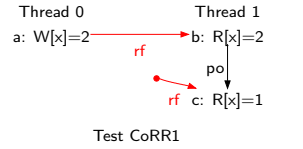
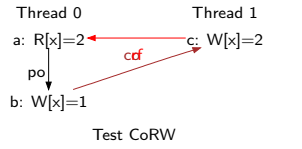
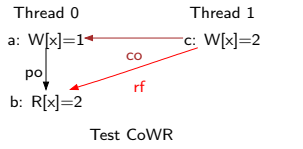
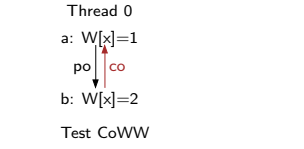


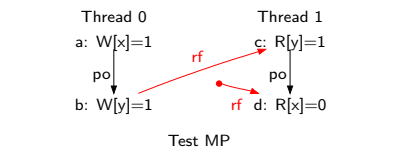
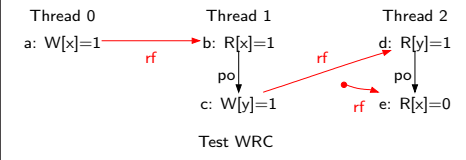
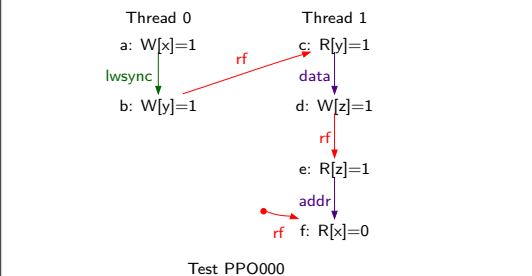
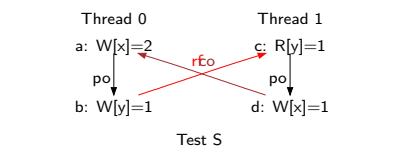
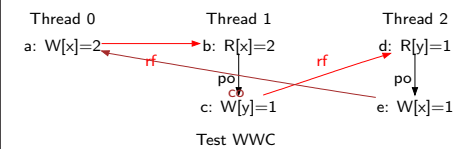
# POWER and ARM Litmus Tests

<http://www.cl.cam.ac.uk/~pes20/ppc-supplemental>

Coherence tests			
<b>CoRR1: rf,po,fr</b> forbidden  <p>Test CoRR1</p>	<b>CoRW: rf,po,co</b> forbidden  <p>Test CoRW</p>	<b>CoWR: co,po,rf<sup>-1</sup></b> forbidden  <p>Test CoWR</p>	<b>CoWW: po,co</b> forbidden  <p>Test CoWW</p>

## 4-edge 2-thread tests

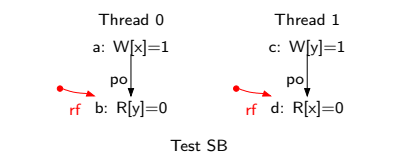
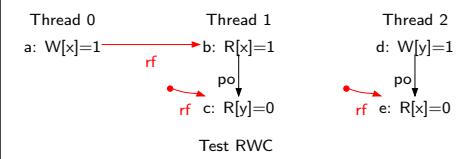
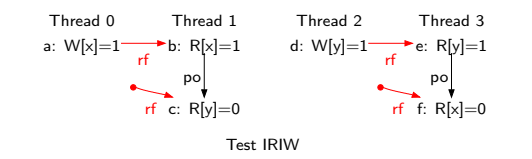
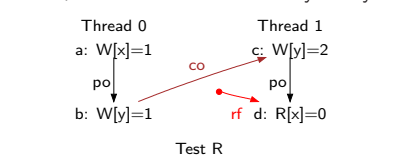
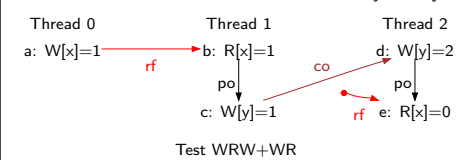
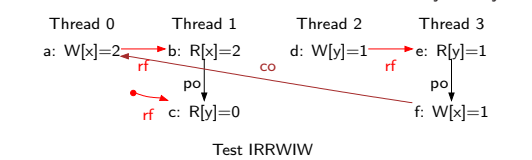
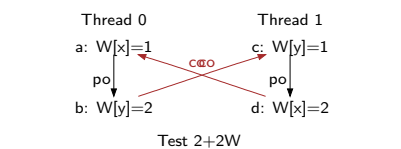
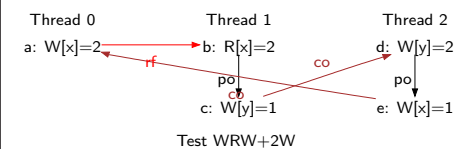
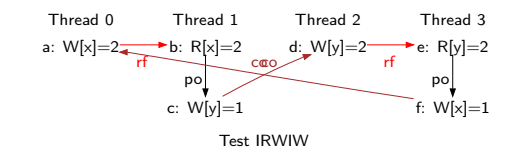
## 5-edge extensions along one rf edge

<b>One rf</b> <b>MP: rf,fr</b> needs lwsync+RRdep  <p>Test MP</p>	<b>Two rf</b> <b>WRC: rf,rf,fr</b> needs lwsync+RRdep  <p>Test WRC</p>	<b>Preserved read-read program order</b> <b>PPO000-019: barrier,rf,intra-thread*,fr</b>  <p>Test PPO000</p>
<b>S: rf,co</b> needs lwsync+RWdep  <p>Test S</p>	<b>WWC: rf,rf,co</b> needs lwsync+RWdep  <p>Test WWC</p>	

## No rf

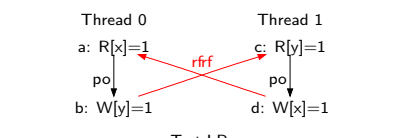
## One rf

## 6-edge extensions along two rf edges

<b>SB: fr,fr</b> needs sync+sync  <p>Test SB</p>	<b>RWC: rf,fr,fr</b> needs sync+sync  <p>Test RWC</p>	<b>IRIW: rf,fr,rf,fr</b> needs sync+sync  <p>Test IRIW</p>
<b>R: co,fr</b> needs sync+sync  <p>Test R</p>	<b>WRW+WR: rf,co,fr</b> needs sync+sync  <p>Test WRW+WR</p>	<b>IRRWIW: rf,fr,rf,co</b> needs sync+sync  <p>Test IRRWIW</p>
<b>2+2W: co,co</b> needs lwsync+lwsync  <p>Test 2+2W</p>	<b>WRW+2W: rf,co,co</b> needs lwsync+lwsync  <p>Test WRW+2W</p>	<b>IRWIW: rf,co,rf,co</b> needs lwsync+lwsync  <p>Test IRWIW</p>

## Two rf

## Key

<b>LB: rf,rf</b> needs RWdep+RWdep  <p>Test LB</p>
--

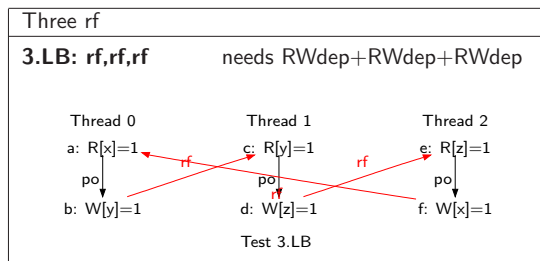
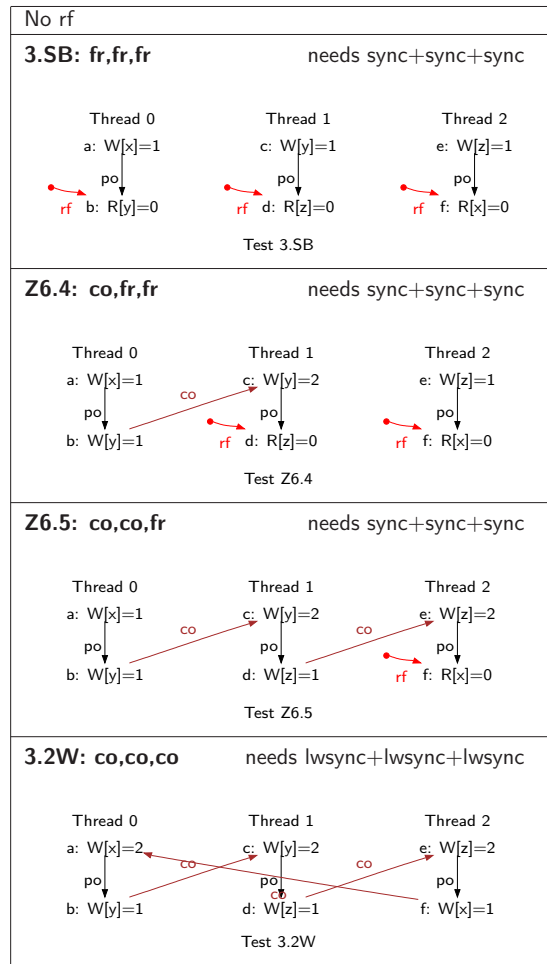
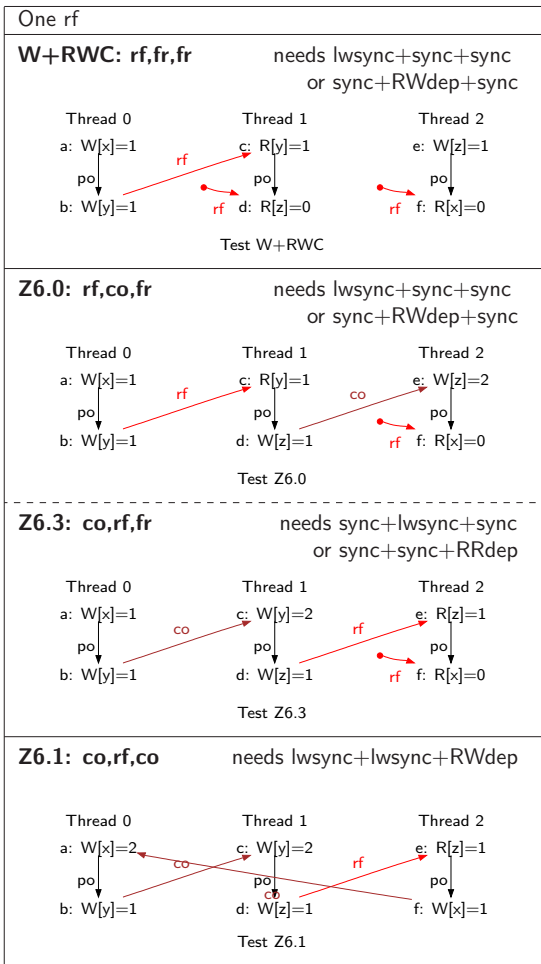
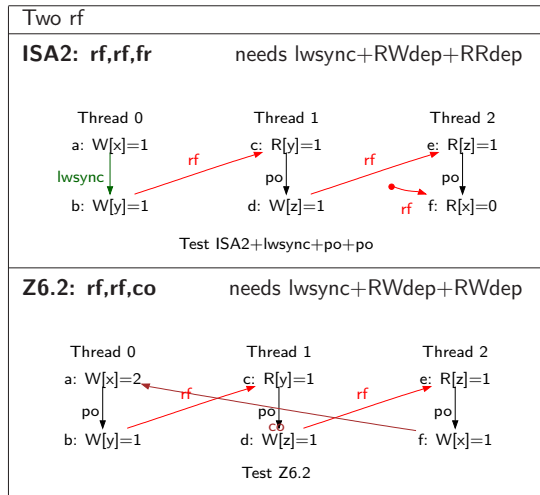
### Edges:

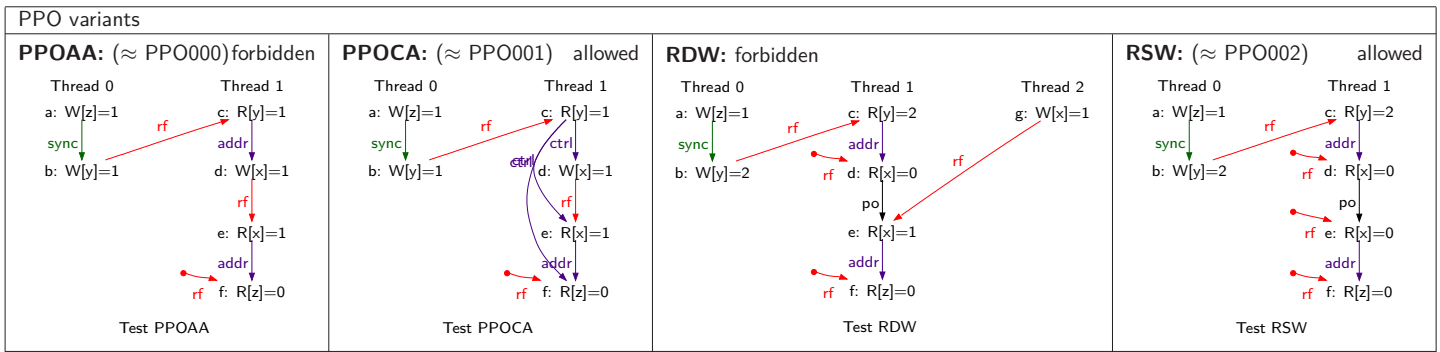
po program order  
 rf reads-from  
 co coherence order  
 fr from-reads: a read from a coherence-predecessor, shown with an rf edge from the (red dot) initial state

Read-read and read-write dependencies:  
 RRdep ::= addr | ctrlisync  
 RWdep ::= addr | data | ctrl | ctrlisync  
 {RRdep,RWdep} < lwsync < sync  
 For ARM, use DMB for lwsync and sync and ctrl-ISB for ctrlisync

6-edge 3-thread tests

DRAFT – the “needs” entries need checking





**Register Shadowing**

