



Организација рачунара – КЗ решење

1.(20)

```
LOAD #0000h
STORE MemSem1
LOAD #100h
STORE MemCntA
STORE MemCntB
LOAD #1000h
STORE MemDstA
LOAD #1100h
STORE MemDstB
LOAD #0004h
STORE FF10h
LOAD #0005h
STORE FF20h
Loop0: LOAD FF11h
      AND #0040h
      JZ Loop0
      LOAD FF12h
      STORE (MemDstA)
      INC MemDstA
      DEC MemCntA
      JNZ Loop0
      LOAD #0000h
      STORE FF10h
Wait1: LOAD MemSem1
      AND #0001h
      JZ Wait1
      ...
      LOAD #100h
      STORE MemCnt
      LOAD #1000h
      STORE MemA
      LOAD #1100h
      STORE MemB
      LOAD #1200h
      STORE MemC
      LOAD #1300h
      STORE MemD
Loop:  LOAD (MemA)
      SUB (MemB)
      STORE (MemC)
      LOAD (MemB)
      SUB (MemA)
      STORE (MemD)
      INC MemA
      INC MemB
      INC MemC
      INC MemD
      DEC MemCnt
      JNZ Loop
      ...
      LOAD #0000h
      STORE MemSem2
      LOAD #100h
      STORE MemCntC
      LOAD #1200h
      STORE MemSrcC
      LOAD #104h
      STORE FF20h
      LOAD #100h
      STORE FF03h
      LOAD #1300h
      STORE FF04h
      LOAD #0104h
      STORE FF30h
      LOAD #0105h
      STORE FF00h
Loop1: LOAD FF21h
      AND #0040h
      JZ Loop1
      LOAD (MemSrcC)
      STORE FF22h
      INC MemSrcC
      DEC MemCntC
      JNZ Loop1
      LOAD #0000h
      STORE FF20h
Wait2: LOAD MemSem2
      AND #0001h
      JZ Wait2
      HALT

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

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

2. (20) Погледати материјале са предавања.