

```

Include 'M64DEF.INC'
.ORG 0x0000
JMP main
.ORG 0x0006
JMP INT2_ISR
.ORG 0x000E
JMP INT6_ISR
.ORG 0x0050
main : LDI R16, low(RAMEND)
      OUT SPL, R16
      LDI R16, high(RAMEND)
      OUT SPH, R16
      LDI R16, 0x00
      STS EICRB, R16
      LDI R16, 0x20
      STS EICRA, R16
      LDI R16, 0x44
      OUT EIMSK, R16
      LDI R16, 0x00
      OUT DDRA, R16
      OUT DDRB, R16
      LDI R16, 0x0FF
      OUT DDRC, R16
      OUT DDRD, R16
      LDI R18, 0x01
      LDI R22, 0x00
      SEI
loop : IN R16, PINA
      IN R17, PINB
      ADD R16, R17
      STS 0x1000, R16
      IN R17, SREG
      AND R17, R18
      STS 0x1001, R17
      JMP Loop

INT2_ISR : IN R19, PINA
          IN R20, PINB
          CPI R19, 127
          BRCC B
          MOV R21, R20
          LSL R21 ; 2B
          CP R21, R19
          BRCC B
          SUB R19, R20
          OUT PORTD, R25
          INC R22
          STS 0x1002, R22
          B: RETI

INT6_ISR : IN R19, PINA
          IN R20, PINB
          CPI R19, 127
          BRCC A
          CPI R20, 127
          BRCC A
          ADD R19, R20
          OUT PORTC, R19
          A: RETI

```