```
.model Lights
.inputs Button
.outputs CarSignal
        PedestrianSignal
.subckt ControlLogic CL
    PresentSignal=CarSignal
    Button=Button NextSignal=Tmp
.latch Tmp CarSignal
.reset CarSignal
0
1
.table CarSignal -> \
            PedestrianSignal
0 1
1 0
.end

.model ControlLogic
.inputs PresentSignal Button
.outputs NextSignal
.table PresentSignal \
        Button -> NextSignal
.default 1
1 1 0
.end
```

```
module a_Lights
 external
    Button: (0..1) ;
    Tmp: (0..1)
 interface
    CarSignal: (0..1) ;
    PedestrianSignal: (0..1)
 atom
   controls  PedestrianSignal
   awaits  CarSignal
     init update
     []  CarSignal' = 1  -> \
            PedestrianSignal':= 0
     []  CarSignal' = 0  -> \
            PedestrianSignal':=1
 endatom
 atom
   controls  CarSignal
   reads  Tmp
     init
     update
     []  true ->  CarSignal':=Tmp
 endatom
 endmodule

module a_ControlLogic
 external
    PresentSignal: (0..1) ;
    Button: (0..1)
 interface
    NextSignal: (0..1)
 atom
   controls  NextSignal
   awaits  PresentSignal , Button
     init update
     []  PresentSignal' = 1  &  \
         Button' = 1  -> \
         NextSignal':= 0
     [] default -> NextSignal':=1
 endatom
 endmodule

 -- Generated by mv2rm DONOT edit
 -- Report bugs to
<vaibhav@cse.ucsc.edu>
 ControlLogic:= a_ControlLogic
 b_Lights:= a_Lights
 ||  ControlLogic [PresentSignal,\
Button , NextSignal := CarSignal,\
Button, Tmp]

 Lights := hide  Tmp  in b_Lights
endhide
```