



Организација рачунара – К3 решење

1.(20)

```
LOAD #0h
STORE MemSem0
STORE MemSem2
LOAD #100h
STORE MemCntA
STORE MemCntB
OUT FF03h
STORE MemDstA
LOAD #0200h
STORE MemDstB
LOAD #0300h
OUT FF05h
LOAD #00C0h
OUT FF20h
LOAD #01C0h
OUT FF10h
LOAD #01C0h
OUT FF00h
LOAD #00C0h
OUT FF30h
Loop: IN FF21h
AND #0010h
JZ Loop
IN FF22h
STORE (MemDstB)
INC MemDstB
DEC MemCntB
JNZ Loop
LOAD #0000h
OUT FF20h
Wait: LOAD MemSem0
AND MemSem2
JZ Wait
...
LOAD #100h
STORE MemCnt
LOAD #0100h
STORE MemA
LOAD #0200h
STORE MemB
LOAD #0300h
STORE MemC
LOAD #0400h
STORE MemD

Loop1: LOAD (MemA)
ADD (MemB)
SUB (MemC)
STORE (MemD)
INC MemA
INC MemB
INC MemC
INC MemD
DEC MemCnt
JNZ Loop1
...
LOAD #0h
STORE MemSem2
LOAD #100h
OUT FF03h
LOAD #0400h
OUT FF04h
LOAD #0182h
OUT FF00h
LOAD #0080h
OUT FF30h
Wait1: LOAD MemSem2
AND #1
JZ Wait1
HALT

Прекидна рутина за PER0:
PUSHA
IN FF12h
STORE (MemDstA)
INC MemDstA
DEC MemCntA
JNZ Back
LOAD #1
STORE MemSem0
LOAD #0000h
OUT FF10h
Back: POPA
RTI

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

2. (20) Погледати материјале са предавања.