

```

--algorithm BBuf {
  variables  $buf \in [0..(N-1) \rightarrow Msg]$ ,  $p = 0$ ,  $c = 0$ ;
  process (Producer = "P")
    {  $p1$ : while (TRUE)
      { await  $p \oplus c \neq N$  ;
        with ( $v \in Msg$ ) {  $buf[p \% N] := v$ };
         $p := p \oplus 1$ 
      }
    }
  process (Consumer = "C")
    {  $c1$ : while (TRUE)
      { await  $p \neq c$ ;
         $c := c \oplus 1$ 
      }
    }
}

```