## the FSM for polling of digital input

down

down/none

waitUp/Act5

down/Act9

TimeOut/ dOut=0

startTimer50ms

state&action

dRead=0

dRead=1

TimeOut

table

input

states

waitUp/none Up/none

Up

up/Act11

waitDown/Act3

waitDown

Up/none

down/Act12

waitDown/none

waitUp

down/Act2

up/Act10

input
dRead=1
dRead=0
TimeOut

**Output** dOut=1

dOut=0

none

startTimer50ms

Act1=none

Act2=startTimer50ms

Act3=startTimer50ms

Act4=none

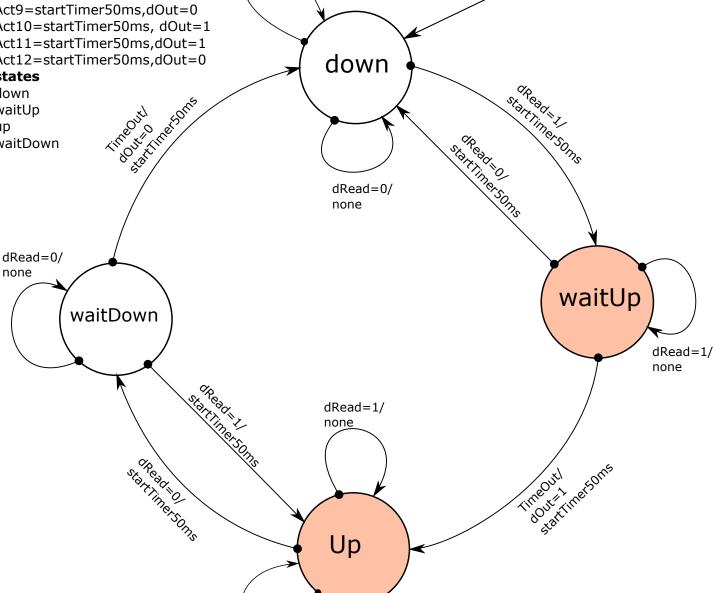
Act6=none

Act5=startTimer50ms

Act7=none Act8=none Act9=startTimer50ms,dOut=0 Act11=startTimer50ms,dOut=1

Act10=startTimer50ms, dOut=1 Act12=startTimer50ms,dOut=0 states

down waitUp up waitDown



TimeOut/ dOut=1

startTimer50ms