

RESET

000, $X = A+B$
 $S_2S_1S_0 = 000$
 $S_3 = 0$

001, $X = X+C$
 $S_2S_1S_0 = 001$
 $S_3 = 1$

011, $X = X+D$
 $S_2S_1S_0 = 011$
 $S_3 = 1$

010, $X = X+E$
 $S_2S_1S_0 = 010$
 $S_3 = 1$

110, $X = X+F$
 $S_2S_1S_0 = 110$
 $S_3 = 1$

111, $X = X+G$
 $S_2S_1S_0 = 111$
 $S_3 = 1$

101, $X = X+H$
 $S_2S_1S_0 = 101$
 $S_3 = 1$