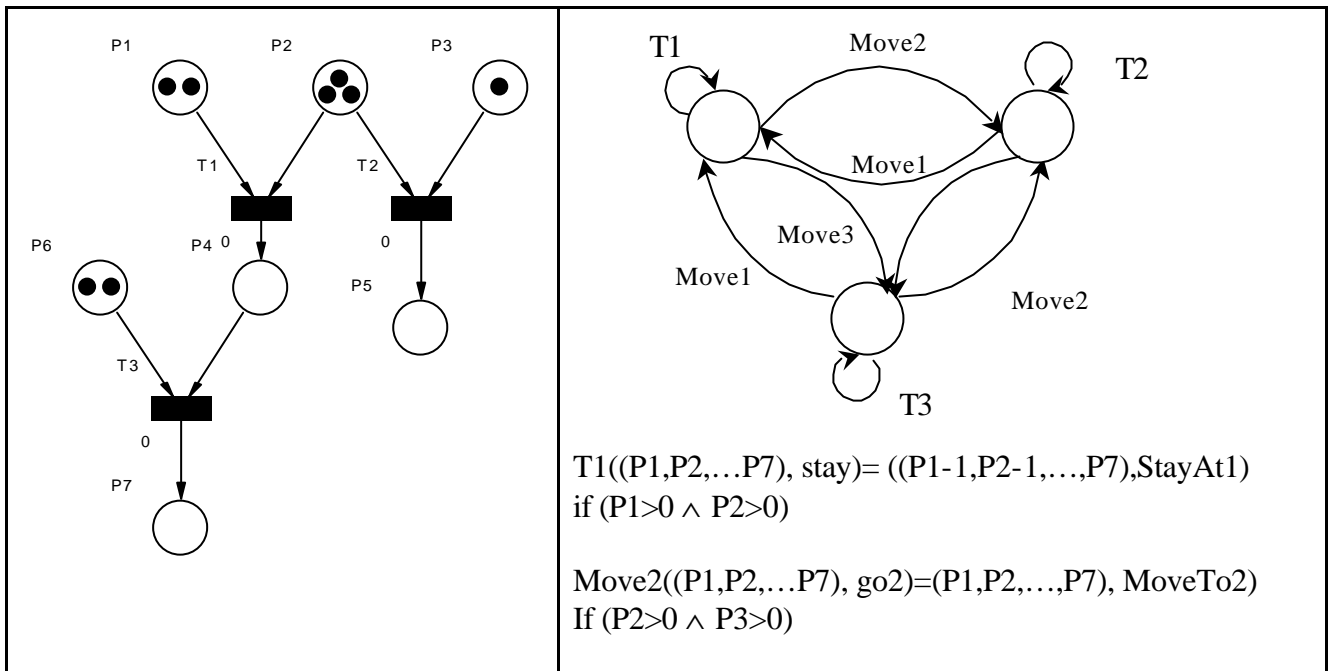


Transforming Petri-Nets (PN) to X-machines (X-mc)

- a) The transformation
 - a. PN transition \rightarrow X-mc function
 - b. PN transition \rightarrow X-mc state – models the fact that we may attempt to execute a PN transition
 - c. The n -th PN place \rightarrow the n -th element of the memory tuple
 - d. The input set of the X-machine is: $\Sigma = \{\text{stay}, \text{go1}, \dots, \text{goN}\}$
 - e. The output set of the x-machine is: $\tilde{A} = \{\text{StayAt1}, \dots, \text{MoveTo1} \dots\}$

b) An example



c) The rationale:

Question : How can we test the software before installing it into the hardware?

