val-axiom^{0,22}

$$
\begin{array}{l}
\text{val-axiom}(E;V;M;\mathit{info};\mathit{pred}?;\\
\qquad\qquad \mathit{init};\mathit{Trans};\mathit{Choose};\\
\qquad\qquad \mathit{Send};\mathit{val})\\
\equiv_{\text{def}}\ (\forall e{:}E.\\
\qquad \text{islocal}(\text{kind}(e))\\
\qquad \Rightarrow \text{isl}(\mathit{Choose}(\text{loc}(e),\text{act}(\text{kind}(e)),\text{state_when}(e)))\\
\qquad\quad \&\ \mathit{val}(e) = \text{outl}(\mathit{Choose}(\text{loc}(e),\text{act}(\text{kind}(e)),\text{state_when}(e))))\\
\qquad \&\ (\forall e{:}E.\\
\qquad\quad \text{isrcv}(\text{kind}(e))\\
\qquad\quad \Rightarrow (\langle \text{lnk}(\text{kind}(e)), \text{tag}(\text{kind}(e)), (\mathit{val}(e))\rangle \in \mathit{Send}\\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad (\text{loc}(\text{sender}(e))\\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad ,\text{kind}(\text{sender}(e))\\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad ,\mathit{val}(\text{sender}(e))\\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad ,\text{state_when}(\text{sender}(e)))))
\end{array}
$$

clarification:

$$
\begin{array}{l}
\text{val-axiom}(E;V;M;\mathit{info};\mathit{pred}?;\\
\qquad\qquad \mathit{init};\mathit{Trans};\mathit{Choose};\\
\qquad\qquad \mathit{Send};\mathit{val})\\
\equiv_{\text{def}}\ (\forall e{:}E.\\
\qquad \text{islocal}(\text{kind}(\mathit{info};e))\\
\qquad \Rightarrow \text{isl}(\mathit{Choose}\\
\qquad\qquad\quad (\text{loc}(\mathit{info};e)\\
\qquad\qquad\quad ,\text{act}(\text{kind}(\mathit{info};e))\\
\qquad\qquad\quad ,\text{state_when}(e;\mathit{info};\mathit{pred}?;\mathit{init};\mathit{Trans};\mathit{val})))\\
\qquad\quad \&\ \mathit{val}(e)\\
\qquad\qquad\quad =\\
\qquad\qquad\quad \text{outl}(\mathit{Choose}\\
\qquad\qquad\qquad\quad (\text{loc}(\mathit{info};e)\\
\qquad\qquad\qquad\quad ,\text{act}(\text{kind}(\mathit{info};e))\\
\qquad\qquad\qquad\quad ,\text{state_when}(e;\mathit{info};\mathit{pred}?;\mathit{init};\mathit{Trans};\mathit{val})))\\
\qquad\qquad\quad \in V(\text{loc}(\mathit{info};e),\text{act}(\text{kind}(\mathit{info};e))))\\
\qquad \&\ (\forall e{:}E.\\
\qquad\quad \text{isrcv}(\text{kind}(\mathit{info};e))\\
\qquad\quad \Rightarrow (\langle \text{lnk}(\text{kind}(\mathit{info};e))\\
\qquad\qquad\quad ,\text{tag}(\text{kind}(\mathit{info};e))\\
\qquad\qquad\quad ,(\mathit{val}(e))\rangle \in \mathit{Send}\\
\qquad\qquad\qquad\qquad\qquad (\text{loc}(\mathit{info};\text{sender}(\mathit{info};e))\\
\qquad\qquad\qquad\qquad\qquad ,\text{kind}(\mathit{info};\text{sender}(\mathit{info};e))\\
\qquad\qquad\qquad\qquad\qquad ,\mathit{val}(\text{sender}(\mathit{info};e))\\
\qquad\qquad\qquad\qquad\qquad ,\text{state_when}(\text{sender}(\mathit{info};e);\mathit{info};\mathit{pred}?;\mathit{init};\mathit{Trans};\mathit{val})) \in \text{Msg}(M)))
\end{array}
$$

http://www.cs.cornell.edu/Info/Projects/NuPrl/FDLcontent/p0_286125_/p55_287007_{val-axiom}.html