

```

.include "tn26def.inc"

.....

;===== *** CODE SEGMENT ***=====

.CSEG          ;begin of program memory
.org 0

;-----SETUP INTERRUPTS HANDLERS-----

reset: rjmp    start          ; 00 Reset Handler
      reti    ; 01 External Interrupt0 Vector Address
      reti    ; 02 Pin change interrupt
      reti    ; 03 Output Compare1A Interrupt Vector Address
      reti    ; 04 Output Compare1B Interrupt Vector Address
      reti    ; 05 Overflow1 Interrupt Vector Address
      rjmp    TimeKey         ; 06 Overflow0 Interrupt Vector Address (Main INT Programm)
      reti    ; 07 Universal Seria Bus Start Interrupt Address
      reti    ; 08 Universal Seria Bus Overflow Interrupt Address
      reti    ; 09 EEPROM Ready Interrupt Vector Address
      reti    ; 0A Analog Comparator Interrupt Vector Address
      reti    ; 0B ADC conversion complete Interrupt Vector Address

.....

;----- BEGIN OF PROGRAMM -----

;----- *** SETUP PART *** -----

start:
      ldi    r16,RAMEND      ;stack init SP=0xdf (RAMEND)
      out   sp,r16          ;

      sbi    ACSR,ACD        ;Analog comparator off

;----- Init Port A -----
      ldi    r16,0xFF        ;Set Ini Ports func (DIRECTION)
      out   ddra,r16        ; DDRA

;   ldi    r16,0x00 ;(INV)   Set Ini Ports value (VALUE)
      ldi    r16,0xFF ;(NO INV) ;Set Ini Ports value (VALUE)
      out   porta,r16       ; PORTA
;-----

;----- Init Port B -----
      ldi    r16,0x38        ;Set Ini Ports func (DIRECTION)
      out   ddrb,r16        ; DDRB

;   ldi    r16,0xBF ;(INV)   Set Ini Ports value (VALUE)
      ldi    r16,0x87 ;(NO INV) Set Ini Ports value (VALUE)
      out   portb,r16       ; PORTB
;-----

;----- Init Timer0 (main INT) -----
      ldi    r16,0x03
      out   TCCR0,r16       ;T/C0 CK/64
      ldi    r16,0x02
      out   TIMSK,r16       ;T/C0 Overflow INT enable
;-----

;----- init ADC converter -----
      ldi    r16,0x9E        ;Single conversion, clear flag,enable INT, prescaler :64 (6
2.5kHz)
      out   ADCSR,r16

      ldi    r16,0xA9        ;set MUX chanel=9, INT Ref=2.56V, Left Adjust results
      out   ADMUX,r16
;-----

```

```
.....

;----- Make ADC conversion -----
;----- Enable "ADC Noise Reduction" mode -----
    ldi    r16,0x28      ;Enable "ADC Noise Reduction" mode & Sleep mode
    out    MCUCR,r16    ;Write to MCU control register
;-----
    Sleep
;----- Disable "ADC Noise Reduction" mode -----
    ldi    r16,0x00    ;Disable "ADC Noise Reduction" mode & Sleep mode
    out    MCUCR,r16    ;Write to MCU control register
;-----
    in     BINL,ADCL    ;Read LOW data byte from ADCL
    in     BINH,ADCH    ;Read HIGH data byte from ADCH
;-----

.....

;===== END OF MAIN PROGRAMM =====
```