

```

'/*
' * Spannungsanzeige mit LEDs
' *
' * ATTINY85
' *
' * PB0 .. 3 : 12 LEDs charliegeplext
' *
' * V0.8 - 23Aug23
' *
' * LEDs abhaengig von Wert
' * Hardware Steckbretty
' * mit watchdog & powerdown
' *
' * Helmut Berka DL2MAJ

$regfile = "attiny85.dat"
$crystal = 8000000
$hwstack = 8
$swstack = 4
$framesize = 4

Dim Wert As Word ' gemessen von ADC2 = PB4
Dim Wartezeit as Integer ' Wartezeit in ms
Wartezeit = 500 ' Standardwert

'Open "comb.1:9600,8,n,1" For Output As #1

'Config Adc = Single , Prescaler = Auto
Config Adc = Single , Prescaler = Auto , Reference = Internal_2.56_nocap
'Config Adc = Single , Prescaler = Auto , Reference = Internal_1.1

Config Watchdog = 1024
Start Watchdog

Gosub LEDoff

Do

    Wert = Getadc(2) ' ADC2 an PB4
    ' Print #1 , Chr(13);
    ' Print #1 , Wert;
    ' Print #1 , "    ";

    Gosub LEDoff

    Select Case Wert

        Case 0 to 39 : Gosub uCsleep
        Case 40 to 52 : Gosub LED12on
        Case 53 to 66 : Gosub LED11on
        Case 66 to 79 : Gosub LED10on
        Case 80 to 703 : Gosub LED9on
        Case 704 to 744 : Gosub LED8on
        Case 745 to 785 : Gosub LED7on
        Case 786 to 825 : Gosub LED6on
        Case 826 to 866 : Gosub LED5on
        Case 867 to 907 : Gosub LED4on
        Case 908 to 948 : Gosub LED3on
        Case 949 to 989 : Gosub LED2on
        Case 990 to 1024 : Gosub LED1on

    End Select

    Waitms Wartezeit

```

Loop

End

LEDOff:

```

    CONFIG PORTB.0=INPUT      ' clears DDRB.0
    CONFIG PORTB.1=INPUT      ' clears DDRB.1
    CONFIG PORTB.2=INPUT      ' clears DDRB.2
    CONFIG PORTB.3=INPUT      ' clears DDRB.3

```

Return

uCsleep:

```

    Didr0 = Bits(ain1d , Ain0d) 'Disable digital input buffer on the AIN1/0
pin

```

' Set Acsr.acd

'Switch off the power to the Analog

Comparator

' alternative:

Stop Ac

Reset Acsr.acbg

'Disable Analog Comparator Bandgap Select

' Reset Adcsra.aden

'Switch off ADC

' alternative:

Stop Adc

Powerdown

Return

LED1on:

Reset Watchdog

```

    CONFIG PORTB.0=OUTPUT      ' clears DDRB.0
    Portb.0 = 1

```

```

    CONFIG PORTB.3=OUTPUT      ' clears DDRB.3
    Portb.3 = 0

```

Return

LED2on:

Reset Watchdog

```

    CONFIG PORTB.0=OUTPUT      ' clears DDRB.0
    Portb.0 = 0

```

```

    CONFIG PORTB.3=OUTPUT      ' clears DDRB.3
    Portb.3 = 1

```

Return

LED3on:

Reset Watchdog

```

    CONFIG PORTB.2=OUTPUT      ' clears DDRB.2
    Portb.2 = 0

```

```

    CONFIG PORTB.3=OUTPUT      ' clears DDRB.3
    Portb.3 = 1

```

Return

LED4on:

Reset Watchdog

```

    CONFIG PORTB.2=OUTPUT      ' clears DDRB.2
    Portb.2 = 1

```

```

    CONFIG PORTB.3=OUTPUT      ' clears DDRB.3
    Portb.3 = 0

```

Return

```
LED5on:
  Reset Watchdog
  CONFIG PORTB.0=OUTPUT          ' clears DDRB.0
  Portb.0 = 1
```

```
  CONFIG PORTB.2=OUTPUT          ' clears DDRB.2
  Portb.2 = 0
Return
```

```
LED6on:
  Reset Watchdog
  CONFIG PORTB.0=OUTPUT          ' clears DDRB.0
  Portb.0 = 0
```

```
  CONFIG PORTB.2=OUTPUT          ' clears DDRB.2
  Portb.2 = 1
Return
```

```
LED7on:
  Reset Watchdog
  CONFIG PORTB.2=OUTPUT          ' clears DDRB.2
  Portb.2 = 1
```

```
  CONFIG PORTB.1=OUTPUT          ' clears DDRB.1
  Portb.1 = 0
Return
```

```
LED8on:
  Reset Watchdog
  CONFIG PORTB.2=OUTPUT          ' clears DDRB.2
  Portb.2 = 0
```

```
  CONFIG PORTB.1=OUTPUT          ' clears DDRB.1
  Portb.1 = 1
Return
```

```
LED9on:
  Reset Watchdog
  CONFIG PORTB.0=OUTPUT          ' clears DDRB.0
  Portb.0 = 1
```

```
  CONFIG PORTB.1=OUTPUT          ' clears DDRB.1
  Portb.1 = 0
Return
```

```
LED10on:
  Reset Watchdog
  CONFIG PORTB.0=OUTPUT          ' clears DDRB.0
  Portb.0 = 0
```

```
  CONFIG PORTB.1=OUTPUT          ' clears DDRB.1
  Portb.1 = 1
Return
```

```
LED11on:
  Reset Watchdog
  CONFIG PORTB.3=OUTPUT          ' clears DDRB.3
  Portb.3 = 1
```

```
  CONFIG PORTB.1=OUTPUT          ' clears DDRB.1
  Portb.1 = 0
Return
```

```
LED12on:
  Reset Watchdog
  CONFIG PORTB.3=OUTPUT          ' clears DDRB.3
```

```
Portb.3 = 0  
CONFIG PORTB.1=OUTPUT          ' clears DDRB.1  
Portb.1 = 1  
Return
```