學號:B06902136
系級:資工四
姓名:賴冠毓

Cell (0) EN:
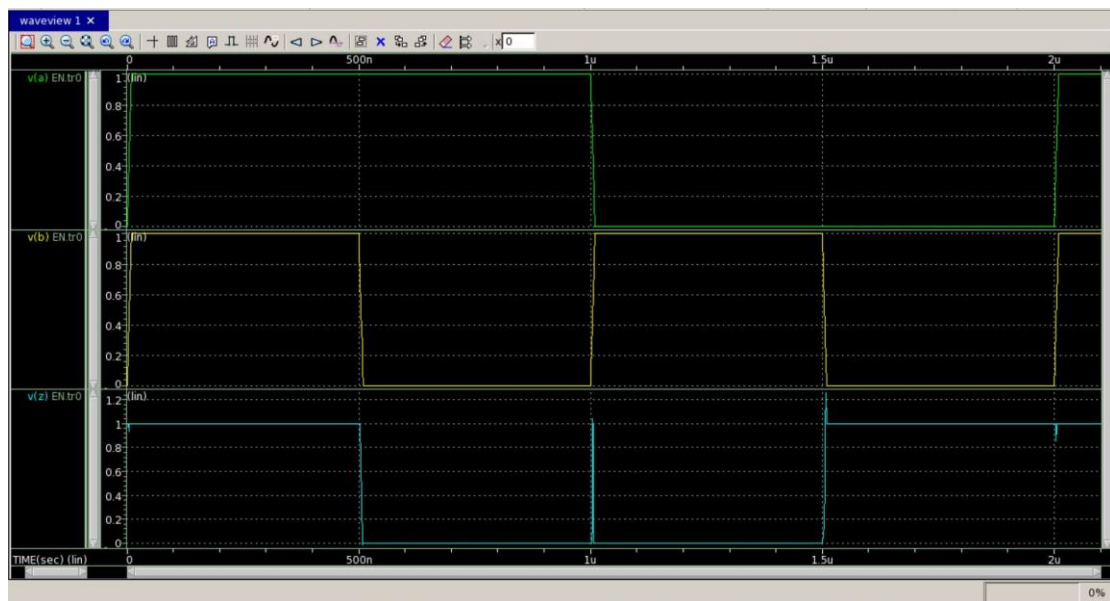inputs: A、B
output: Z
truth table:

inputs		output
A	B	Z
0	0	1
0	1	0
1	0	0
1	1	1

waveform result:

What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	1
Section 2	1	0	0
Section 3	0	1	0
Section 4	0	0	1

Cell (1) NR2:
inputs: A、B
output: Z

truth table:

inputs		output
A	B	Z
0	0	1
0	1	0
1	0	0
1	1	0

waveform result:
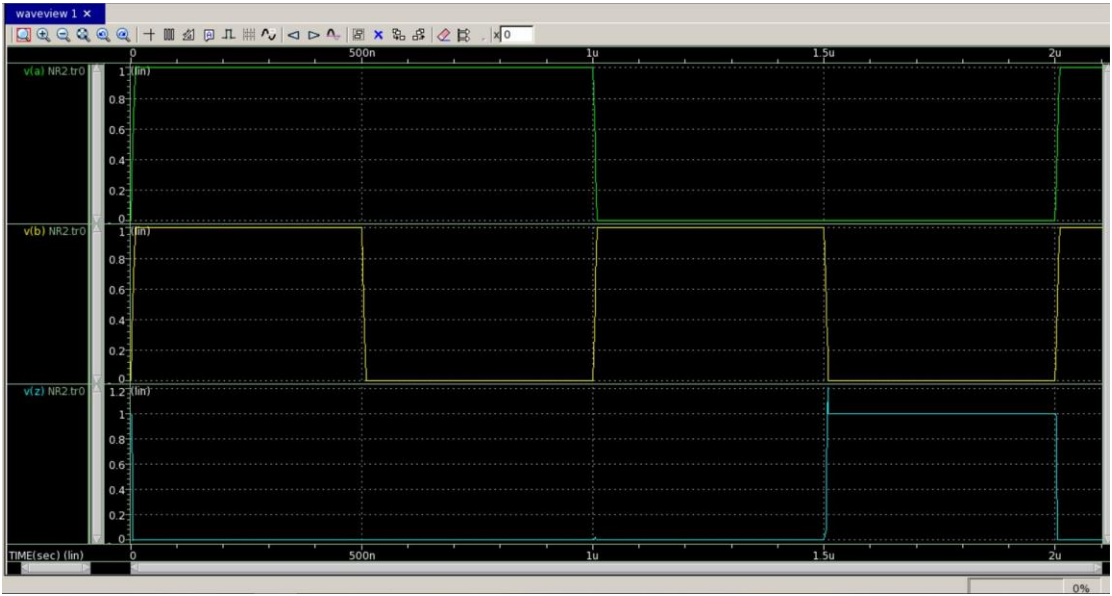
What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	0
Section 2	1	0	0
Section 3	0	1	0
Section 4	0	0	1

Cell (2) OR2:
inputs: A、B
output: Z
truth table:

inputs		output
A	B	Z
0	0	0
0	1	1
1	0	1
1	1	1

waveform result:
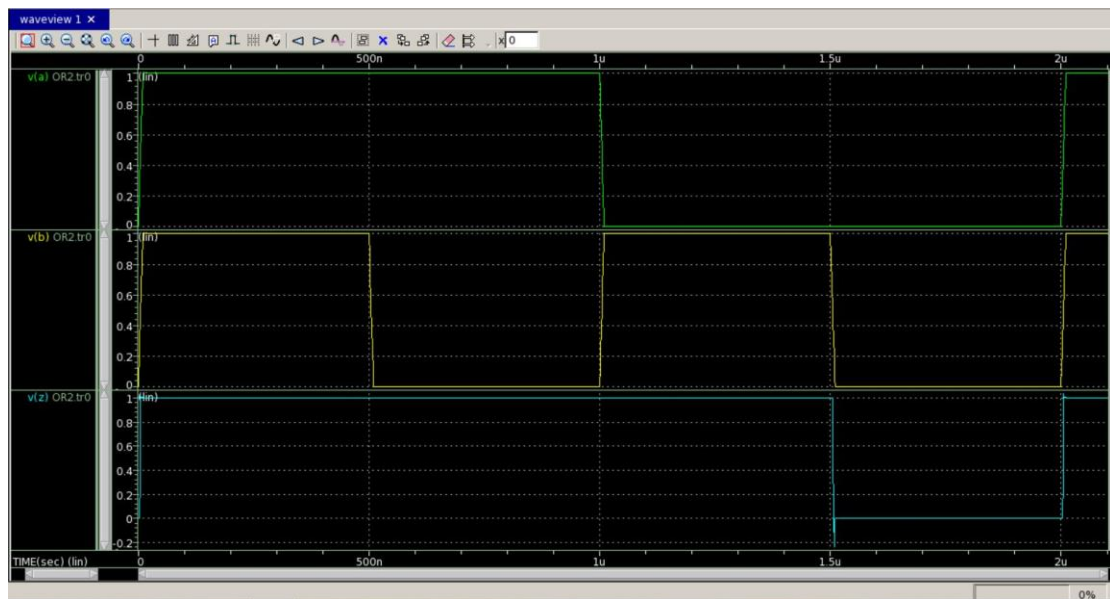
What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	1
Section 2	1	0	1
Section 3	0	1	1
Section 4	0	0	0

Cell (3) E03:
inputs: A、B、C
output: Z
truth table:

inputs			output
A	B	C	Z
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1

waveform result:
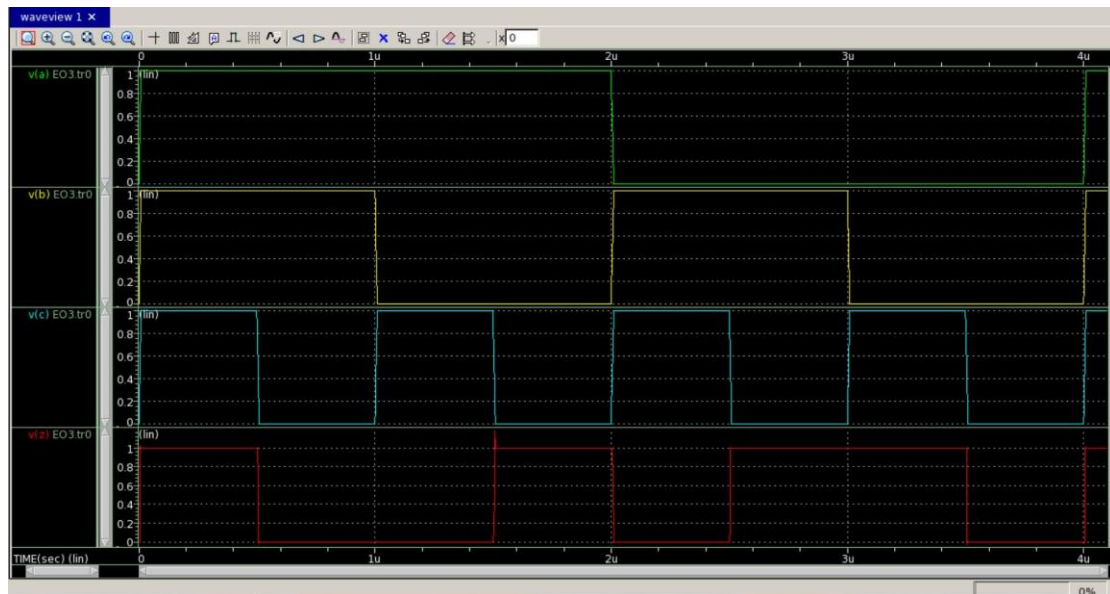
What I have observed:

Section	v(a)	v(b)	v(c)	v(z)
Section 1	1	1	1	1
Section 2	1	1	0	0
Section 3	1	0	1	0
Section 4	1	0	0	1
Section 5	0	1	1	0
Section 6	0	1	0	1
Section 7	0	0	1	1
Section 8	0	0	0	0

Cell (4) AN3:

inputs: A、B、C

output: Z

truth table:

inputs			output
A	B	C	Z
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

waveform result:
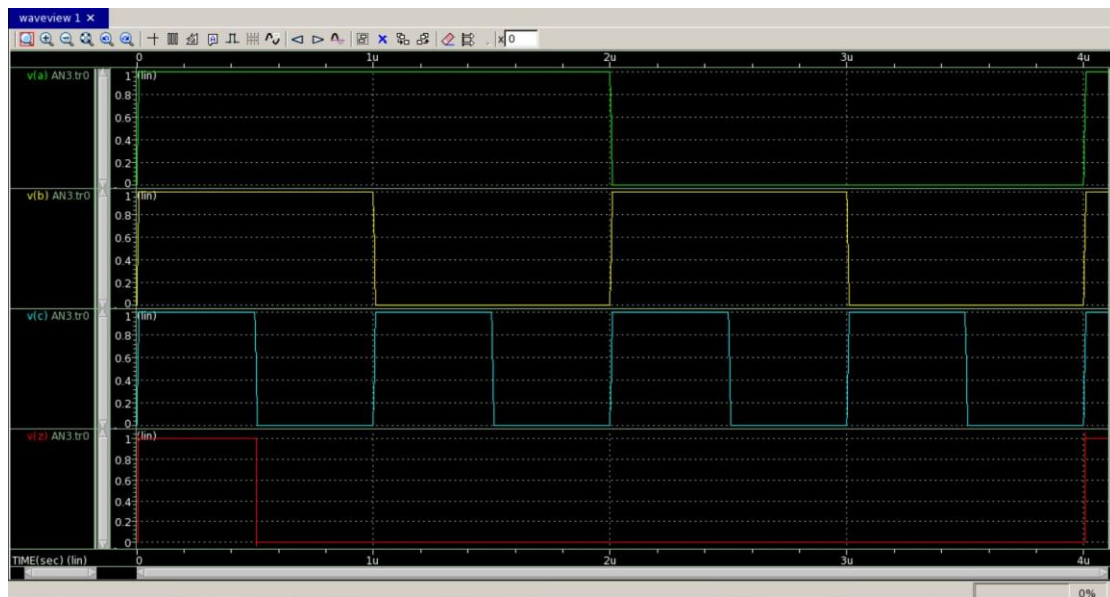
What I have observed:

Section	v(a)	v(b)	v(c)	v(z)
Section 1	1	1	1	1
Section 2	1	1	0	0
Section 3	1	0	1	0
Section 4	1	0	0	0
Section 5	0	1	1	0
Section 6	0	1	0	0
Section 7	0	0	1	0
Section 8	0	0	0	0

Cell (5) ND2:
inputs: A、B
output: Z
truth table:

inputs		output
A	B	Z
0	0	1
0	1	1
1	0	1
1	1	0

waveform result:
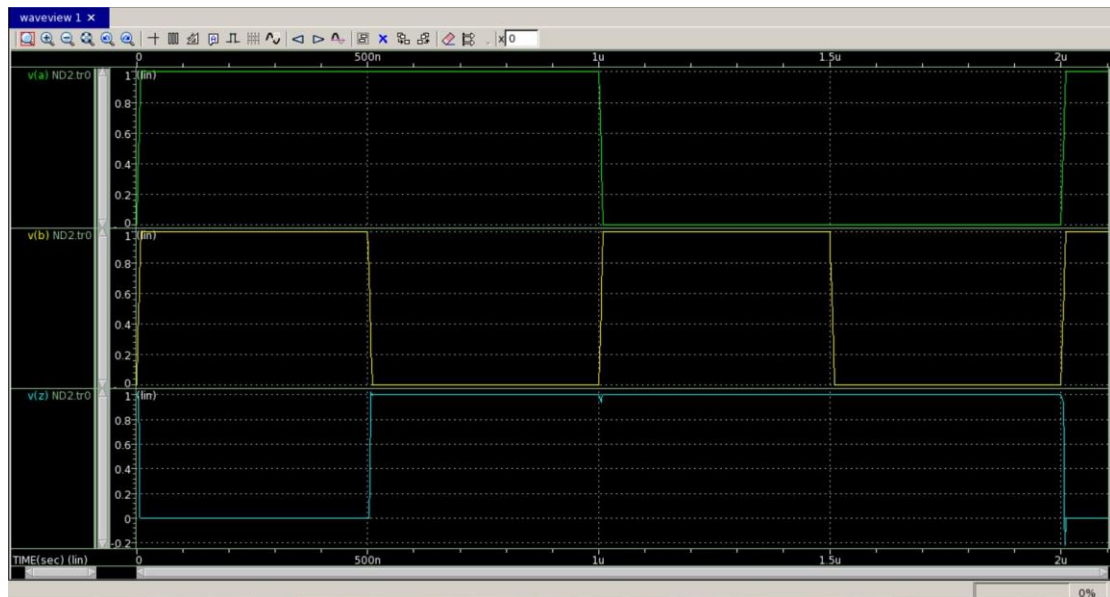
What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	0
Section 2	1	0	1
Section 3	0	1	1
Section 4	0	0	1

Cell (6) AN2:
inputs: A、B
output: Z
truth table:

inputs		output
A	B	Z
0	0	0
0	1	0
1	0	0
1	1	1

waveform result:
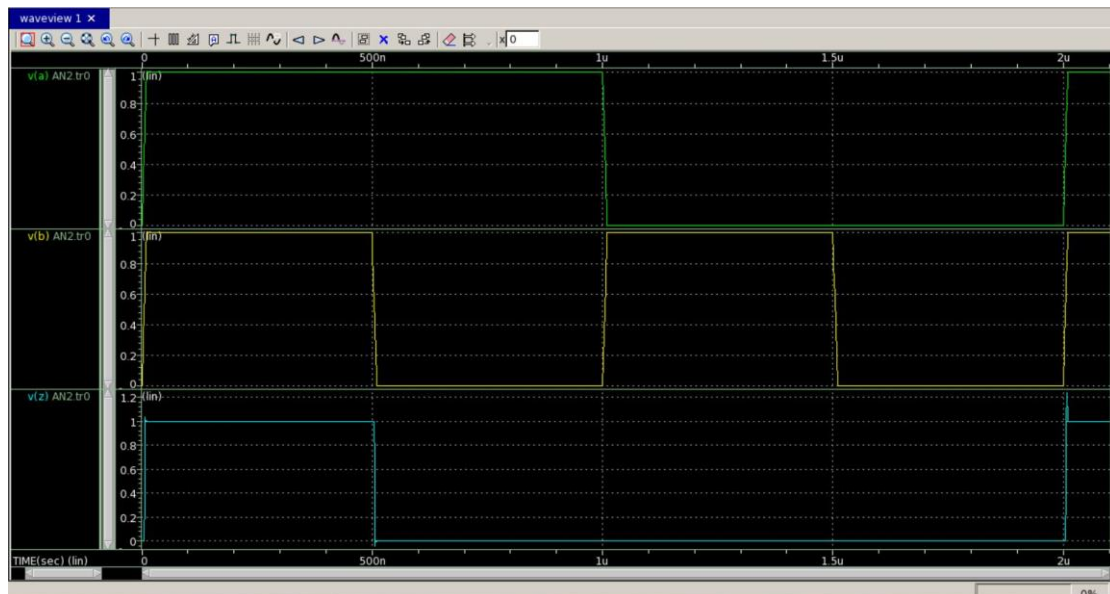
What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	1
Section 2	1	0	0
Section 3	0	1	0
Section 4	0	0	0

Cell (7) EO:

inputs: A、B

output: Z

truth table:

inputs		output
A	B	Z
0	0	0
0	1	1
1	0	1
1	1	0

waveform result:
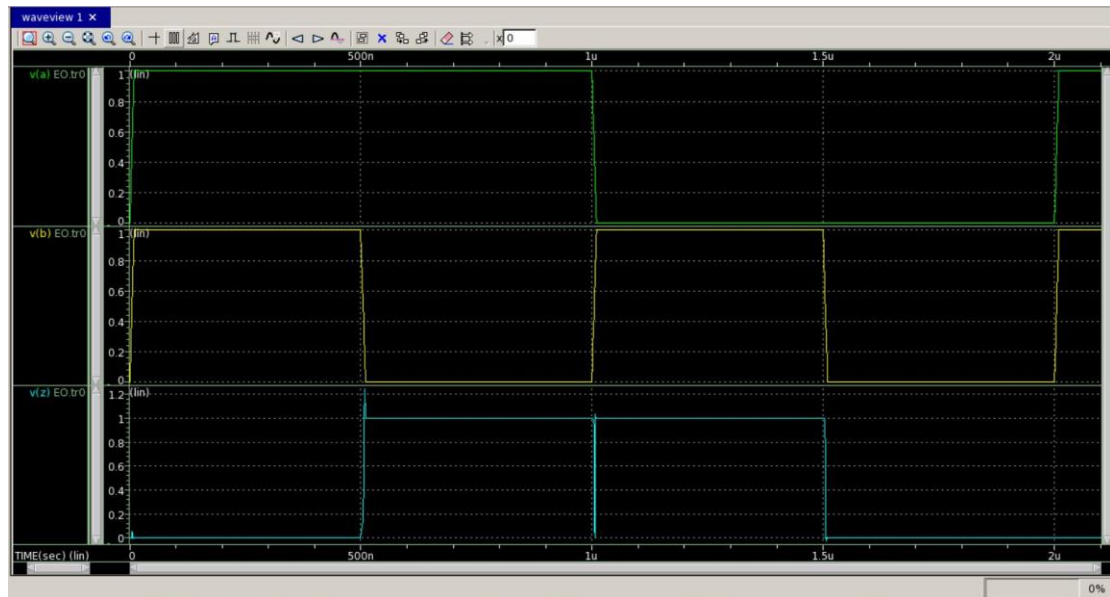
What I have observed:

Section	v(a)	v(b)	v(z)
Section 1	1	1	0
Section 2	1	0	1
Section 3	0	1	1
Section 4	0	0	0

Cell (8) DRIVER:

inputs: A

output: Z

truth table:

input	output
A	Z
0	0
1	1

waveform result:
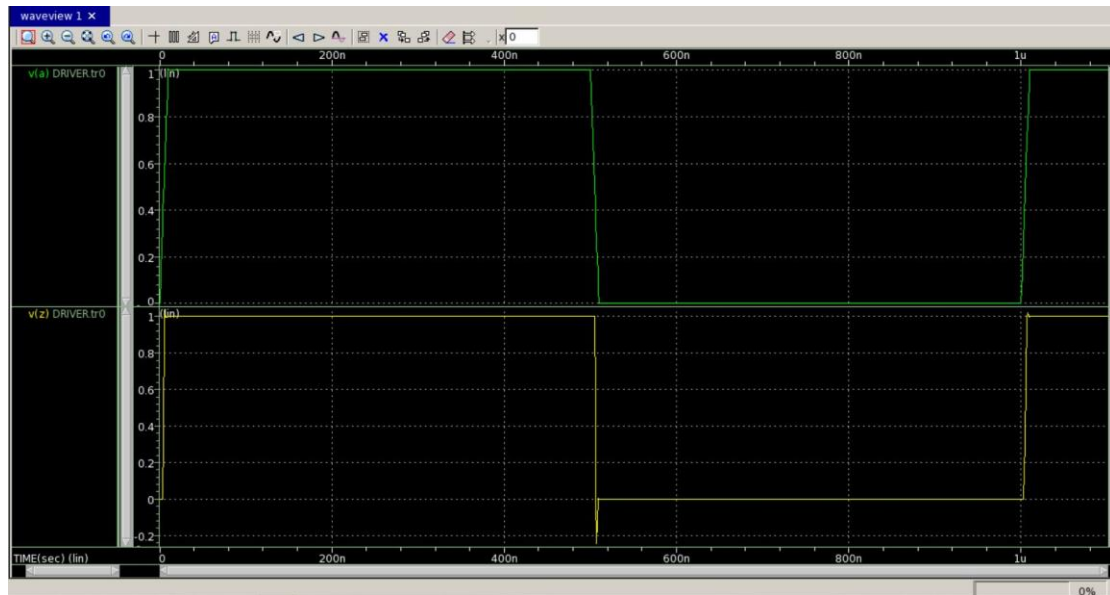
What I have observed:

Section	v(a)	v(z)
Section 1	1	1
Section 2	0	0

Cell (9) IV:

inputs: A

output: Z

truth table:

input	output
A	Z
0	1
1	0

waveform result:
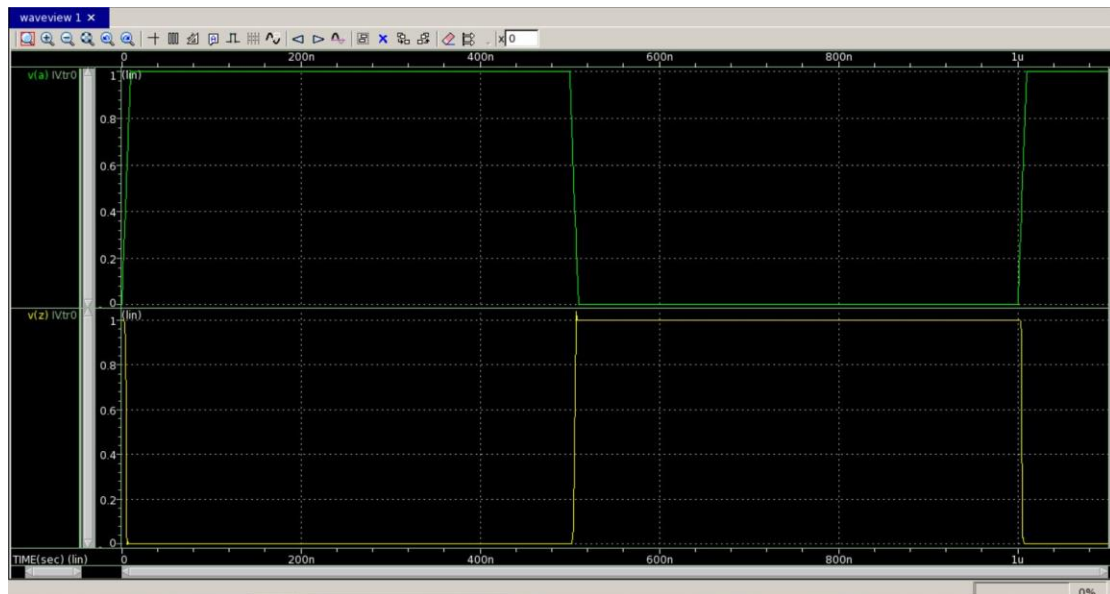
What I have observed:

Section	v(a)	v(z)
Section 1	1	0
Section 2	0	1

Cell (10) FA1:
inputs: A、B、CI
output: CO、S
truth table:

inputs			outputs	
A	B	CI	CO	S
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

waveform result:
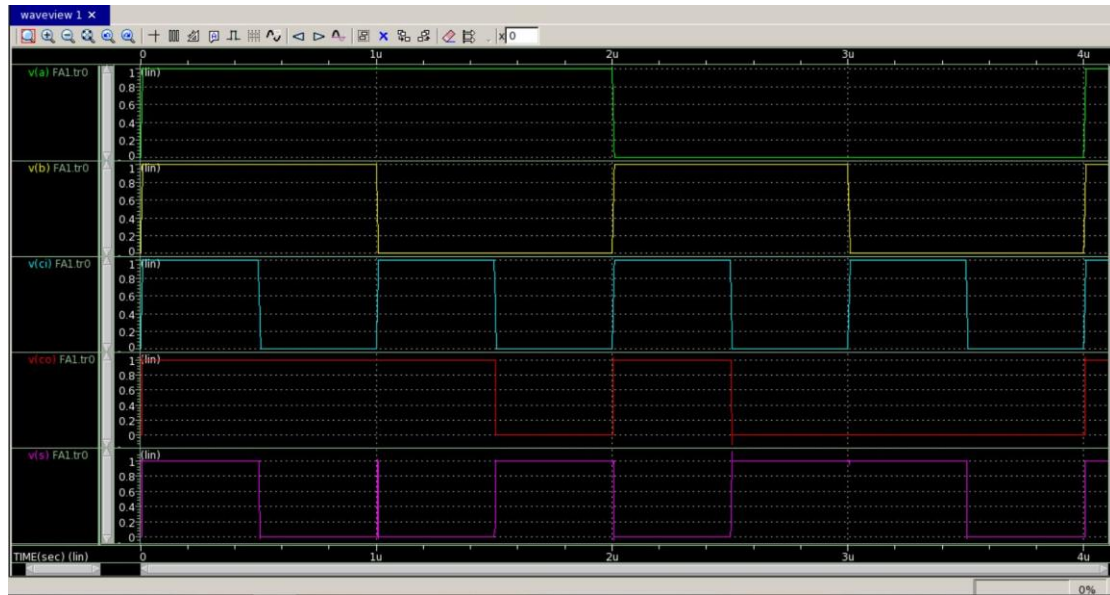
What I have observed:

Section	v(a)	v(b)	v(ci)	v(co)	v(s)
Section 1	1	1	1	1	1
Section 2	1	1	0	1	0
Section 3	1	0	1	1	0
Section 4	1	0	0	0	1
Section 5	0	1	1	1	0
Section 6	0	1	0	0	1
Section 7	0	0	1	0	1
Section 8	0	0	0	0	0