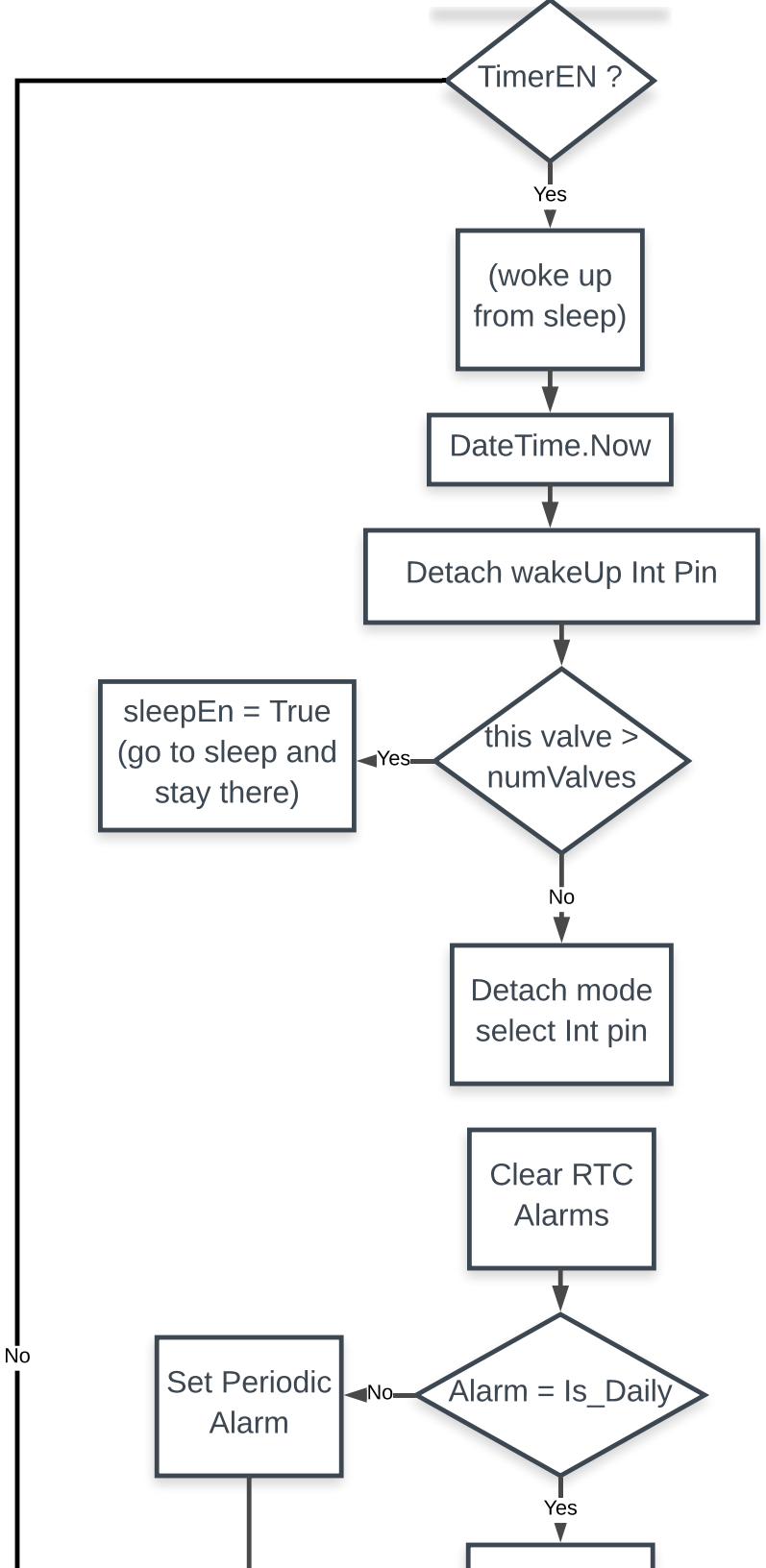
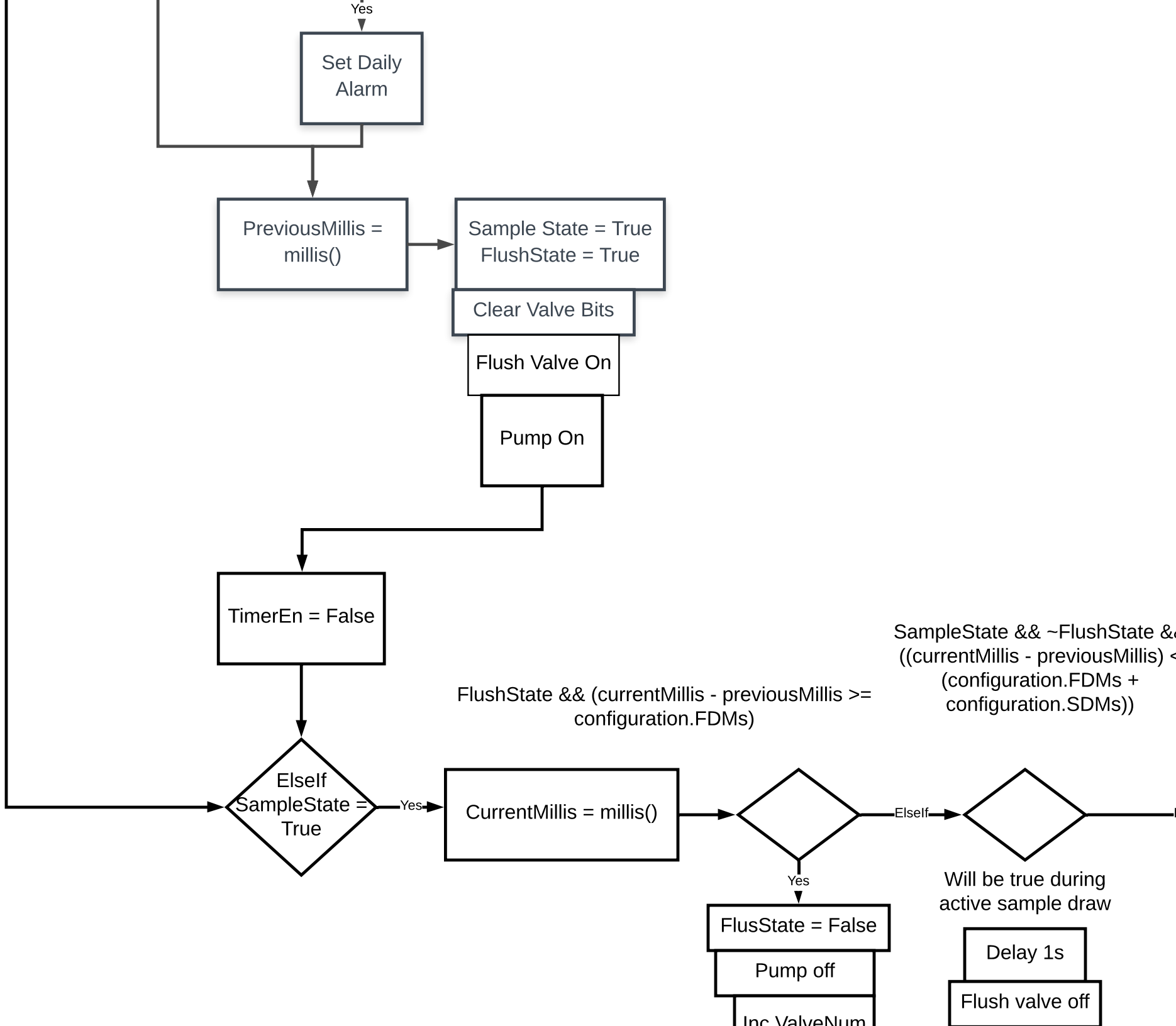
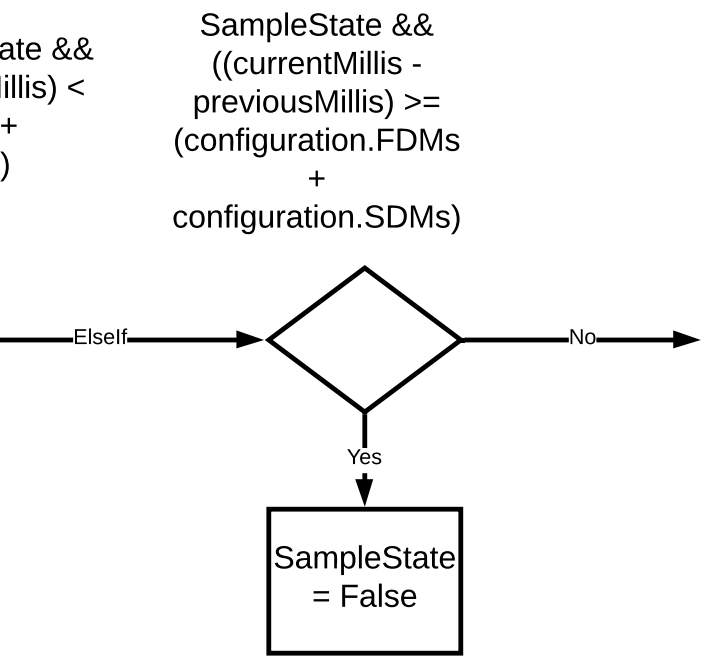
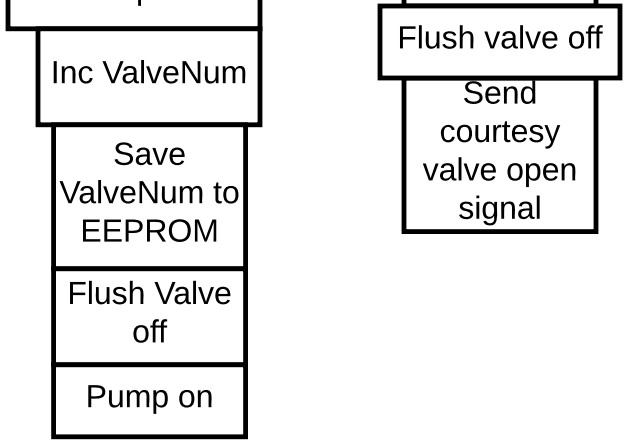
Loop


TimerEN ?
Yes
(woke up from sleep)
DateTime.Now
Detach wakeUp Int Pin
this valve > numValves
Yes
sleepEn = True (go to sleep and stay there)
No
Detach mode select Int pin
Clear RTC Alarms
Alarm = Is_Daily
No
Set Periodic Alarm
Yes
No


Yes
Set Daily Alarm
PreviousMillis = millis()
Sample State = True
FlushState = True
Clear Valve Bits
Flush Valve On
Pump On
TimerEn = False
ElseIf SampleState = True
Yes
CurrentMillis = millis()
FlushState && (currentMillis - previousMillis >= configuration.FDMs)
SampleState && ~FlushState && ((currentMillis - previousMillis) < (configuration.FDMs + configuration.SDMs))
ElseIf
Yes
FlusState = False
Pump off
Inc ValveNum
Will be true during active sample draw
Delay 1s
Flush valve off


ate &&
illis) <
+
)
SampleState &&
((currentMillis -
previousMillis) >=
(configuration.FDMs
+
configuration.SDMs)
ElseIf
No
Yes
SampleState
= False


Inc ValveNum
Save ValveNum to EEPROM
Flush Valve off
Pump on
Flush valve off
Send courtesy valve open signal

= False