

```
$regfile = "m32def.dat"  
'$baud = 19200  
$crystal = 16000000  
$hwstack = 40  
$swstack = 32  
$framesize = 32
```

```
'Clkpr = &B10000000  
'Clkpr = &B00001000
```

```
Tccr1a = &B10000000  
Tccr1b = &B00000100
```

```
Portb = &B11111111  
Ddrb = &B11111111
```

```
Portc = &B00011111  
Ddrc = &B11101011
```

```
Data_port Alias Portb  
Digit1anode Alias Portc. 2  
Digit2anode Alias Portc. 1  
Digit3anode Alias Portc. 0  
Digit4anode Alias Portc. 4  
Mode_key Alias Pinc.3
```

```
Config Timer1 = Counter , Edge = Falling
```

```
Config Timer0 = Timer , Prescale = 1024
```

```
On Ovf0 Sample
```

```
Enable Ovf0  
Enable Interrupts
```

```
Dim Revolution As Word
```

```
Dim Digit1 As Byte ,  
Dim Digit2 As Byte ,  
Dim Digit3 As Byte ,  
Dim Digit4 As Byte
```

```
Dim Wtemp1 As Word ,  
Dim Wtemp2 As Word
```

```
Dim Btemp As Byte  
Dim Refresh As Bit
```

```
Dim Work_mode As Bit  
Dim Index As Byte
```

```
Declare Sub Calculate_digits
```

```
Do
```

```
    If Mode_key = 0 Then Incr Index Else Index = 0  
    If Index = 5 Then  
        Toggle Work_mode
```

```
        Call Calculate_digits
```

```
End If
```

```
If Refresh = 1 Then  
    Call Calculate_digits  
    Refresh = 0  
End If
```

```
Data_port = Digit1
```

```
Reset Digit1anode  
Waitms 4  
Set Digit1anode  
Data_port = Digit2
```

```
Reset Digit2anode  
Waitms 4  
Set Digit2anode  
Data_port = Digit3
```

```
Reset Digit3anode  
Waitms 4  
Set Digit3anode  
Data_port = Digit4
```

```
Reset Digit4anode
Waitms 4
Set Digit4anode
Loop
```

```
Sub Calculate_digits
```

```
If Work_mode = 0 Then Wtemp1 = Revolution * 15 Else Wtemp1 = Revolution \
4
```

```
Digit1 = 255
If Wtemp1 > 999 Then
Btemp = Wtemp1 \ 1000
Digit1 = Lookup(btemp , Cyfra)
Wtemp2 = Btemp * 1000
Wtemp1 = Wtemp1 - Wtemp2
End If
Digit2 = 20
If Wtemp1 > 99 Then
Btemp = Wtemp1 \ 100
Digit2 = Lookup(btemp , Cyfra)
Wtemp2 = Btemp * 100
Wtemp1 = Wtemp1 - Wtemp2
End If
```

```
If Digit2 = 20 Then If Digit1 = 255 Then Digit2 = 255
Digit3 = 20
If Wtemp1 > 9 Then
Btemp = Wtemp1 \ 10
Digit3 = Lookup(btemp , Cyfra)
Wtemp2 = Btemp * 10
Wtemp1 = Wtemp1 - Wtemp2
End If
```

```
If Digit3 = 20 Then If Digit2 = 255 Then Digit3 = 255
```

```
Digit4 = Lookup(wtemp1 , Cyfra )
```

```
If Work_mode = 1 Then Reset Digit4.4
```

```
End Sub
```

```
Sample:
Stop Timer1
Revolution = Timer1
Timer1 = 0
Start Timer1
Refresh = 1
Return
```

Cyfra:

Data 20 , 183 , 56 , 147 , 82 , 80 , 55 , 16 , 18 , 255