## – MODULE InnerFIFO —

 $\begin{array}{l} {\rm EXTENDS} \ Naturals, \ Sequences \\ {\rm CONSTANT} \ Message \\ {\rm VARIABLES} \ in, \ out, \ q \end{array}$ 

 $\begin{array}{l} \mathit{InChan} \ \stackrel{\triangle}{=} \ \mathit{Instance} \ \mathit{Channel} \ \mathit{With} \ \mathit{Data} \leftarrow \mathit{Message}, \ \mathit{chan} \leftarrow \mathit{in} \\ \mathit{OutChan} \ \stackrel{\triangle}{=} \ \mathit{Instance} \ \mathit{Channel} \ \mathit{With} \ \mathit{Data} \leftarrow \mathit{Message}, \ \mathit{chan} \leftarrow \mathit{out} \\ \end{array}$ 

$$Init \triangleq \land InChan!Init \land OutChan!Init \land q = \{\}$$