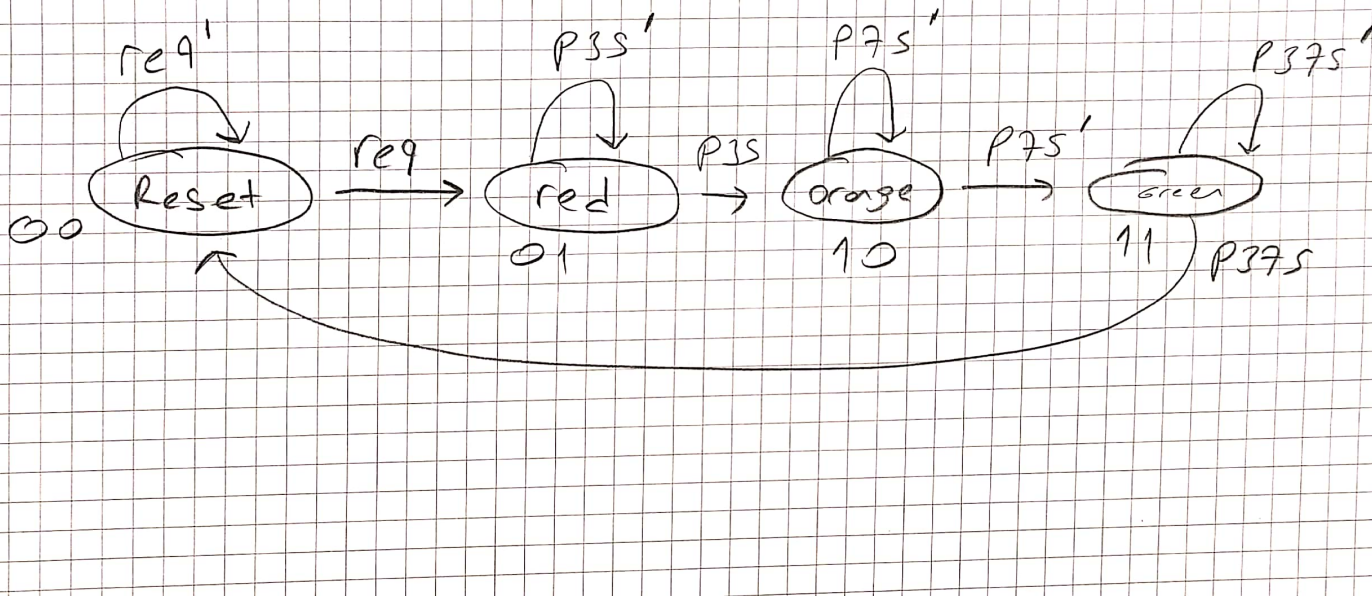
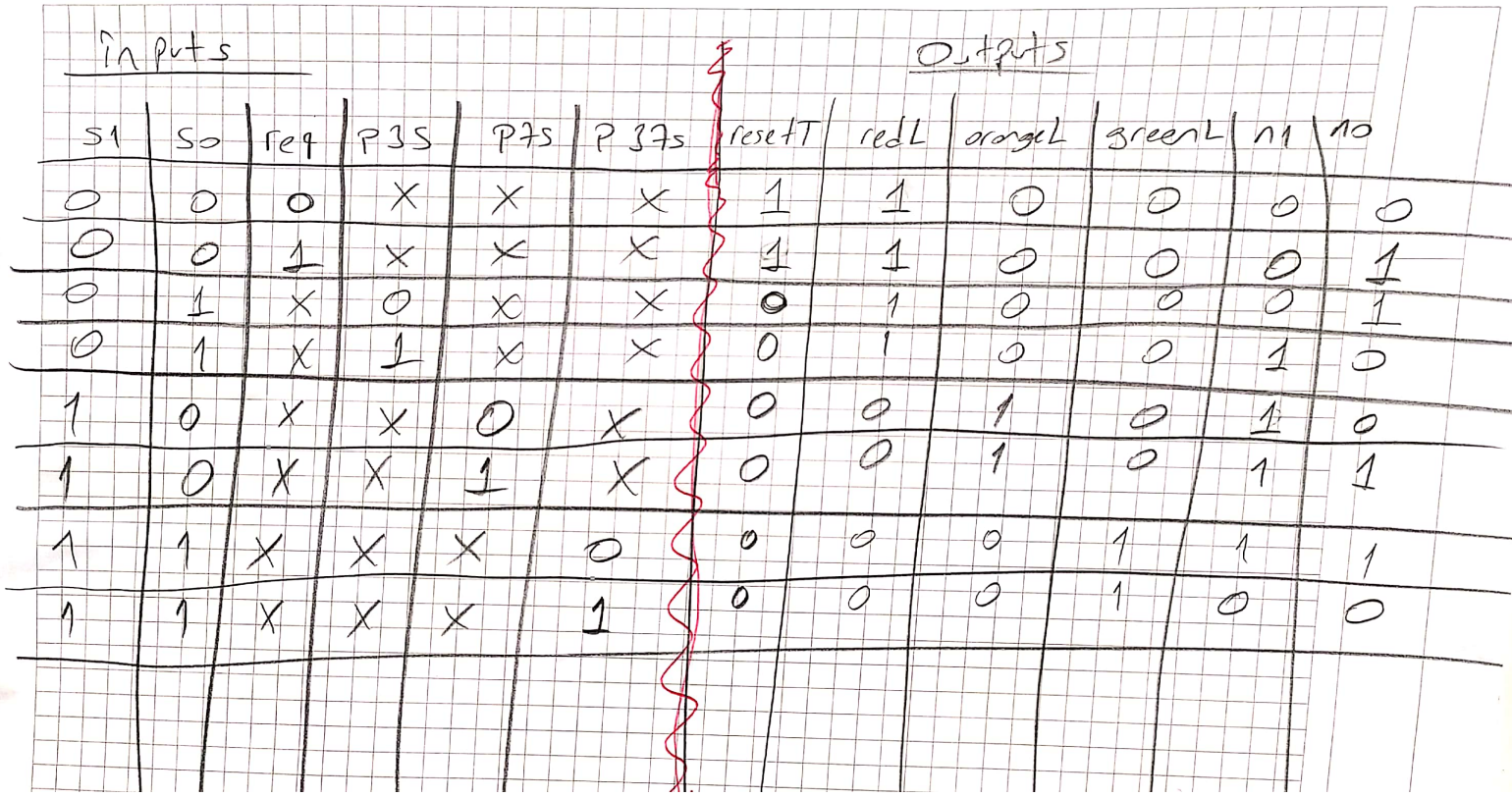
State digram



Scanned with CamScanner



Inputs						Outputs					
S1	S0	req	P3S	P7S	P37S	resetT	redL	orangeL	greenL	n1	n0
0	0	0	X	X	X	1	1	0	0	0	0
0	0	1	X	X	X	1	1	0	0	0	1
0	1	X	0	X	X	0	1	0	0	0	1
0	1	X	1	X	X	0	1	0	0	1	0
1	0	X	X	0	X	0	0	1	0	1	0
1	0	X	X	1	X	0	0	1	0	1	1
1	1	X	X	X	0	0	0	0	1	1	1
1	1	X	X	X	1	0	0	0	1	0	0

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Boolean

resetT = $S1'S0'req1' + S1'S0'req = S1'S0'(req1' + req)$

$= S1'S0'$

redL = $S1'S0'req1' + S1'S0'req + S1'S0P35' + S1'S0P35$

$S1'S0'(req' + req) + S1'S0(P35' + P35) =$

$S1'S0' + S1'S0$

orangeL = $S1S0'P75' + S1S0'P75' = S1S0'(P75' + P75) =$

$= S1S0'$

greenL = $S1S0P375' + S1S0P375 = S1S0(P375' + P375)$

$= S1S0$

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$n1 = s1's0p3s + s1s0'p7s' + s1s0'p7s + s1s0p37s'$

$s1s0'(p7s' + p7s) = s1s0'$

$n0 = s1's0'reg + s1's0p3s' + s1s0'p7s + s1s0p37s'$

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