

Caching Locks



- Spin lock: to acquire a lock, a process may enter an infinite loop that keeps attempting a read-modify till it succeeds
- If the lock is in memory, there is heavy bus traffic → other processes make little forward progress
- Locks can be cached:
 - cache coherence ensures that a lock update is seen by other processors
 - the process that acquires the lock in exclusive state gets to update the lock first
 - spin on a local copy – the external bus sees little traffic