```
arch
+ src sync req
+ dst sync ack
+ dst sync ack reg
+ src sync reg sync to dest
+ dst sync ack sync to src
+ src in reg
+ src in hold
+ src in hold sync to dest
+ src busy sync to dest
+ dest ack
+ dest ack sync to src
+ PROCESS 512()
+ PROCESS 513()
+ PROCESS 514()
+ PROCESS 515()
+ PROCESS 516()
```