



$$S_1 = S_0 \wedge E$$

$$S_2 = S_1 \wedge E$$

$$S_3 = (S_2 \wedge E) \vee (S_3 \wedge E) = (S_2 \vee S_3) \wedge E$$

$$S_0 = (S_0 \wedge \bar{E}) \vee (S_1 \wedge \bar{E}) \vee (S_2 \wedge \bar{E}) \vee (S_3 \wedge \bar{E})$$

$$= (S_0 \vee S_1 \vee S_2 \vee S_3) \wedge \bar{E} = 1 \wedge \bar{E} = \bar{E}$$

