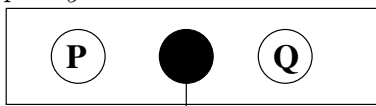


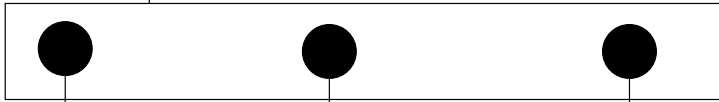
SimpleSystem



$$SV_{SimpleSystem} =$$

$$\begin{aligned} &\langle \text{p-send}(m), \text{in}(m), - \rangle \rightarrow \text{in}(m) \\ &\langle \text{p-a}, -, - \rangle \rightarrow \text{p-a} [\forall x. \text{p-a} \neq \text{p-send}(x)] \\ &\langle -, \text{out}(m, \text{ec}), \text{q-recv}(m, \text{ec}) \rangle \rightarrow \text{out}(m, \text{ec}) \\ &\langle -, -, \text{q-b} \rangle \rightarrow \text{q-b} [\forall x, y. \text{q-b} \neq \text{q-recv}(x, y)] \\ &\langle -, \tau, - \rangle \rightarrow \tau \end{aligned}$$

SimpleProtocol



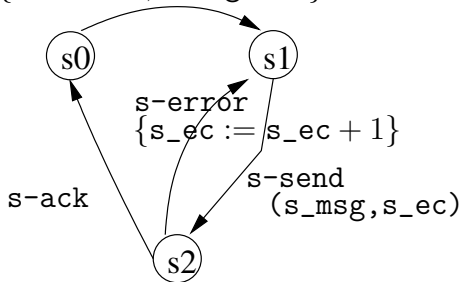
$$SV_{SimpleProtocol} =$$

$$\begin{aligned} &\langle \text{s-recv}(m), -, - \rangle \rightarrow \text{in}(m) \\ &\langle \text{s-send}(m, \text{ec}), \text{m-recv}(m, \text{ec}), - \rangle \rightarrow \tau \\ &\langle -, \text{m-send}(m, \text{ec}), \text{r-recv}(m, \text{ec}) \rangle \rightarrow \tau \\ &\langle \text{s-error}, \text{m-error}, - \rangle \rightarrow \tau \\ &\langle \text{s-ack}, -, \text{r-ack} \rangle \rightarrow \tau \\ &\langle -, -, \text{r-send}(m, \text{ec}) \rangle \rightarrow \text{out}(m, \text{ec}) \\ &\langle -, \tau, - \rangle \rightarrow \tau \end{aligned}$$

Sender

vars:
s_ec: Nat
m, s_msg: Data

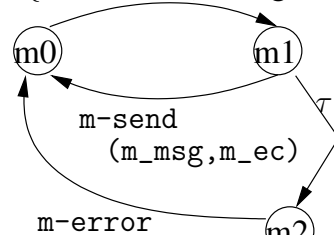
s-recv(?m)
{s_ec := 0, s_msg := m}



Medium

vars:
ec, m_ec: Nat
m, m_msg: Data

m-recv(?m, ?ec)
{m_ec := ec, m_msg := m}



Receiver

vars:
ec, r_ec: Nat
m, r_msg: Data

r-recv(?m, ?ec)
{r_ec := ec, r_msg := m}

