

$$\lceil \log_2 6 \rceil = 3 \Rightarrow 3\text{bit의 state} \Rightarrow Q2, Q1, Q0$$

State	Q2	Q1	Q0
IDLE	0	0	0
L1	0	0	1
L2	0	1	1
R1	1	1	1
R2	1	1	0
LR3	1	0	1

(Gray Code)

S	Q2	Q1	Q0	Transition Express	S*	Q2*	Q1*	Q0*
IDLE	0	0	0	(LEFT+RIGHT+HAZ)'	IDLE	0	0	0
IDLE	0	0	0	LEFT·RIGHT'·HAZ'	L1	0	0	1
IDLE	0	0	0	HAZ+LEFT·RIGHT	LR3	1	0	1
IDLE	0	0	0	RIGHT·LEFT'·HAZ'	R1	1	1	1
L1	0	0	1		L2	0	1	1
L2	0	1	1		IDLE	0	0	0
R1	1	1	1		R2	1	1	0
R2	1	1	0		IDLE	0	0	0
LR3	1	0	1		IDLE	0	0	0