control[2..0]

LessThan0
A[2..0]
3'h2 B[2..0]
< OUT

dout

LessThan1
3'h4 A[2..0]
B[2..0]
< OUT

Equal3
A[2..0]
3'h0 B[2..0]
= OUT

Equal4
A[2..0]
3'h1 B[2..0]
= OUT

WideNor0

dout[1]~not

1'h0 DATAIN

dout[2]
OUT0

dout[2..0]

x[1..0]

3'h4 A[2..0]
COUNT[1..0]

RotateRight0
OUT[0]

y1

Equal2
A[1..0]
2'h2 B[1..0]
= OUT

y2

Equal0
A[1..0]
2'h1 B[1..0]
= OUT

z.green
0
1'h0 1

y3

Equal1
A[1..0]
2'h0 B[1..0]
= OUT

y5

z.blue
0
1'h0 1

y4