



Организација рачунара – КЗ решење

1.(20)

```
LOAD #0h
STORE MemSem1
LOAD #100h
STORE MemCntA
STORE MemCntB
LOAD #1000h
STORE MemDstA
LOAD #1100h
STORE MemDstB
LOAD #8000h
STORE FF10h
LOAD #8800h
STORE FF20h
Loop: LOAD FF11h
      AND #8000h
      JZ Loop
      LOAD FF12h
      STORE (MemDstA)
      INC MemDstA
      DEC MemCntA
      JNZ Loop
      LOAD #0000h
      STORE FF10h
Wait:  LOAD MemSem1
      AND #1
      JZ Wait
      ...
      LOAD #100h
      STORE MemCnt
      LOAD #1000h
      STORE MemA
      LOAD #1100h
      STORE MemB
      LOAD #1200h
      STORE MemC
      LOAD #1300h
      STORE MemD
Loop1: LOAD (MemA)
      MUL (MemB)
      STORE (MemC)
      DIV #0002h
      STORE (MemD)
      INC MemA
      INC MemB
      INC MemC
      INC MemD
      DEC MemCnt
      JNZ Loop1
```

```
...
LOAD #0h
STORE MemSem2
LOAD #100h
STORE FF03h
LOAD #1200h
STORE FF04h
LOAD #8880h
STORE FF00h
LOAD #8080h
STORE FF30h
Wait1: LOAD MemSem2
      AND #1
      JZ Wait1
      LOAD #0h
      STORE MemSem2
      LOAD #100h
      STORE FF03h
      LOAD #1300h
      STORE FF04h
      LOAD #8888h
      STORE FF00h
      LOAD #8080h
      STORE FF30h
Wait2: LOAD MemSem2
      AND #1
      JZ Wait2
      HALT
```

```
Прекидна рутина за PER1:
PUSHA
LOAD FF22h
STORE (MemDstB)
INC MemDstB
DEC MemCntB
JNZ Back
LOAD #1
STORE MemSem1
LOAD #0
STORE FF20h
Back: POPA
      RTI
```

```
Прекидна рутина за DMA:
PUSHA
LOAD #0000h
STORE FF30h
STORE FF00h
LOAD #1
STORE MemSem2
POPA
RTI
```

2. (20) Погледати материјале са предавања.