

RESET

000, $X = A+B$

$S_1S_0 = 00$

$S_3S_2 = 00$

011, $X = X+C$

$S_1S_0 = 01$

$S_3S_2 = 01$

111, $X = X+D$

$S_1S_0 = 11$

$S_3S_2 = 01$

101, $X = X+E$

$S_1S_0 = 10$

$S_3S_2 = 11$

100, $X = X+F$

$S_1S_0 = 10$

$S_3S_2 = 10$