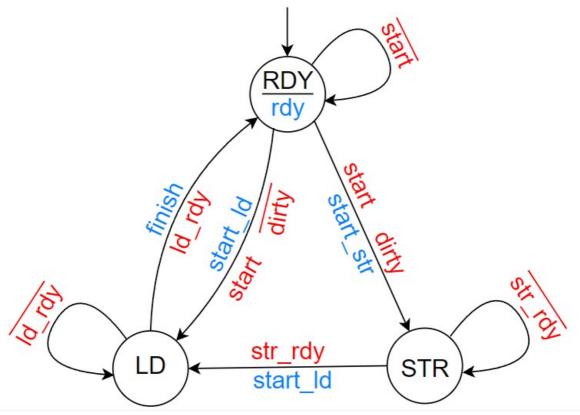
## FSM:



## **Transition Table:**

S <sub>1</sub>	S₀	Start	dirty	Str rdy	Ld rdy	S <sub>1</sub>	S₀
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	0				0	0
0	0	1	0			1	0
0	0	1	0			1	0
0	0	1	0			1	0
0	0	1	0			1	0
0	0	1	1			0	1
0	0	1	1			0	1
0	0	1	1			0	1
0	0	1	1			0	1

0	1	0		0	1
0	1	0		0	1
0	1	1		1	0
0	1	1		1	0
0	1	0		0	1
0	1	0		0	1
0	1	1		1	0
0	1	1		1	0
0	1	0		0	1
0	1	0		0	1
0	1	1		1	0
0	1	1		1	0
0	1	0		0	1
0	1	0		0	1
0	1	1		1	0
0	1	1		1	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0
1	0		0	1	0
1	0		1	0	0

### **States Formulas:**

 $S_1 = \overline{S}_1 \overline{S}_0 S \overline{D} + \overline{S}_1 S_0 R + S_1 \overline{S}_0 \overline{L}$  $S_0 = \overline{S}_1 \overline{S}_0 S D + \overline{S}_1 S_0 \overline{R}$ 

# **Output Table:**

S <sub>1</sub>	S <sub>0</sub>	Start	dirty	Str rdy	Ld rdy	SR	SL	finish
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	0				0	0	0
0	0	1	0			0	1	0
0	0	1	0			0	1	0
0	0	1	0			0	1	0
0	0	1	0			0	1	0
0	0	1	1			1	0	0
0	0	1	1			1	0	0
0	0	1	1			1	0	0
0	0	1	1			1	0	0
0	1			0		0	0	0
0	1			0		0	0	0
0	1			1		0	1	0
0	1			1		0	1	0
0	1			0		0	0	0
0	1			0		0	0	0
0	1			1		0	1	0
0	1			1		0	1	0
0	1			0		0	0	0
0	1			0		0	0	0
0	1			1		0	1	0
0	1			1		0	1	0
0	1			0		0	0	0
0	1			0		0	0	0
0	1			1		0	1	0
0	1			1		0	1	0

1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1
1	0		0	0	0	0
1	0		1	0	0	1

# **Output Formulas:**

Start Store =  $\overline{S}_1\overline{S}_0SD$ Start Load =  $\overline{S}_1\overline{S}_0S\overline{D}$  +  $\overline{S}_1S_0R$ Finishing =  $S_1L$