

A: waiting on first number

B: Waiting for enter to be released

C: Waiting on second number

D: waiting for enter to be released

E: waiting for operator

F: showing result

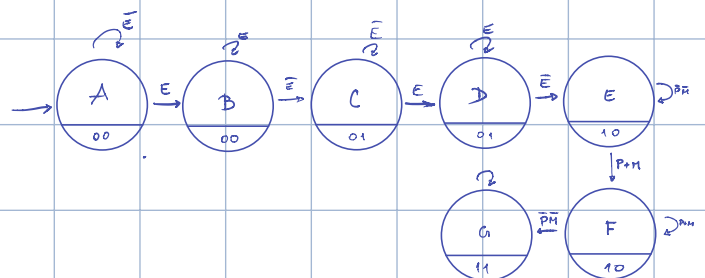
G: waiting for AC

0 1 1

State	$S_2$	$S_1$	$S_0$
A	0	0	0
B	1	0	0
C	1	0	1
D	0	0	1
E	0	1	0
F	1	1	0
G	1	1	1

$$Y_1 = S_1$$

$$Y_0 = S_0$$



$S_2$	$S_1$	$S_0$	$E$	$P$	$M$	$S_2'$	$S_1'$	$S_0'$
0	0	0	0	x	x	0	0	0
0	0	0	1	x	x	1	0	0
1	0	0	0	x	x	1	0	1
1	0	0	1	x	x	1	0	0
0	0	1	0	x	x	0	1	0
0	0	1	1	x	x	0	0	1
1	0	1	0	x	x	1	0	1
1	0	1	1	x	x	0	0	1
0	1	0	x	0	0	0	1	0
0	1	0	x	x	1	1	1	0
0	1	0	x	1	x	1	1	0
1	1	0	x	0	0	1	1	1
1	1	0	x	x	1	1	1	0
1	1	0	x	1	x	1	1	0
1	1	1	x	x	x	1	1	1

$$S_2' = S_2 \bar{E} + S_2 S_1 + S_1 M + S_1 P + \bar{S}_1 \bar{S}_0 E$$

$$S_1' = S_1 + \bar{S}_2 S_0 E \quad \begin{matrix} S_1 P + S_1 \bar{S}_0 E \\ S_1 \bar{P} \end{matrix}$$

$$S_0' = S_2 S_0 + S_0 E + S_2 \bar{S}_1 \bar{E} + S_2 S_1 \bar{P} \bar{M} \quad \begin{matrix} \bar{S}_0 \bar{E} \\ \bar{S}_0 \bar{P} \end{matrix}$$