



Организација рачунара – КЗ решење

1.(20)

```
LOAD #0000h
STORE MemSem1
STORE MemSem2
LOAD #1000h
STORE MemCntA
STORE MemCntB
OUT FF03h
STORE MemDstA
LOAD #2000h
STORE MemDstB
LOAD #3000h
OUT FF05h
LOAD #8000h
OUT FF10h
LOAD #8002h
OUT FF20h
LOAD #8000h
OUT FF30h
LOAD #8006h
OUT FF00h
Loop0: IN FF11h
AND #0008h
JZ Loop0
IN FF12h
STORE (MemDstA)
INC MemDstA
DEC MemCntA
JNZ Loop0
LOAD #0000h
OUT FF10h
Wait12: LOAD MemSem1
AND MemSem2
JZ Wait12
...
LOAD #1000h
STORE MemCnt
STORE MemA
LOAD #2000h
STORE MemB
LOAD #3000h
STORE MemC
LOAD #4000h
STORE MemD
Loop: LOAD (MemA)
ADD (MemB)
SUB (MemC)
STORE (MemD)
INC MemA
INC MemB
INC MemC
INC MemD
DEC MemCnt
JNZ Loop
...
LOAD #0000h
STORE MemSem2
LOAD #1000h
OUT FF03h
LOAD #4000h
OUT FF04h
LOAD #8010h
OUT FF30h
LOAD #8012h
OUT FF00h
Wait2: LOAD MemSem2
AND #0001h
JZ Wait2
HALT

Прекидна рутина за PER1:
PUSHA
IN FF22h
STORE (MemDstB)
INC MemDstB
DEC MemCntB
JNZ Back
LOAD #0001h
STORE MemSem1
LOAD #0000h
OUT FF20h
Back: POPA
RTI

Прекидна рутина за DMA:
PUSHA
LOAD #0000h
OUT FF30h
OUT FF00h
LOAD #0001h
STORE MemSem2
POPA
RTI
```

2. (20) Погледати материјале са предавања.