

Answer

The weakest inductive invariant I found that is implied by *Init* and implies *MutualExclusion* is:

$\wedge \textit{TypeOK}$

$\wedge \textit{MutualExclusion}$

$\wedge pc[0] \notin \{ \text{"e3"}, \text{"e4"} \}$

$\wedge \forall i \in \{0, 1\} : \textit{InCS}(i) \vee (pc[i] = \text{"e2"}) \Rightarrow x[i]$

[CLOSE](#)