```
∧ senderState = "WAITING"
        \land ackWireIn = <<>>
       ∧ ackWireOut = <<>>
       \land dataWireOut = <<>>
               \wedge n = 0
       \land dataWireIn = <<>>
          \land output = <<>>
         \land ackSeqNum = 0
          \land senderIdx = 1
          \land buffer = <<>>
\land senderPc = [ SendSynAck |-> "A S",
             ACK |-> "A",
           SynAck |-> "A"
      ReceiveButFirst |-> "A R",
          Sender |-> "A s" ]
    ∧ receiverState = "W̄AITING"
```

```
∧ senderState = "WAITING"
        \land ackWireIn = <<>>
       ∧ ackWireOut = <<>>
       \land dataWireOut = <<>>
               \wedge n = 2
       \land dataWireIn = <<>>
          ∧ output = <<>>
          \Lambda ackSegNum = 0
           \land senderIdx = 1
         \land buffer = <<1>>
\land senderPc = [ SendSynAck |-> "A S",
             ACK |-> "A",
           SynAck |-> "A_",
      ReceiveButFirst |-> "A R",
           Sender |-> "A s" ]
    ∧ receiverState = "WAITING"
```

```
\land senderState = "WAITING"
        \land ackWireIn = <<>>
       ∧ ackWireOut = <<>>
       \land dataWireOut = <<>>
               \wedge n = 3
        \land dataWireIn = <<>>
          ∧ output = <<>>
          \Lambda ackSegNum = 0
           \land senderIdx = 1
        \land buffer = <<1, 2>>
\land senderPc = [ SendSynAck |-> "A S",
             ACK |-> "A",
           SynAck |-> "A_",
      ReceiveButFirst |-> "A R",
           Sender |-> "A s" ]
    ∧ receiverState = "WĀITING"
```

```
\land senderState = "WAITING"
        \land ackWireIn = <<>>
       \land ackWireOut = <<>>
       \land dataWireOut = <<>>
               \wedge n = 4
        \land dataWireIn = <<>>
          \land output = <<>>
          \Lambda ackSegNum = 0
           \land senderIdx = 1
       \land buffer = <<1, 2, 3>>
\land senderPc = [ SendSynAck |-> "A S",
             ACK |-> "A",
            SynAck |-> "A ",
      ReceiveButFirst |-> "A R",
           Sender |-> "A s" ]
    ∧ receiverState = "W̄AITING"
```