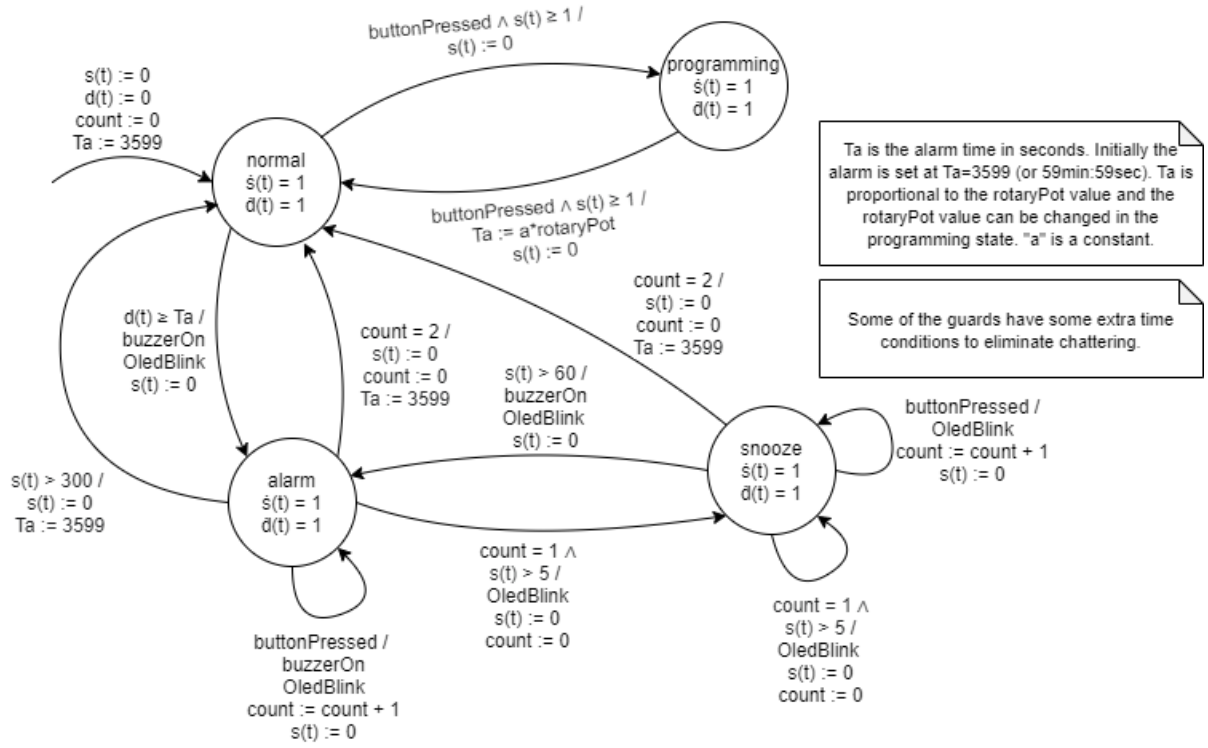
State Diagram and State-Transition Logic Table

continuous variables: d(t), s(t): R
variables: count: {0,1,2}, Ta: {0, 1,⋯, 3599}
inputs: buttonPressed: pure, rotaryPot: {0, 1,⋯, 1023}
outputs: buzzerOn, OledBink: pure



Inputs	Variables	Continuous Variables	Current State	Next State	Outputs	Actions
buttonPressed	-	s(t) ≥ 1	normal	programming	-	s(t) := 0
-	-	d(t) ≥ Ta	normal	alarm	buzzerOn OledBlink	s(t) := 0
buttonPressed rotaryPot	-	s(t) ≥ 1	programming	normal	-	Ta := a*rotaryPot s(t) := 0
-	count = 2	-	alarm	normal	-	s(t) := 0 count := 0 Ta := 3599
-	count = 1	s(t) > 5	alarm	snooze	OledBlink	s(t) := 0 count := 0
-	-	s(t) > 300	alarm	normal	-	s(t) := 0 Ta := 3599
buttonPressed	-	-	alarm	alarm	buzzerOn OledBlink	count := count + 1 s(t) := 0
-	count = 2	-	snooze	normal	-	s(t) := 0 count := 0 Ta := 3599
-	count = 1	s(t) > 5	snooze	snooze	OledBlink	s(t) := 0 count := 0
-	-	s(t) > 60	snooze	alarm	buzzerOn OledBlink	s(t) := 0
buttonPressed	-	-	snooze	snooze	OledBlink	count := count + 1