



Организација рачунара – К3 решење

1.(20)

```
LOAD #0000h
STORE MemSem1
STORE MemSem2
LOAD #0100h
STORE MemCntA
STORE MemCntB
OUT FF03h
STORE MemDstA
LOAD #0200h
STORE MemDstB
LOAD #0300h
OUT FF05h
LOAD #00C0h
OUT FF10h
LOAD #01C0h
OUT FF20h
LOAD #01C0h
OUT FF00h
LOAD #00C0h
OUT FF30h
ChRdy: IN FF11h
AND #0100h
JZ ChRdy
IN FF12h
STORE (MemDstA)
INC MemDstA
DEC MemCntA
JNZ ChRdy
LOAD #0000h
OUT FF10h
Wait: LOAD MemSem1
AND MemSem2
JZ Wait
...
LOAD #0100h
STORE MemCnt
LOAD #0100h
STORE MemA
LOAD #0200h
STORE MemB
LOAD #0300h
STORE MemC
LOAD #0400h
STORE MemD

Loop: LOAD (MemA)
ADD (MemB)
ADD (MemC)
STORE (MemD)
INC MemA
INC MemB
INC MemC
INC MemD
DEC MemCnt
JNZ Loop
...
LOAD #0100h
STORE MemCntD
LOAD #0400h
STORE MemSrcD
LOAD #0080h
OUT FF10h
ChRd1: IN FF11h
AND #0100h
JZ ChRd1
LOAD (MemSrcD)
OUT FF12h
INC MemSrcD
DEC MemCntD
JNZ ChRd1
LOAD #0000h
OUT FF10h
HALT

Прекидна рутина за PER1:
PUSHA
IN FF22h
STORE (MemDstB)
INC MemDstB
DEC MemCntB
JNZ Back
LOAD #1
STORE MemSem1
LOAD #0000h
OUT FF20h
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.