

f2f+-pred-at-most-one-min^{11,40}

$\forall es:ES, ff:FIFO, f2f+:F2F+-decls.$

$\text{plus-ify}\{i:1\}(es;ff;is_req;is_ack;awaiting;owes_ack)$

$\Rightarrow (\forall sndr, rcvr:ff.C, m, m':E.$

$([m: sndr \dashv\vdash is_req \rightarrow rcvr] \vee [m: rcvr \dashv\vdash is_ack \rightarrow sndr])$

$\Rightarrow ([m': sndr \dashv\vdash is_req \rightarrow rcvr] \vee [m': rcvr \dashv\vdash is_ack \rightarrow sndr])$

$\Rightarrow (\forall e:E. \neg f2f+-pred(e,m))$

$\Rightarrow (\forall e:E. \neg f2f+-pred(e,m'))$

$\Rightarrow (m = m')$