

the FSM for polling of digital input

input

dRead=1

dRead=0

TimeOut

Output

dOut=1

dOut=0

none

startTimer50ms

Act1=none

Act2=startTimer50ms

Act3=startTimer50ms

Act4=none

Act5=startTimer50ms

Act6=none

Act7=none

Act8=none

Act9=startTimer50ms,dOut=0

Act10=startTimer50ms, dOut=1

Act11=startTimer50ms,dOut=1

Act12=startTimer50ms,dOut=0

states

down

waitUp

up

waitDown

state&action table		states			
		down	waitUp	Up	waitDown
input	dRead=0	down/none	down/Act2	waitDown/Act3	waitDown/none
	dRead=1	waitUp/Act5	waitUp/none	Up/none	Up/none
	TimeOut	down/Act9	up/Act10	up/Act11	down/Act12

