

## **mux-component-property**<sup>11,40</sup>

$\forall ds:(\text{Id} \rightarrow \text{Type}), da:(\text{Id} \rightarrow \text{Knd} \rightarrow \text{Type}), Aa, Ba, Ab, Bb:\text{Type}, Ca:\text{Component}(ds;da;Aa;Ba),$   
 $Cb:\text{Component}(ds;da;Ab;Bb), Pa:\text{ComponentSpec}(Aa;Ba), Pb:\text{ComponentSpec}(Ab;Bb).$   
 $\text{component-compatible}(ds;da;Aa;Ab;Ca;Cb)$   
 $\Rightarrow \text{component-output-disjoint}\{i:l\}(ds;da;Aa;Ab;Ca;Cb)$   
 $\Rightarrow Ca \mid\text{-} es,in,out.Pa(es,in,out)$   
 $\Rightarrow Cb \mid\text{-} es,in,out.Pb(es,in,out)$   
 $\Rightarrow \text{mux-component}(Ca;Cb) \mid\text{-} es,in,out.Pa(es,es\text{-interface-left}(in),es\text{-interface-left}(out))$   
 $\quad \& Pb(es$   
 $\quad \quad ,es\text{-interface-right}(in)$   
 $\quad \quad ,es\text{-interface-right}(out))$