



Use One hot encoding

$$S0 = 001, S1=010, S2=100$$

Equations:

$$ld = Q0 \text{ Start}'$$

$$en = Q2 \text{ Start}$$

$$D0 = Q0 \text{ Start}' + Q2 \text{ Start}'$$

$$D1 = Q0 \text{ Start} + Q2 \text{ Start}$$

$$D2 = Q1$$

The reason I used one hot encoding is because equations can be written by inspection. You should be able to solve this problem for other state encodings.

