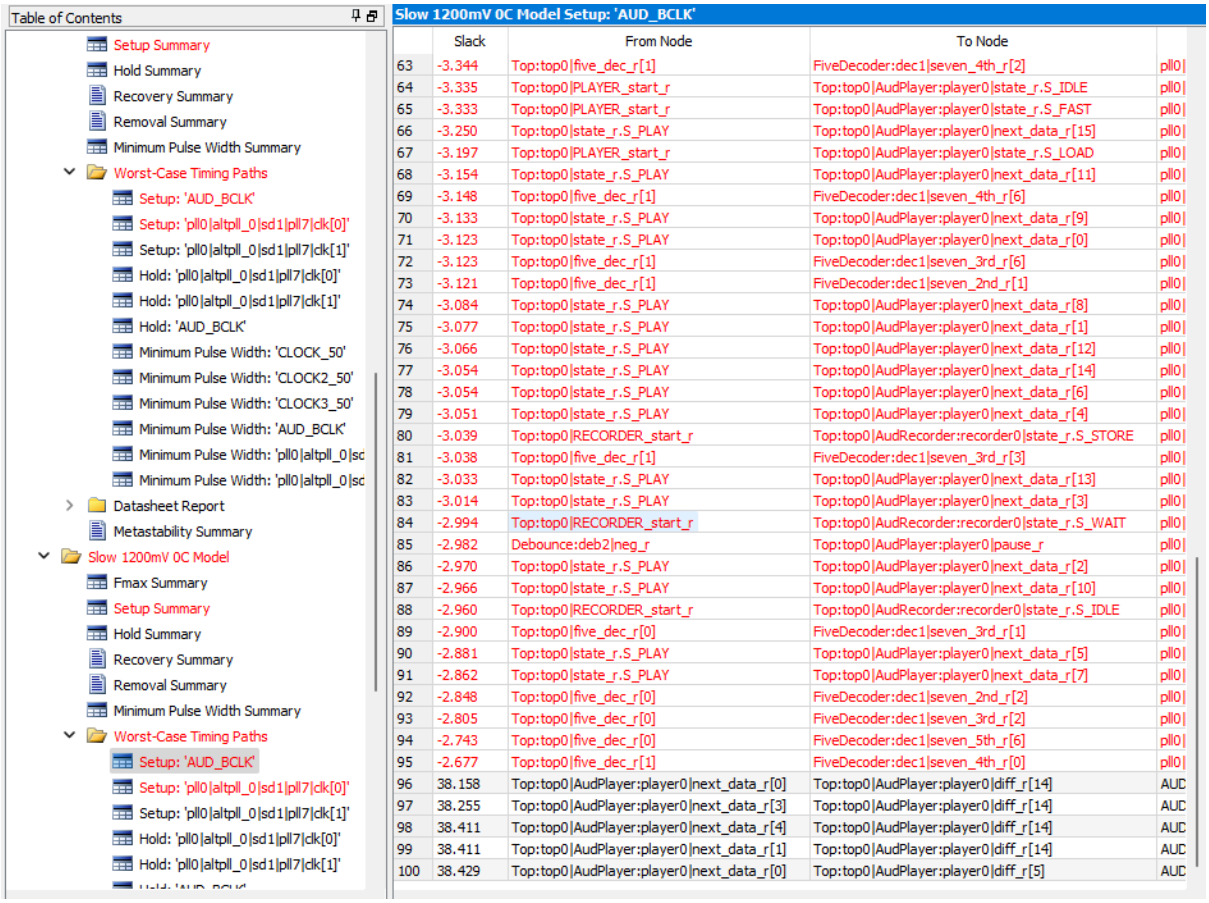
	Clock	Slack	End Point TNS
1	AUD_BCLK	-41.301	-867.886
2	pll0|altpll_0|sd1|pll7|clk[0]	-5.394	-20.072
3	pll0|altpll_0|sd1|pll7|clk[1]	80.818	0.000



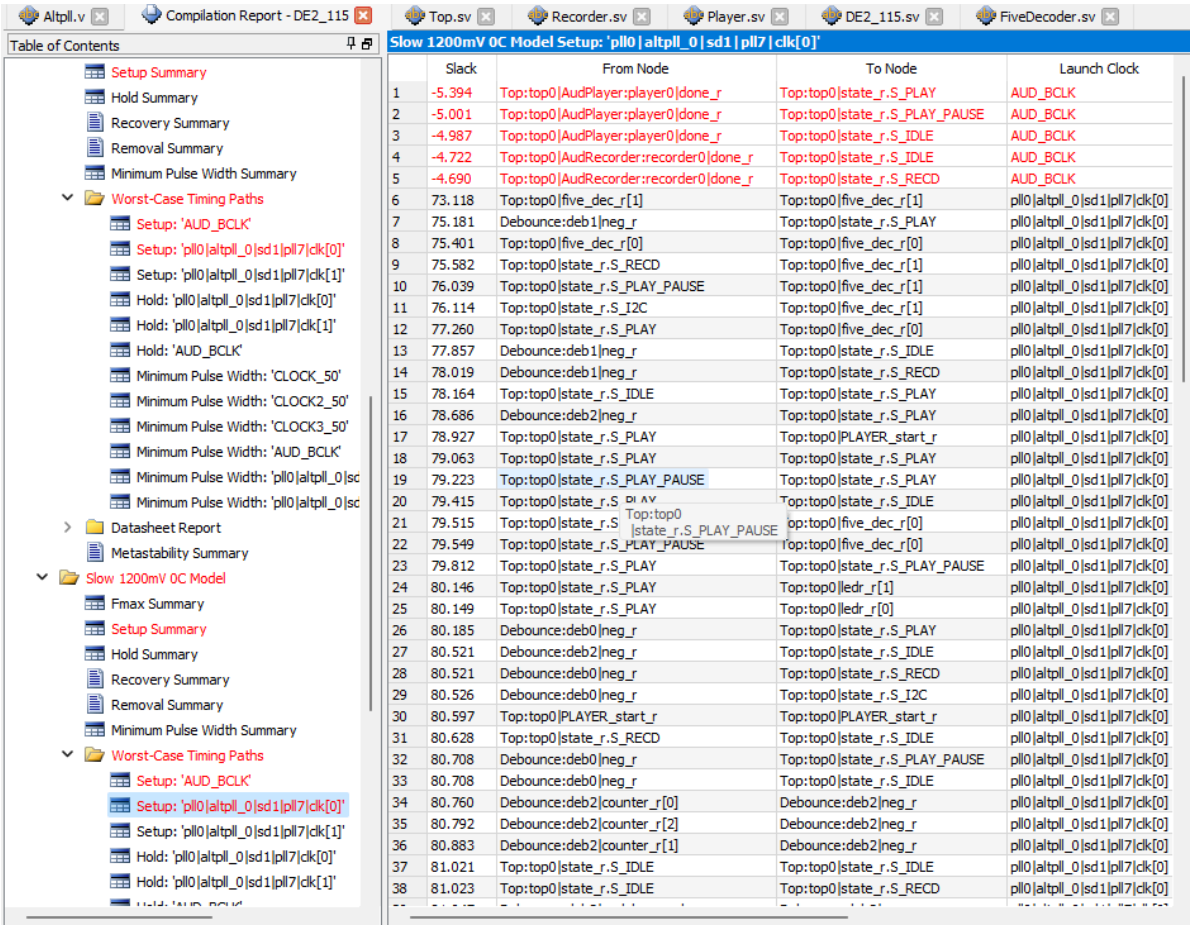
	Slack	From Node	To Node	
1	-41.301	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[14]	pll0|
2	-41.044	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[5]	pll0|
3	-40.999	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[15]	pll0|
4	-40.980	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[16]	pll0|
5	-40.895	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[13]	pll0|
6	-40.783	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[7]	pll0|
7	-40.770	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[11]	pll0|
8	-40.712	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[9]	pll0|
9	-40.706	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[12]	pll0|
10	-40.705	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[8]	pll0|
11	-40.666	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[4]	pll0|
12	-40.606	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[10]	pll0|
13	-40.561	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[6]	pll0|
14	-40.548	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[3]	pll0|
15	-40.537	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[1]	pll0|
16	-40.320	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[2]	pll0|
17	-39.880	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[0]	pll0|
18	-3.614	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[6]	pll0|
19	-3.613	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[5]	pll0|
20	-3.612	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[1]	pll0|
21	-3.576	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[3]	pll0|
22	-3.575	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[4]	pll0|
23	-3.574	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[0]	pll0|
24	-3.574	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[5]	pll0|
25	-3.574	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[6]	pll0|
26	-3.572	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[0]	pll0|
27	-3.551	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[3]	pll0|
28	-3.538	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
29	-3.532	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[2]	pll0|
30	-3.528	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
31	-3.525	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
32	-3.523	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
33	-3.522	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[0]	pll0|
34	-3.520	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[5]	pll0|
35	-3.519	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[0]	pll0|
36	-3.518	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[4]	pll0|
37	-3.518	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[5]	pll0|
38	-3.518	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[2]	pll0|



	Slack	From Node	To Node	
39	-3.514	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
40	-3.506	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[5]	pll0|
41	-3.505	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[0]	pll0|
42	-3.504	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[4]	pll0|
43	-3.504	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[5]	pll0|
44	-3.477	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[3]	pll0|
45	-3.476	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[4]	pll0|
46	-3.475	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[0]	pll0|
47	-3.475	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[5]	pll0|
48	-3.475	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_1st_r[6]	pll0|
49	-3.452	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[3]	pll0|
50	-3.450	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[6]	pll0|
51	-3.449	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[5]	pll0|
52	-3.448	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[1]	pll0|
53	-3.440	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
54	-3.395	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[0]	pll0|
55	-3.395	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[3]	pll0|
56	-3.395	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[1]	pll0|
57	-3.394	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
58	-3.357	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_SLOW	pll0|
59	-3.356	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_PAUSE	pll0|
60	-3.345	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[0]	pll0|
61	-3.345	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[3]	pll0|
62	-3.345	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[1]	pll0|
63	-3.344	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
64	-3.335	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_IDLE	pll0|
65	-3.333	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_FAST	pll0|
66	-3.250	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[15]	pll0|
67	-3.197	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_LOAD	pll0|
68	-3.154	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[11]	pll0|
69	-3.148	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
70	-3.133	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[9]	pll0|
71	-3.123	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[0]	pll0|
72	-3.123	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
73	-3.121	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
74	-3.084	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[8]	pll0|
75	-3.077	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[1]	pll0|
76	-3.066	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[12]	pll0|

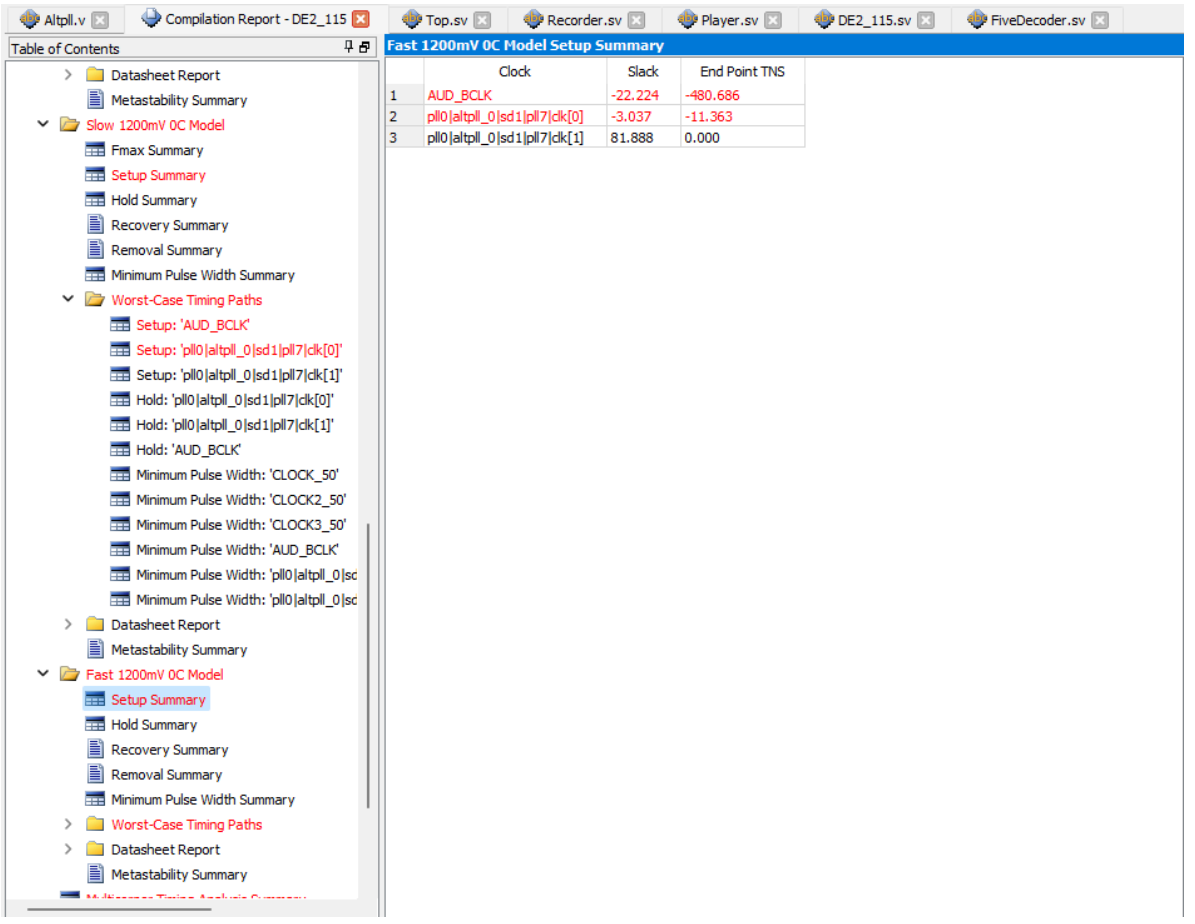


	Slack	From Node	To Node	
63	-3.344	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[2]	pll0|
64	-3.335	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_IDLE	pll0|
65	-3.333	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_FAST	pll0|
66	-3.250	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[15]	pll0|
67	-3.197	Top:top0|PLAYER_start_r	Top:top0|AudPlayer:player0|state_r.S_LOAD	pll0|
68	-3.154	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[11]	pll0|
69	-3.148	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
70	-3.133	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[9]	pll0|
71	-3.123	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[0]	pll0|
72	-3.123	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
73	-3.121	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
74	-3.084	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[8]	pll0|
75	-3.077	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[1]	pll0|
76	-3.066	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[12]	pll0|
77	-3.054	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[14]	pll0|
78	-3.054	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[6]	pll0|
79	-3.051	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[4]	pll0|
80	-3.039	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_STORE	pll0|
81	-3.038	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
82	-3.033	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[13]	pll0|
83	-3.014	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[3]	pll0|
84	-2.994	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_WAIT	pll0|
85	-2.982	Debounce:deb2|neg_r	Top:top0|AudPlayer:player0|pause_r	pll0|
86	-2.970	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[2]	pll0|
87	-2.966	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[10]	pll0|
88	-2.960	Top:top0|RECORDER_start_r	Top:top0|AudRecorder:recorder0|state_r.S_IDLE	pll0|
89	-2.900	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[1]	pll0|
90	-2.881	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[5]	pll0|
91	-2.862	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|next_data_r[7]	pll0|
92	-2.848	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[2]	pll0|
93	-2.805	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[2]	pll0|
94	-2.743	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[6]	pll0|
95	-2.677	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[0]	pll0|
96	38.158	Top:top0|AudPlayer:player0|next_data_r[0]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
97	38.255	Top:top0|AudPlayer:player0|next_data_r[3]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
98	38.411	Top:top0|AudPlayer:player0|next_data_r[4]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
99	38.411	Top:top0|AudPlayer:player0|next_data_r[1]	Top:top0|AudPlayer:player0|diff_r[14]	AUD
100	38.429	Top:top0|AudPlayer:player0|next_data_r[0]	Top:top0|AudPlayer:player0|diff_r[5]	AUD



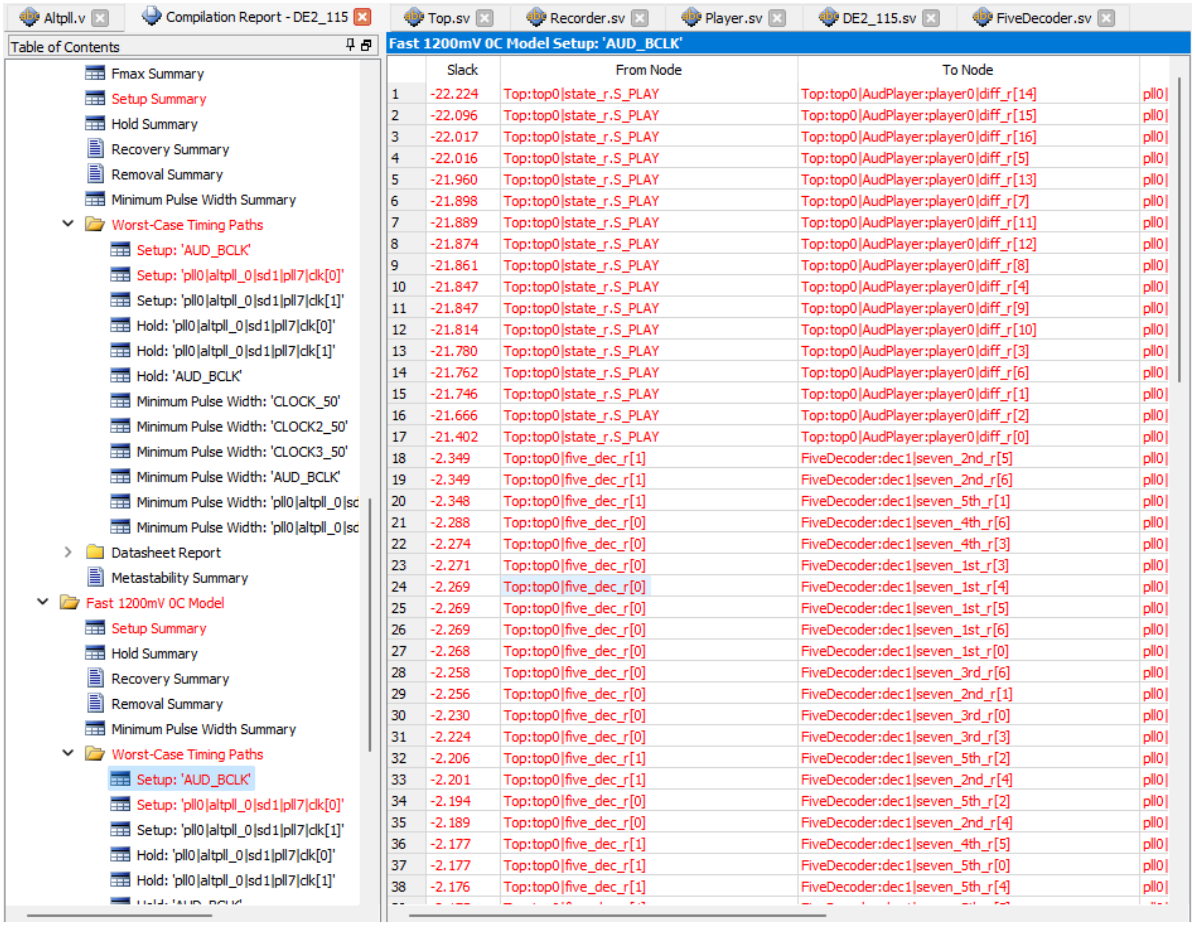
Slow 1200mV 0C Model Setup: 'pll0|altpll_0|sd1|pll7|clk[0]'

	Slack	From Node	To Node	Launch Clock
1	-5.394	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY	AUD_BCLK
2	-5.001	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY_PAUSE	AUD_BCLK
3	-4.987	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
4	-4.722	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
5	-4.690	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_RECD	AUD_BCLK
6	73.118	Top:top0|five_dec_r[1]	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
7	75.181	Debounce:deb1|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
8	75.401	Top:top0|five_dec_r[0]	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
9	75.582	Top:top0|state_r.S_RECD	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
10	76.039	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
11	76.114	Top:top0|state_r.S_I2C	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
12	77.260	Top:top0|state_r.S_PLAY	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
13	77.857	Debounce:deb1|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
14	78.019	Debounce:deb1|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
15	78.164	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
16	78.686	Debounce:deb2|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
17	78.927	Top:top0|state_r.S_PLAY	Top:top0|PLAYER_start_r	pll0|altpll_0|sd1|pll7|clk[0]
18	79.063	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
19	79.223	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
20	79.415	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
21	79.515	Top:top0|state_r.S	op:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
22	79.549	Top:top0|state_r.S_PLAY_PAUSE	op:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
23	79.812	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
24	80.146	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
25	80.149	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
26	80.185	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
27	80.521	Debounce:deb2|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
28	80.521	Debounce:deb0|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
29	80.526	Debounce:deb0|neg_r	Top:top0|state_r.S_I2C	pll0|altpll_0|sd1|pll7|clk[0]
30	80.597	Top:top0|PLAYER_start_r	Top:top0|PLAYER_start_r	pll0|altpll_0|sd1|pll7|clk[0]
31	80.628	Top:top0|state_r.S_RECD	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
32	80.708	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
33	80.708	Debounce:deb0|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
34	80.760	Debounce:deb2|counter_r[0]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
35	80.792	Debounce:deb2|counter_r[2]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
36	80.883	Debounce:deb2|counter_r[1]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
37	81.021	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
38	81.023	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]

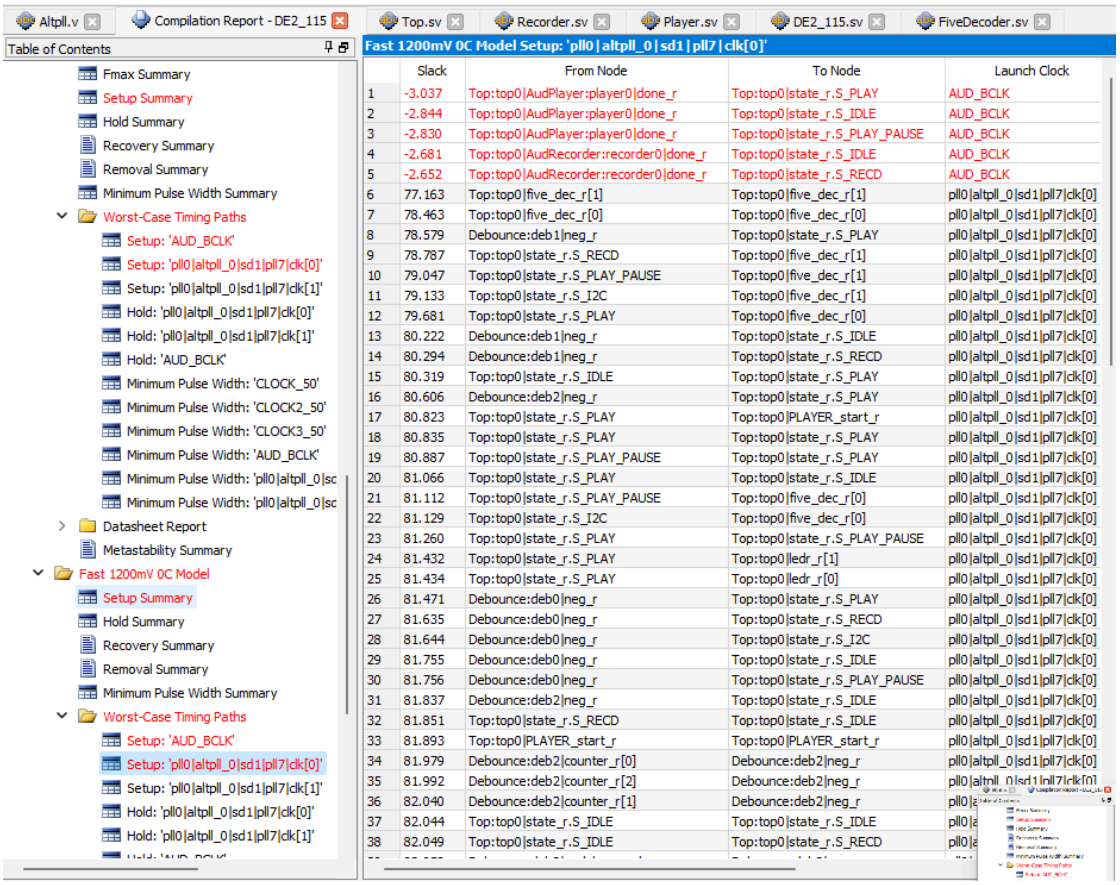


Fast 1200mV 0C Model Setup Summary

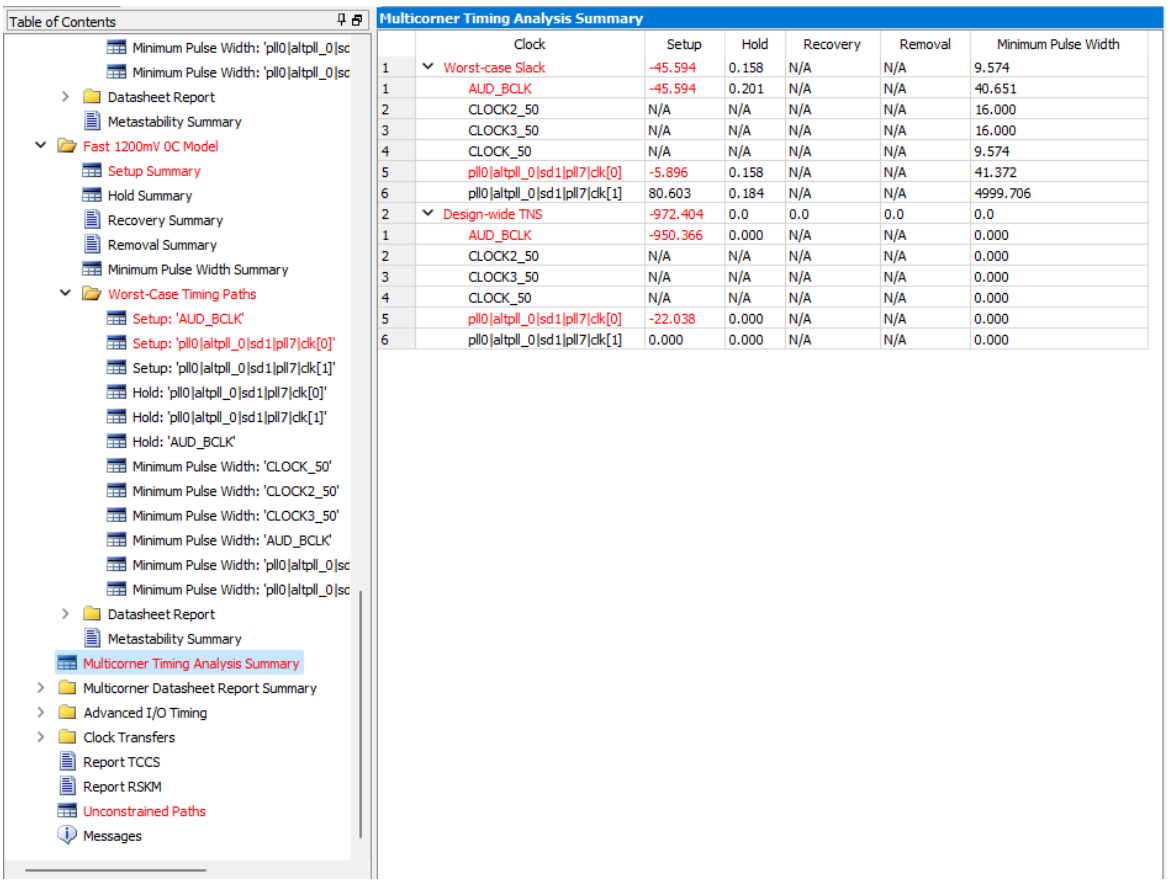
	Clock	Slack	End Point TNS
1	AUD_BCLK	-22.224	-480.686
2	pll0|altpll_0|sd1|pll7|clk[0]	-3.037	-11.363
3	pll0|altpll_0|sd1|pll7|clk[1]	81.888	0.000



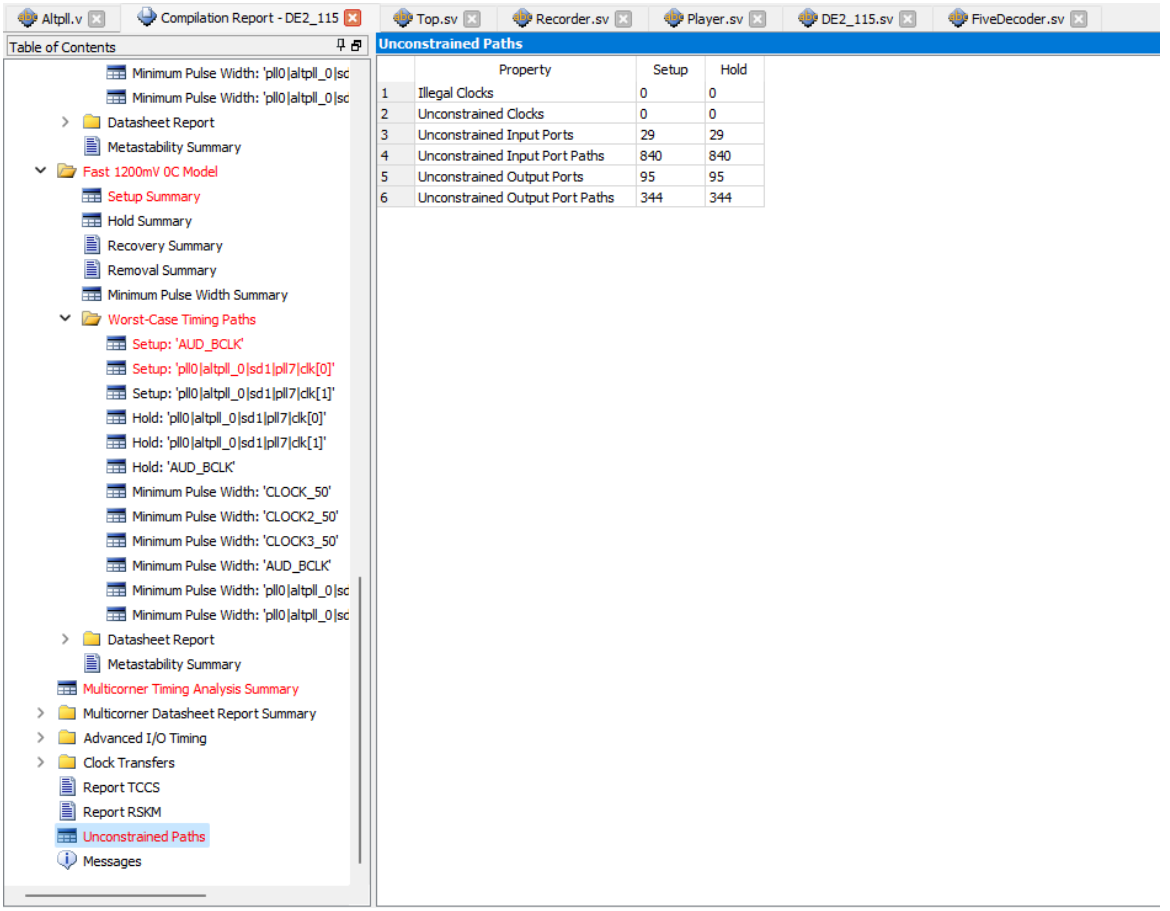
	Slack	From Node	To Node	
1	-22.224	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[14]	pll0|
2	-22.096	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[15]	pll0|
3	-22.017	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[16]	pll0|
4	-22.016	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[5]	pll0|
5	-21.960	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[13]	pll0|
6	-21.898	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[7]	pll0|
7	-21.889	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[11]	pll0|
8	-21.874	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[12]	pll0|
9	-21.861	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[8]	pll0|
10	-21.847	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[4]	pll0|
11	-21.847	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[9]	pll0|
12	-21.814	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[10]	pll0|
13	-21.780	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[3]	pll0|
14	-21.762	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[6]	pll0|
15	-21.746	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[1]	pll0|
16	-21.666	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[2]	pll0|
17	-21.402	Top:top0|state_r.S_PLAY	Top:top0|AudPlayer:player0|diff_r[0]	pll0|
18	-2.349	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[5]	pll0|
19	-2.349	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[6]	pll0|
20	-2.348	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[1]	pll0|
21	-2.288	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[6]	pll0|
22	-2.274	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_4th_r[3]	pll0|
23	-2.271	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[3]	pll0|
24	-2.269	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[4]	pll0|
25	-2.269	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[5]	pll0|
26	-2.269	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[6]	pll0|
27	-2.268	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_1st_r[0]	pll0|
28	-2.258	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[6]	pll0|
29	-2.256	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[1]	pll0|
30	-2.230	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[0]	pll0|
31	-2.224	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_3rd_r[3]	pll0|
32	-2.206	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[2]	pll0|
33	-2.201	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
34	-2.194	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_5th_r[2]	pll0|
35	-2.189	Top:top0|five_dec_r[0]	FiveDecoder:dec1|seven_2nd_r[4]	pll0|
36	-2.177	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_4th_r[5]	pll0|
37	-2.177	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[0]	pll0|
38	-2.176	Top:top0|five_dec_r[1]	FiveDecoder:dec1|seven_5th_r[4]	pll0|



	Slack	From Node	To Node	Launch Clock
1	-3.037	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY	AUD_BCLK
2	-2.844	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
3	-2.830	Top:top0|AudPlayer:player0|done_r	Top:top0|state_r.S_PLAY_PAUSE	AUD_BCLK
4	-2.681	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_IDLE	AUD_BCLK
5	-2.652	Top:top0|AudRecorder:recorder0|done_r	Top:top0|state_r.S_RECD	AUD_BCLK
6	77.163	Top:top0|five_dec_r[1]	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
7	78.463	Top:top0|five_dec_r[0]	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
8	78.579	Debounce:deb1|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
9	78.787	Top:top0|state_r.S_RECD	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
10	79.047	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
11	79.133	Top:top0|state_r.S_I2C	Top:top0|five_dec_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
12	79.681	Top:top0|state_r.S_PLAY	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
13	80.222	Debounce:deb1|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
14	80.294	Debounce:deb1|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
15	80.319	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
16	80.606	Debounce:deb2|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
17	80.823	Top:top0|state_r.S_PLAY	Top:top0|PLAYER_start_r	pll0|altpll_0|sd1|pll7|clk[0]
18	80.835	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
19	80.887	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
20	81.066	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
21	81.112	Top:top0|state_r.S_PLAY_PAUSE	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
22	81.129	Top:top0|state_r.S_I2C	Top:top0|five_dec_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
23	81.260	Top:top0|state_r.S_PLAY	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
24	81.432	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[1]	pll0|altpll_0|sd1|pll7|clk[0]
25	81.434	Top:top0|state_r.S_PLAY	Top:top0|ledr_r[0]	pll0|altpll_0|sd1|pll7|clk[0]
26	81.471	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY	pll0|altpll_0|sd1|pll7|clk[0]
27	81.635	Debounce:deb0|neg_r	Top:top0|state_r.S_RECD	pll0|altpll_0|sd1|pll7|clk[0]
28	81.644	Debounce:deb0|neg_r	Top:top0|state_r.S_I2C	pll0|altpll_0|sd1|pll7|clk[0]
29	81.755	Debounce:deb0|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
30	81.756	Debounce:deb0|neg_r	Top:top0|state_r.S_PLAY_PAUSE	pll0|altpll_0|sd1|pll7|clk[0]
31	81.837	Debounce:deb2|neg_r	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
32	81.851	Top:top0|state_r.S_RECD	Top:top0|state_r.S_IDLE	pll0|altpll_0|sd1|pll7|clk[0]
33	81.893	Top:top0|PLAYER_start_r	Top:top0|PLAYER_start_r	pll0|altpll_0|sd1|pll7|clk[0]
34	81.979	Debounce:deb2|counter_r[0]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
35	81.992	Debounce:deb2|counter_r[2]	Debounce:deb2|neg_r	pll0|altpll_0|sd1|pll7|clk[0]
36	82.040	Debounce:deb2|counter_r[1]	Debounce:deb2|neg_r	pll0|a
37	82.044	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_IDLE	pll0|a
38	82.049	Top:top0|state_r.S_IDLE	Top:top0|state_r.S_RECD	pll0|a



	Clock	Setup	Hold	Recovery	Removal	Minimum Pulse Width
1	Worst-case Slack	-45.594	0.158	N/A	N/A	9.574
1	AUD_BCLK	-45.594	0.201	N/A	N/A	40.651
2	CLOCK2_50	N/A	N/A	N/A	N/A	16.000
3	CLOCK3_50	N/A	N/A	N/A	N/A	16.000
4	CLOCK_50	N/A	N/A	N/A	N/A	9.574
5	pll0|altpll_0|sd1|pll7|clk[0]	-5.896	0.158	N/A	N/A	41.372
6	pll0|altpll_0|sd1|pll7|clk[1]	80.603	0.184	N/A	N/A	4999.706
2	Design-wide TNS	-972.404	0.0	0.0	0.0	0.0
1	AUD_BCLK	-950.366	0.000	N/A	N/A	0.000
2	CLOCK2_50	N/A	N/A	N/A	N/A	0.000
3	CLOCK3_50	N/A	N/A	N/A	N/A	0.000
4	CLOCK_50	N/A	N/A	N/A	N/A	0.000
5	pll0|altpll_0|sd1|pll7|clk[0]	-22.038	0.000	N/A	N/A	0.000
6	pll0|altpll_0|sd1|pll7|clk[1]	0.000	0.000	N/A	N/A	0.000



	Property	Setup	Hold
1	Illegal Clocks	0	0
2	Unconstrained Clocks	0	0
3	Unconstrained Input Ports	29	29
4	Unconstrained Input Port Paths	840	840
5	Unconstrained Output Ports	95	95
6	Unconstrained Output Port Paths	344	344