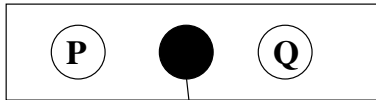


ABP



$SV_{ABP} =$

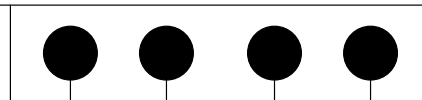
$\langle \text{send}(m), \text{in}(m), - \rangle \rightarrow \underline{\text{send}(m)}$

$\langle a, -, - \rangle \rightarrow a \ [a \neq \text{send}(m)]$

$\langle -, \text{out}(m), \text{recv}(m) \rangle \rightarrow \underline{\text{recv}(m)}$

$\langle -, -, b \rangle \rightarrow b \ [b \neq \text{recv}(m)]$

Protocol



$SV_{Protocol} =$

$\langle \text{in}(m), -, -, - \rangle \rightarrow \text{in}(m)$

$\langle \text{send}(m, b), \text{in}(m, b), -, - \rangle \rightarrow \underline{\text{send}(m, b)}$

$\langle -, \text{out}(m, b), -, \text{recv}(m, b) \rangle \rightarrow \underline{\text{recv}(m, b)}$

$\langle -, -, -, \text{out}(m) \rangle \rightarrow \text{out}(m)$

$\langle -, -, \text{in}(b), \text{sack}(b) \rangle \rightarrow \underline{\text{sack}(b)}$

$\langle \text{rack}(b), -, \text{out}(b), - \rangle \rightarrow \underline{\text{rack}(b)}$

Sender

var $b, sb : \text{Bool}$
var $m : \text{Data}$

$\{sb := \text{false}\}$

$\text{in}(?m)$

0

1

τ

$\text{rack}(?b)[b = sb]$
 $\{sb := \neg sb\}$

$\text{send}(m, sb)$

2

$\text{rack}(?b)$
 $[b \neq sb]$

Perfect
or
Faulty
Medium
 (m, b)

Perfect
or
Faulty
Medium
 (b)

Receiver

var $b, rb : \text{Bool}$
var $m : \text{Data}$

$\{rb := \text{false}\}$

$\text{recv}(?m, ?b)$
 $[rb = b]$

0

1

$\text{sack}(rb)$

$\text{out}(m)$

2

$\text{recv}(?m, ?b)[rb \neq b]$
 $\{rb := \neg rb\}$