

Mutual Exclusion With Busy Waiting

Hardware Solution: The TSL Instruction

Lock the memory bus

enter_region:

TSL REGISTER,LOCK

CMP REGISTER,#0

JNE enter_region

RET

| copy lock to register and set lock to 1

| was lock zero?

| if it was non zero, lock was set, so loop

| return to caller; critical region entered

leave_region:

MOVE LOCK,#0

RET

| store a 0 in lock

| return to caller