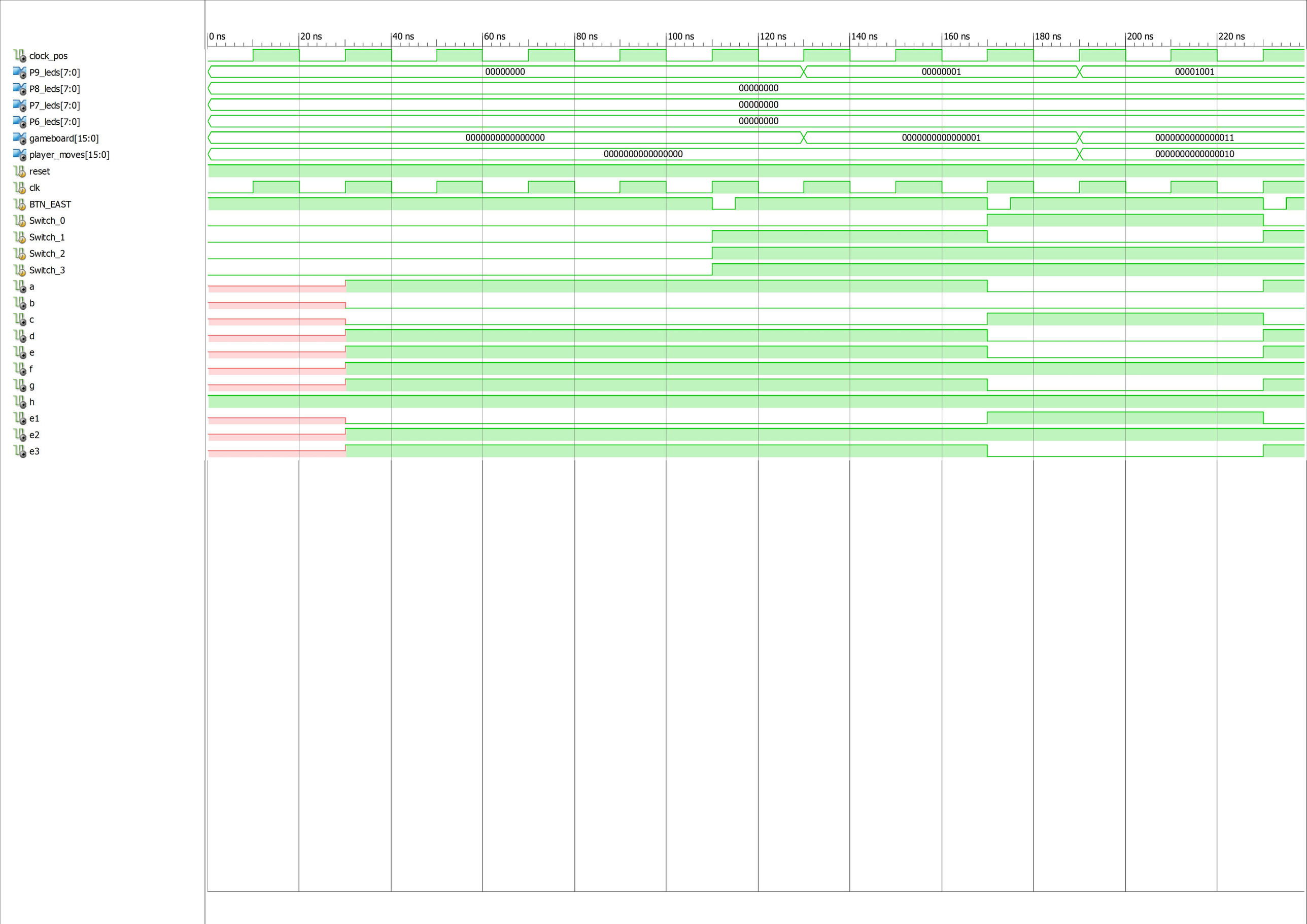
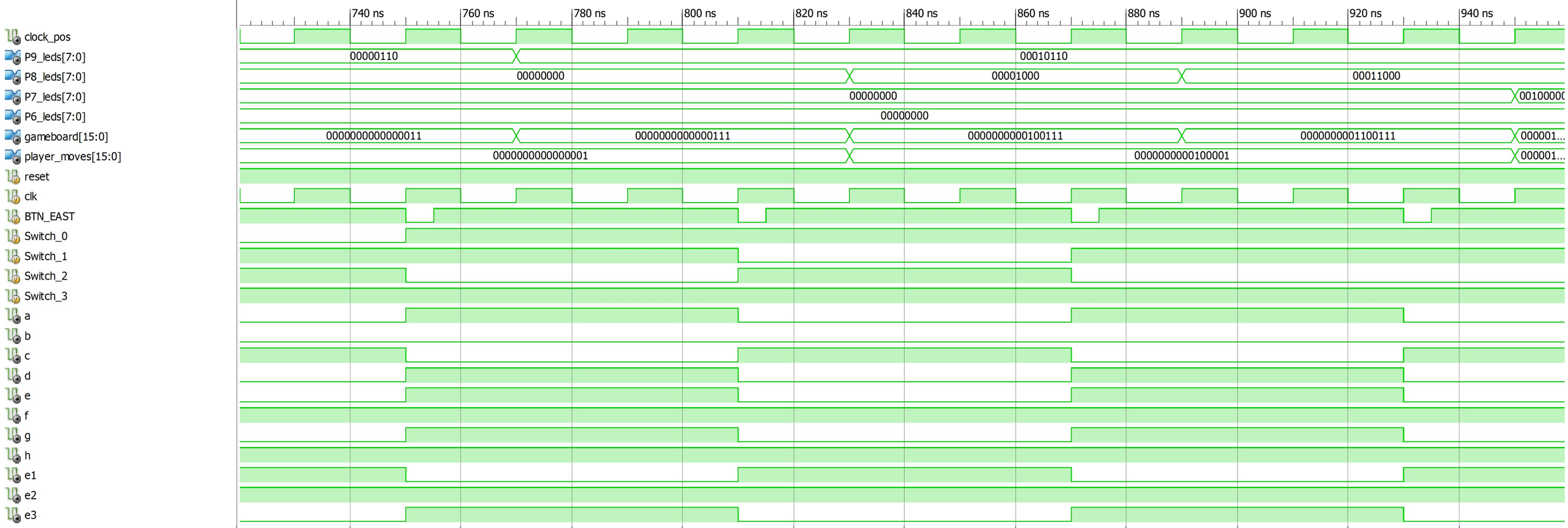
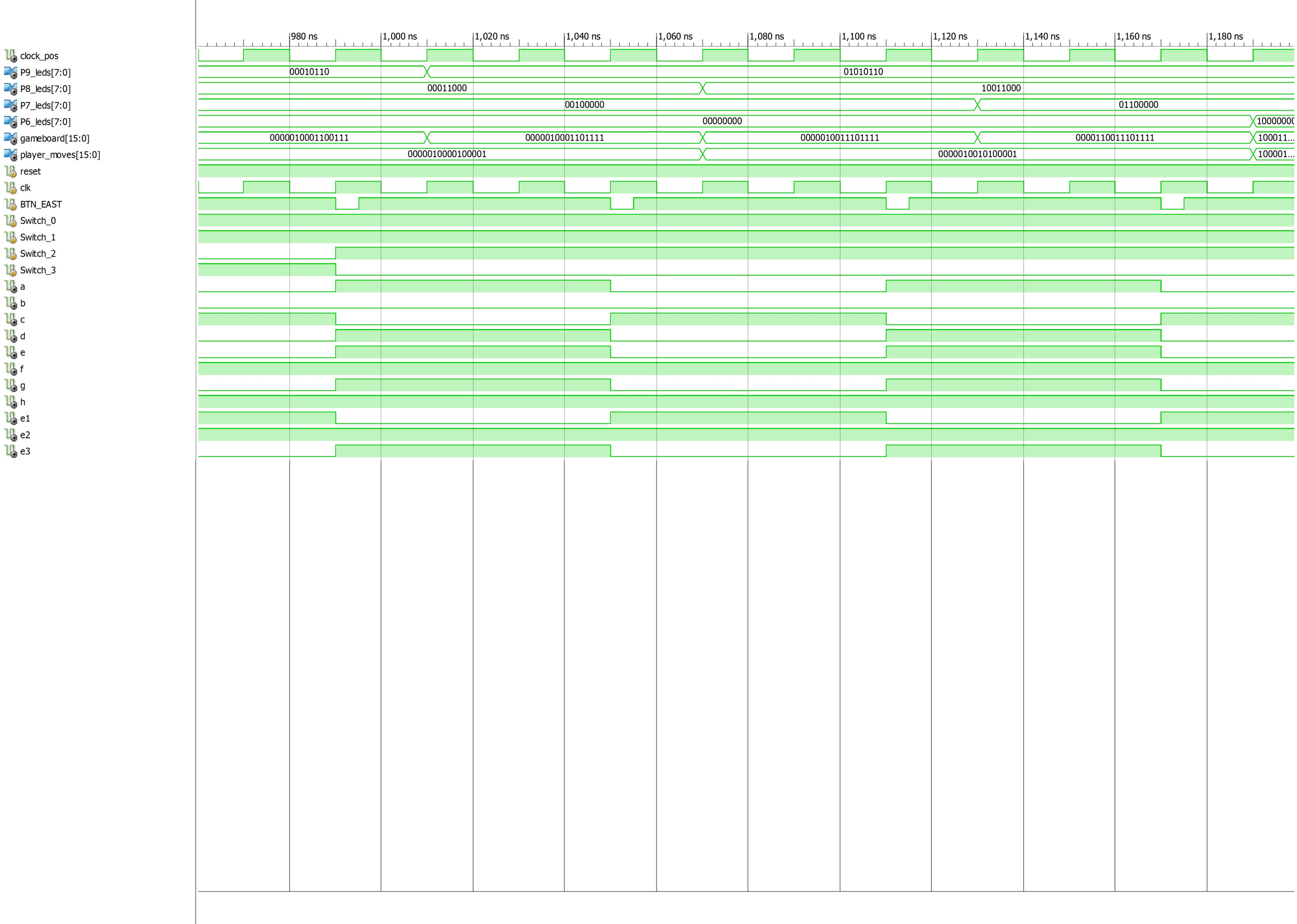

0 ns
20 ns
40 ns
60 ns
80 ns
100 ns
120 ns
140 ns
160 ns
180 ns
200 ns
220 ns
clock_pos
P9_leds[7:0]
00000000
00000001
00001001
P8_leds[7:0]
00000000
P7_leds[7:0]
00000000
P6_leds[7:0]
00000000
gameboard[15:0]
0000000000000000
0000000000000001
0000000000000011
player_moves[15:0]
0000000000000000
0000000000000010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3

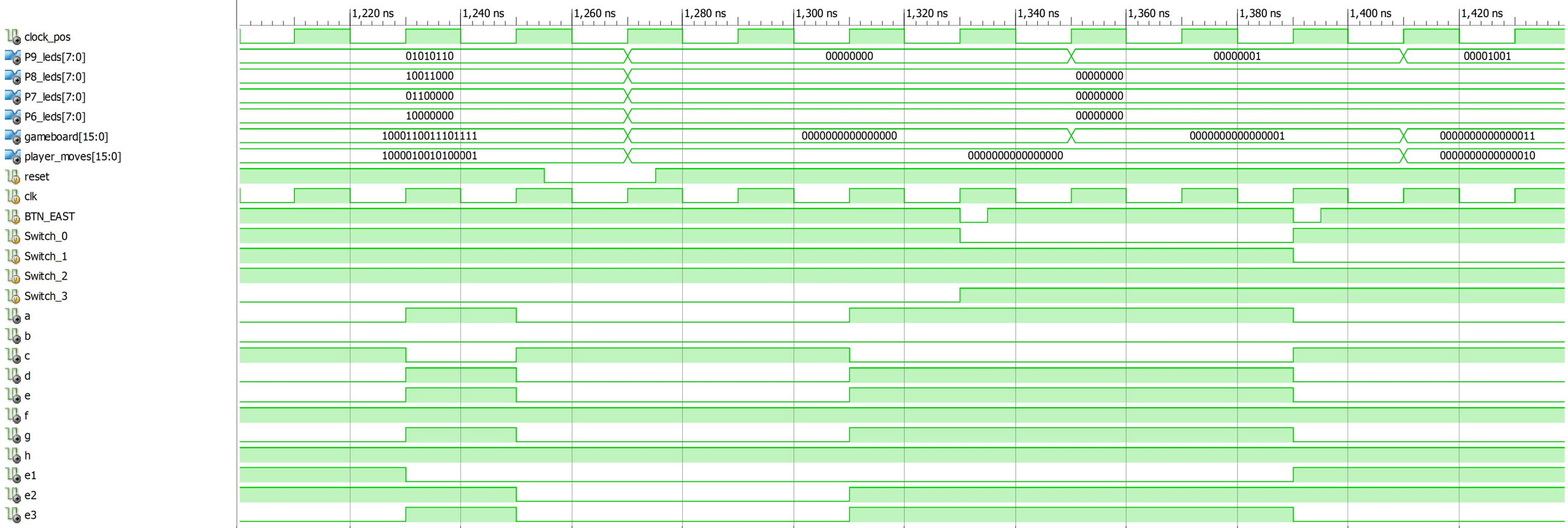
260 ns
280 ns
300 ns
320 ns
340 ns
360 ns
380 ns
400 ns
420 ns
440 ns
460 ns
clock_pos
P9_leds[7:0]
00001001
00101001
P8_leds[7:0]
000000...
00000001
00100001
P7_leds[7:0]
00000000
00000001
P6_leds[7:0]
00000000
gameboard[15:0]
000000...
0000000000010011
0000000000010111
0000000100010111
0000000101010111
player_moves[15:0]
0000000000000010
0000000000000110
0000000001000110
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3

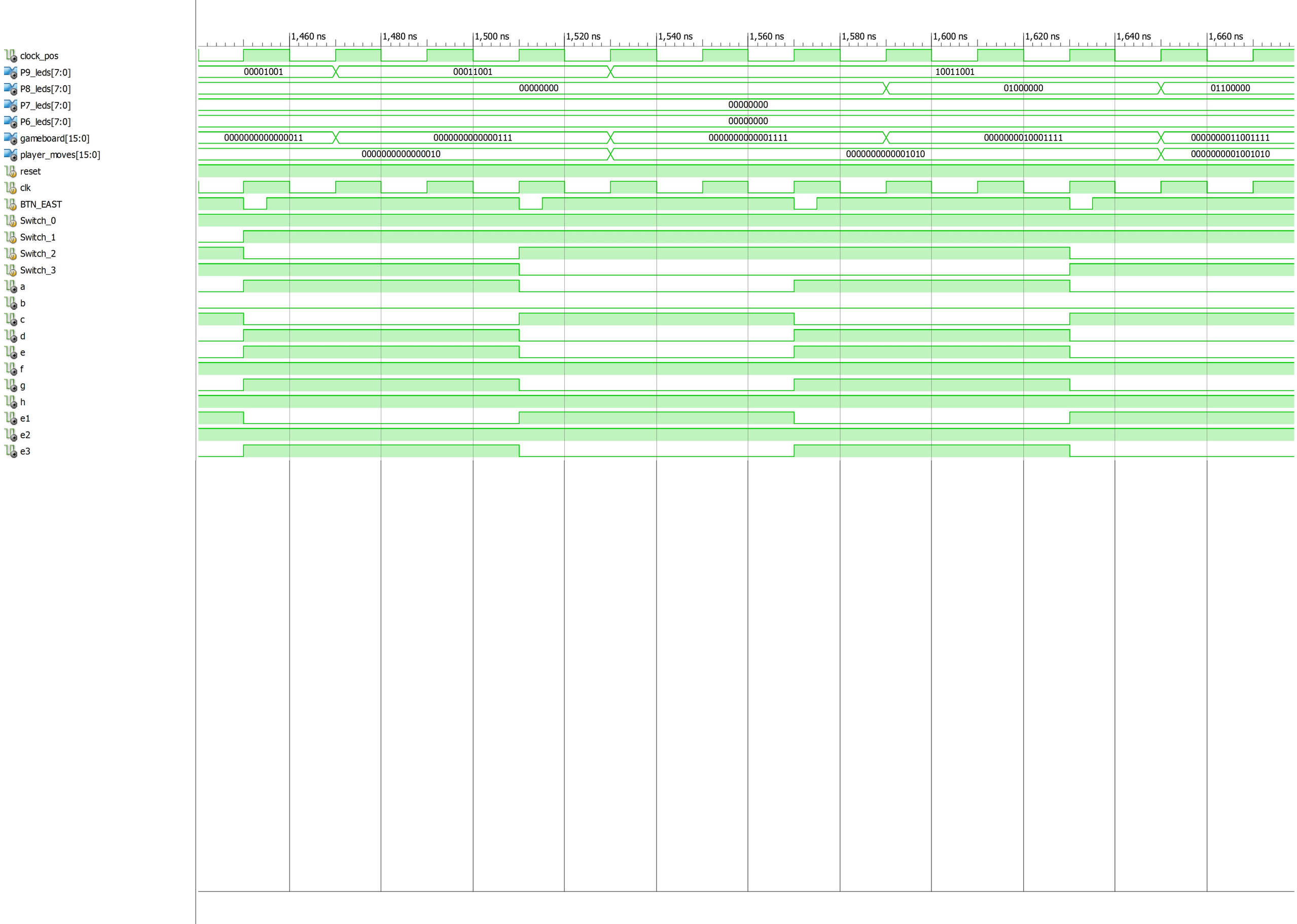
500 ns | 520 ns | 540 ns | 560 ns | 580 ns | 600 ns | 620 ns | 640 ns | 660 ns | 680 ns | 700 ns

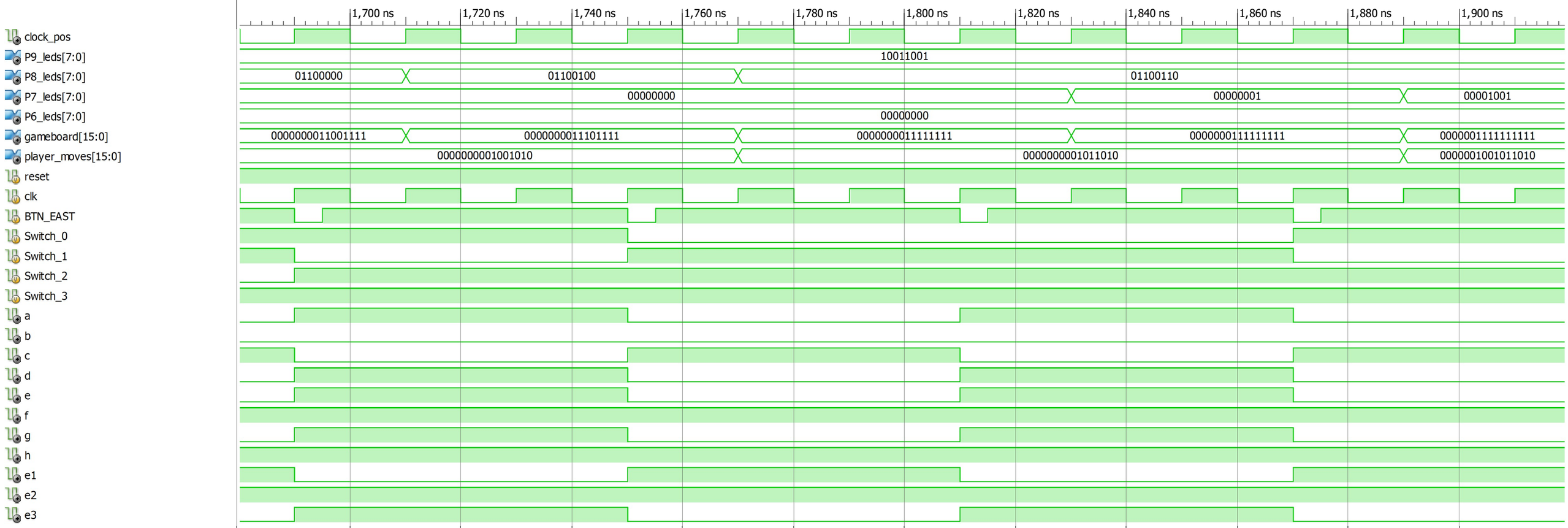
clock_pos	
P9_leds[7:0]	00101001
P8_leds[7:0]	00100001
P7_leds[7:0]	00000001
P6_leds[7:0]	000000...
gameboard[15:0]	000000...
player_moves[15:0]	0000000001000110
reset	
clk	
BTN_EAST	
Switch_0	
Switch_1	
Switch_2	
Switch_3	
a	
b	
c	
d	
e	
f	
g	
h	
e1	
e2	
e3	

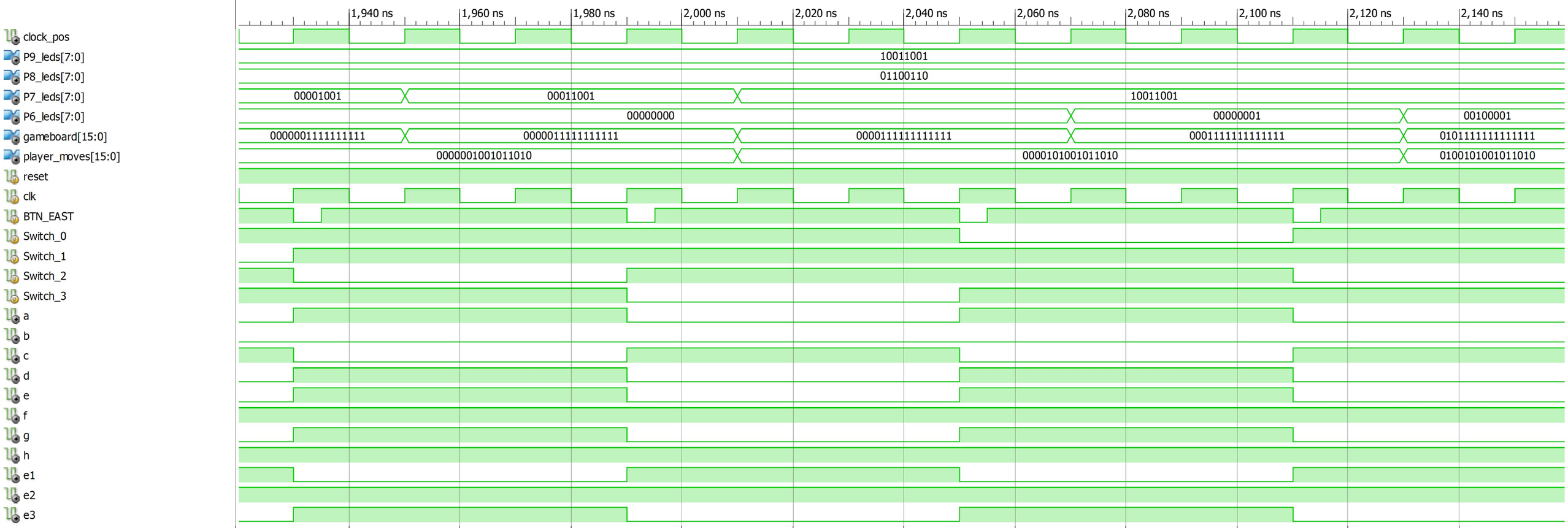

740 ns
760 ns
780 ns
800 ns
820 ns
840 ns
860 ns
880 ns
900 ns
920 ns
940 ns
clock_pos
P9_leds[7:0]
00000110
00010110
P8_leds[7:0]
00000000
00001000
00011000
P7_leds[7:0]
00000000
00100000
P6_leds[7:0]
00000000
gameboard[15:0]
0000000000000011
0000000000000111
0000000000100111
0000000001100111
000001...
player_moves[15:0]
0000000000000001
0000000000100001
000001...
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3

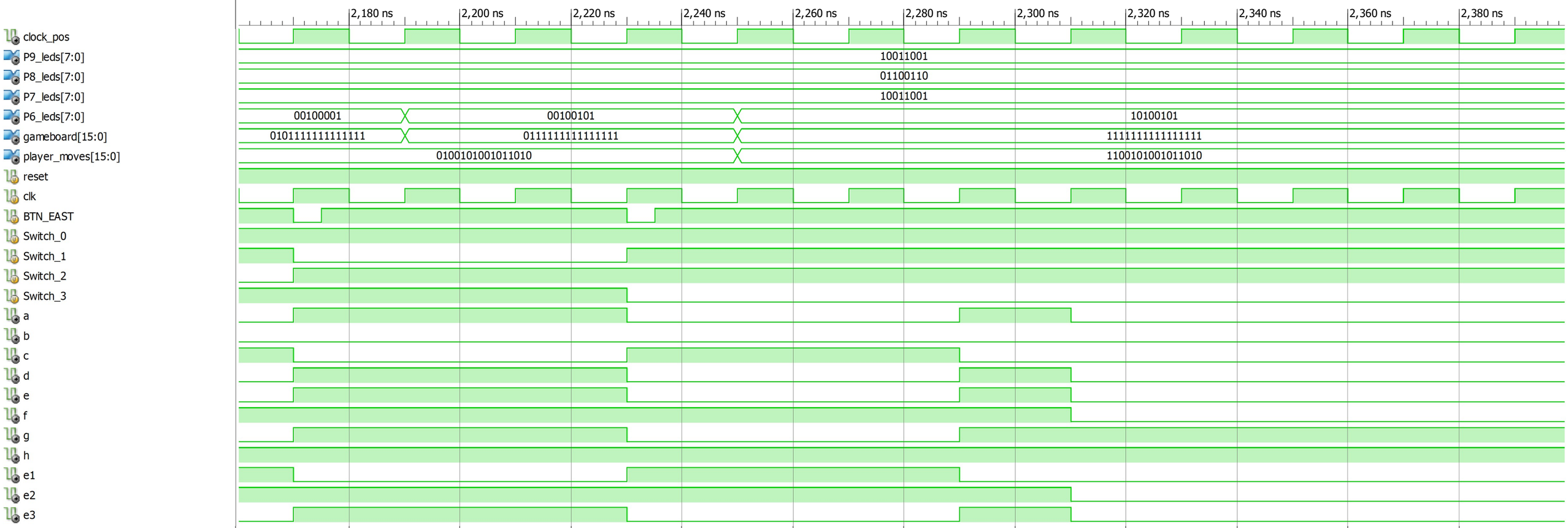

980 ns
1,000 ns
1,020 ns
1,040 ns
1,060 ns
1,080 ns
1,100 ns
1,120 ns
1,140 ns
1,160 ns
1,180 ns
clock_pos
P9_leds[7:0]
00010110
01010110
P8_leds[7:0]
00011000
10011000
P7_leds[7:0]
00100000
01100000
P6_leds[7:0]
00000000
10000000
gameboard[15:0]
0000010001100111
0000010001101111
0000010011101111
0000110011101111
100011...
player_moves[15:0]
0000010000100001
0000010010100001
100001...
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3


1,220 ns
1,240 ns
1,260 ns
1,280 ns
1,300 ns
1,320 ns
1,340 ns
1,360 ns
1,380 ns
1,400 ns
1,420 ns
clock_pos
P9_leds[7:0]
01010110
00000000
00000001
00001001
P8_leds[7:0]
10011000
00000000
P7_leds[7:0]
01100000
00000000
P6_leds[7:0]
10000000
00000000
gameboard[15:0]
1000110011101111
0000000000000000
0000000000000001
0000000000000011
player_moves[15:0]
1000010010100001
0000000000000000
0000000000000010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3


1,460 ns
1,480 ns
1,500 ns
1,520 ns
1,540 ns
1,560 ns
1,580 ns
1,600 ns
1,620 ns
1,640 ns
1,660 ns
clock_pos
P9_leds[7:0]
00001001
00011001
10011001
P8_leds[7:0]
00000000
01000000
01100000
P7_leds[7:0]
00000000
P6_leds[7:0]
00000000
gameboard[15:0]
0000000000000011
0000000000000111
0000000000001111
0000000010001111
0000000011001111
player_moves[15:0]
0000000000000010
0000000000001010
0000000001001010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3


1,700 ns
1,720 ns
1,740 ns
1,760 ns
1,780 ns
1,800 ns
1,820 ns
1,840 ns
1,860 ns
1,880 ns
1,900 ns
clock_pos
P9_leds[7:0]
10011001
P8_leds[7:0]
01100000
01100100
01100110
P7_leds[7:0]
00000000
00000001
00001001
P6_leds[7:0]
00000000
gameboard[15:0]
0000000011001111
0000000011101111
0000000011111111
0000001111111111
0000001111111111
player_moves[15:0]
0000000001001010
0000000001011010
0000001001011010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3


1,940 ns
1,960 ns
1,980 ns
2,000 ns
2,020 ns
2,040 ns
2,060 ns
2,080 ns
2,100 ns
2,120 ns
2,140 ns
clock_pos
P9_leds[7:0]
10011001
P8_leds[7:0]
01100110
P7_leds[7:0]
00001001
00011001
10011001
P6_leds[7:0]
00000000
00000001
00100001
gameboard[15:0]
0000001111111111
0000011111111111
0000111111111111
0001111111111111
0101111111111111
player_moves[15:0]
0000001001011010
0000101001011010
0100101001011010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3


2,180 ns
2,200 ns
2,220 ns
2,240 ns
2,260 ns
2,280 ns
2,300 ns
2,320 ns
2,340 ns
2,360 ns
2,380 ns
clock_pos
P9_leds[7:0]
10011001
P8_leds[7:0]
01100110
P7_leds[7:0]
10011001
P6_leds[7:0]
00100001
00100101
10100101
gameboard[15:0]
0101111111111111
0111111111111111
1111111111111111
player_moves[15:0]
0100101001011010
1100101001011010
reset
clk
BTN_EAST
Switch_0
Switch_1
Switch_2
Switch_3
a
b
c
d
e
f
g
h
e1
e2
e3