

watchdog

Designed with syncCharts 2.084

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This report has been generated by syncCharts v2.084. SyncCharts has been created and developed by Charles André, I3S Lab. - University of Nice (F)
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Comments

Watchdog

This is an example of pure esterel program.

Basically it's a SR flip-flop (set and reset inputs).

When ON, if more than 5 occurrences of 'top' occur then the system goes to an 'alarm' state. 'reset' must occur to get out this state.

This example illustrates: hierarchy, parallelism, preemption and normal termination (see module 'timer' and its final stars).

Chapter 1

Modules

1.1 Tree

Table 1.1: Application Tree

Tree	
(p.6)	watchdog
(p.4)	control
(p.3)	timer

1.2 timer

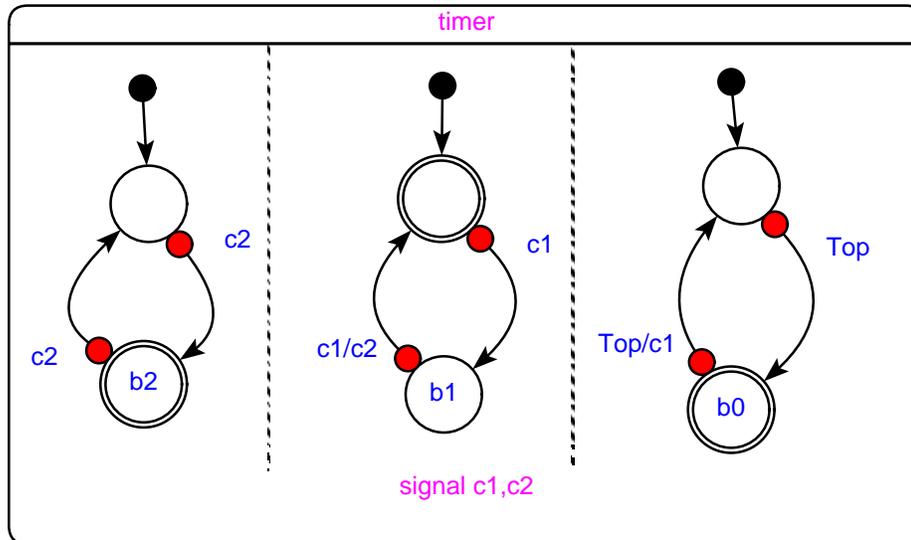


Figure 1.1: Macro-state timer

Declarations

Table 1.2: Declarations

Declarations
input Top;
output b1;
output b0;
output b2;

1.3 control

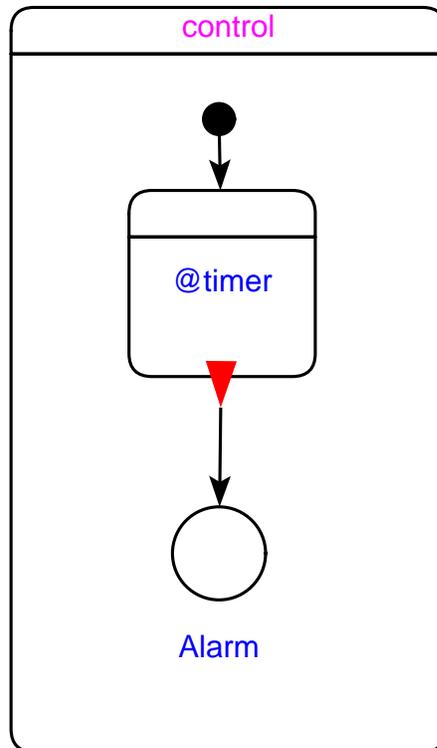


Figure 1.2: Macro-state control

Declarations

Table 1.3: Declarations

Declarations
input Top;
output Alarm;
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output b1;

output b0;

output b2;

1.4 watchdog

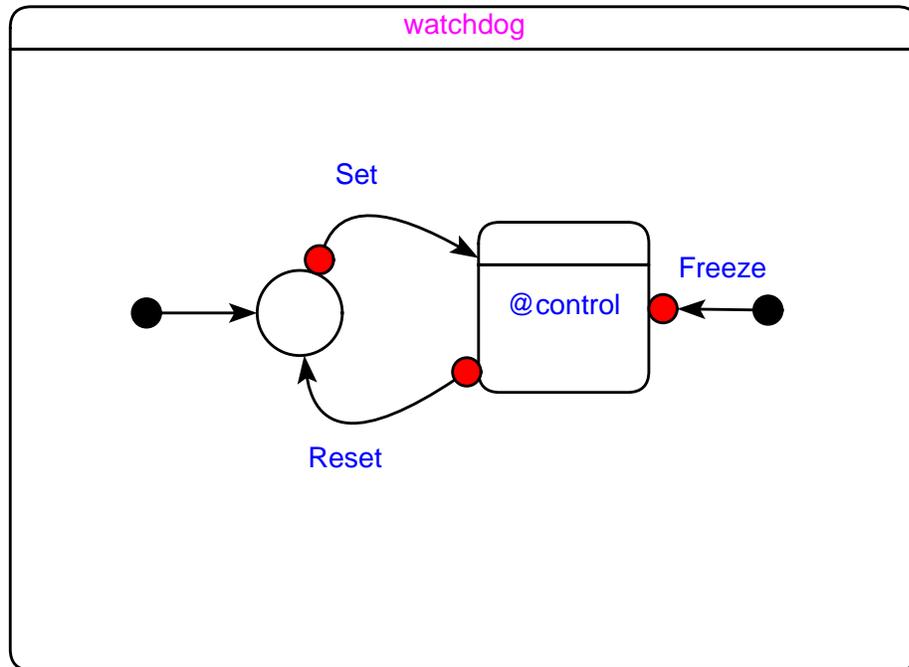


Figure 1.3: Macro-state watchdog

Declarations

Table 1.4: Declarations

Declarations

input Freeze;

input Set;

input Reset;

input Top;

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```
output Alarm;  
output b1;  
output b0;  
output b2;
```

1.5 External Declarations

Declarations to be provided by the host language:

Chapter 2

Other Views