The Two-Process One-Bit Algorithm

```
--algorithm OneBit{
   variable x = [i    ∈ {0, 1} ↦ FALSE] ;
   fair process ( P ∈ {0, 1} )
    { ncs:- while ( TRUE )
                {      skip ;
                  e1: x[self] := TRUE ;
                  e2: if ( ¬x[1 − self] ) { cs: skip }
                      else { if ( self = 0 ) { goto e2 }
                                else { e3: x[1] := FALSE ;
                                       e4: while ( x[0] ) { skip } ;
                                           goto e1
                                     }
                           } ;
                   f:    x[self] := FALSE
                }
     }
  }
```

CLOSE