Answer

Use the same INSTANCE statement and definition of chBar as in module BoundedChannel, and have TLC check the temporal property C!Spec. TLC reports that an action property at a certain location of module BoundedChannel is violated. Clicking on that location reveals the property to be $\Box[Next]_{var}$, indicating that a step of FGBBuf does not implement a legal step of BChan. Using the Trace Explorer reveals the problem to be that a p2 action changes in, but leaves chBar unchanged—the change to chBar being effected by the subsequent p3 action.