

TTL

همانطوریکه در شکل زیر مشاهده می کنید از یک icatmega8 برای پروژه انتخاب شده است. نکاتی که قابل ذکر میباشد:

این تستر، ای سی های ttl از شماره 7400 تا 7434 رو تست میکند به غیر از (7411,7423,7425,7429,7431).

۱. از یک سوکت 14pin برای قرار گرفتن ای سی های تحت تست استفاده شده که تمام پایه های آن به (به غیر از pin7 و pin14) وصل یک مقاومت pull up می شوند.

۲. با قرار دادن ای سی در سوکت و وارد کردن شماره توسط کیبرد و فشردن کلید(*) ای سی تست می شود اگر سالم بود با روشن شدن led-green و خاموش شدن آن نشان داده میشود اگر هم ای سی سوخته، با روشن شدن led-red نمایش داده میشود.

۳. کلید (#) برای ریست شدن می باشد. (برای وارد کردن شماره ای سی جدید)

۴. از کریستال داخلی 8mhz برای کار ای سی انتخاب شده است.

۵. از سوکت به ترتیب از چپ به راست pin1.pin2.pin3.pin4.pin5.pin6

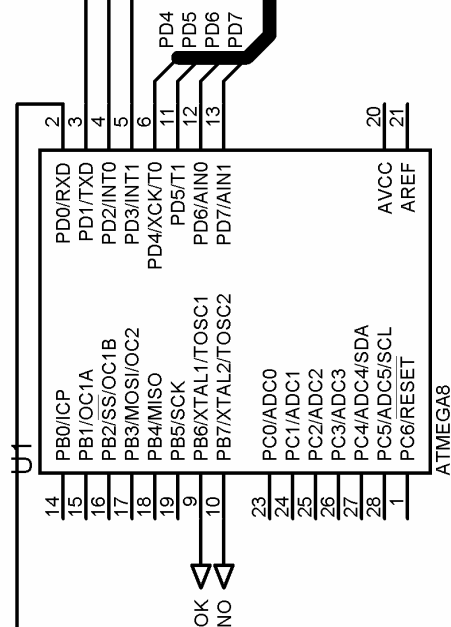
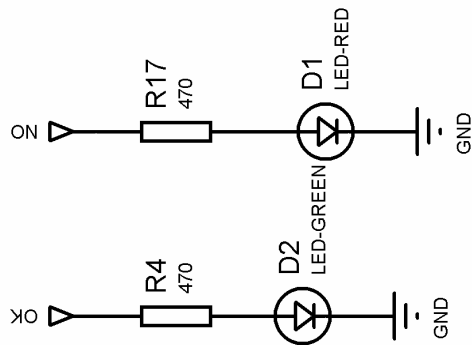
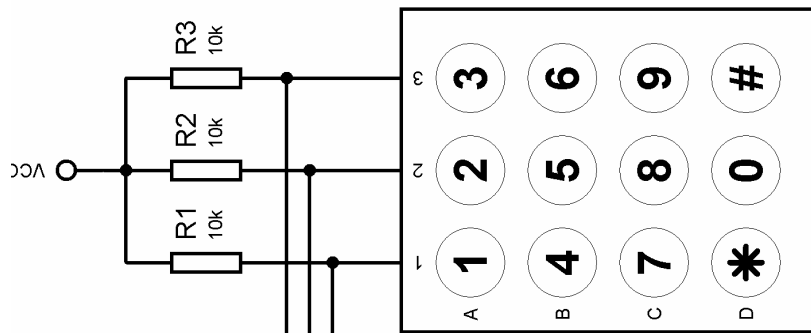
وصل pc0.pc1.pc2.pc3.pc4.pc5 (pin1 به pc5 و همینطور) ای سی 8 atmega می شود

و همچنین pin8.pin9.pin10.pin11.pin12.pin13 به ترتیب از چپ به راست

وصل می شود. (pin13 به Pb5 و همینطور) pb0.pb1.pb2.pb3.pb4.pb5

BY:M.ZAREI

در صورتیکه سوالی داشتین با Email:avr2006pic@yahoo.com مکاتبه کنید.

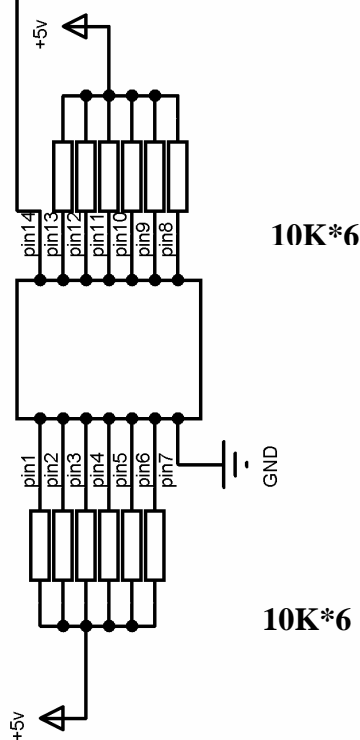


گروه نرم افزار و سخت افزار کویبر الکترونیک

PDIP

(RESET) PC6	1	28	PC5 (ADC5/SCL)
(RXD) PD0	2	27	PC4 (ADC4/SDA)
(TXD) PD1	3	26	PC3 (ADC3)
(INT0) PD2	4	25	PC2 (ADC2)
(INT1) PD3	5	24	PC1 (ADC1)
(XCK/T0) PD4	6	23	PC0 (ADC0)
VCC	7	22	GND
GND	8	21	AREF
(XTAL1/TOSC1) PB6	9	20	AVCC
(XTAL2/TOSC2) PB7	10	19	PB5 (SCK)
(T1) PD5	11	18	PB4 (MISO)
(AIN0) PD6	12	17	PB3 (MOSI/OC2)
(AIN1) PD7	13	16	PB2 (SS/OC1B)
(ICP) PB0	14	15	PB1 (OC1A)

سوکت
14pin



```

'tester ic ttl
'avr2006pic@yahoo.com

$regfile = "m8def.dat"
$crystal = 8000000
Config Portd = &B11110001
Config Portc = Input
Config Portb = &B11000000
Config Pinb.6 = Output
Config Pinb.7 = Output
'*****
Ok Alias Portb.6
No Alias Portb.7
Icon Alias Portd.0
C5 Alias Portc.5
C4 Alias Portc.4
C3 Alias Portc.3
C2 Alias Portc.2
C1 Alias Portc.1
C0 Alias Portc.0
'*****
B5 Alias Portb.5
B4 Alias Portb.4
B3 Alias Portb.3
B2 Alias Portb.2
B1 Alias Portb.1
B0 Alias Portb.0
'*****
D7 Alias Portd.7
D6 Alias Portd.6
D5 Alias Portd.5
D4 Alias Portd.4
Ok = 0 : No = 0 : Icon = 0
Dim A As Byte , Column As Byte , Old As Byte , Key As Byte ,
Flag As Bit , Number0 As Long , Number1 As Long , Number2 As Word , _
Number3 As Byte , Number4 As Byte , Counteric As Byte

Number0 = 0
Number1 = 0
Number2 = 0
Number3 = 0
Number4 = 0
'*****
Main:
Icon = 0
Config Portc = Input
Config Portb = &B11000000
D7 = 0 : D6 = 1 : D5 = 1 : D4 = 1
Gosub Column
If Flag = 1 Then Goto Result1
D7 = 1 : D6 = 0 : D5 = 1 : D4 = 1
Gosub Column
If Flag = 1 Then Goto Result2
D7 = 1 : D6 = 1 : D5 = 0 : D4 = 1
Gosub Column
If Flag = 1 Then Goto Result3
D7 = 1 : D6 = 1 : D5 = 1 : D4 = 0
Gosub Column
If Flag = 1 Then Goto Result4
Goto Main

Result1:
Select Case Key
Case 0 : Old = 1
Case 1 : Old = 2
Case 2 : Old = 3

```

کي برد'

```

        End Select
        Goto Test
Result2:
    Select Case Key
    Case 0 : Old = 4
    Case 1 : Old = 5
    Case 2 : Old = 6
    End Select
    Goto Test
Result3:
    Select Case Key
    Case 0 : Old = 7
    Case 1 : Old = 8
    Case 2 : Old = 9
    End Select
    Goto Test
Result4:
    Select Case Key
    Case 0 : Old = 10
    Case 1 : Old = 0
    Case 2 : Old = 11
    End Select
    Goto Test

تست سطر'
Column:
    Flag = 1
    Key = 0
    If Pind.3 = 0 Then Goto Exit1
    Key = Key + 1
    If Pind.2 = 0 Then Goto Exit1
    Key = Key + 1
    If Pind.1 = 0 Then Goto Exit1
    Key = Key + 1
    Flag = 0
    Return
Exit1:
    Return
    '*****
Test:
    Waitms 20
    D7 = 0 : D6 = 0 : D5 = 0 : D4 = 0
    If Pind.3 = 1 And Pind.2 = 1 And Pind.1 = 1 Then
    Key = 0
    Goto Next0
    Else
    Goto Test
    End If
    '*****

مطمئن از رها ش'
Next0:
    If Old = 10 Or Old = 11 Then Goto Loop1
    Counteric = Counteric + 1
    Select Case Counteric
    Case 0 : Goto Main
    Case 1 : Number1 = Old * 1000
    Case 2 : Number2 = Old * 100
    Case 3 : Number3 = Old * 10
    Case 4 : Number4 = Old
    End Select
    Old = 0
    Goto Main
Loop1:
    If Old = 10 Then
    Number0 = Number1 + Number2
    Number0 = Number0 + Number3
    Number0 = Number0 + Number4
    Number0 = Number0 - 7400
    On Number0 Goto 7400 , 7401 , 7402 , 7403 , 7404 , 7405 , 7406 , 7407
    7408 , 7409 , 7410 , 7411 , 7412 , 7413 , 7414 , 7415 , 7416 , 7417

```

```

7418 , 7419 , 7420 , 7421 , 7422 , 7423 , 7424 , 7425 , 7426 , 7427
7428 , 7429 , 7430 , 7431 , 7432 , 7433 , 7434 , 7435 , 7436 , 7437
7438 , 7439 , 7440 , 7441 , 7442 , 7443 , 7444 , 7445 , 7446 , 7447
7448 , 7449 , 7450
Else
Gosub Clear
Goto Main
End If
Goto Main
7400:

Config Portc = &B110110
Config Portb = &B11110110
Gosub Clear
Icon = 1
Waitms 10                                     '4 gait nand

C5 = 0
C4 = 1                                         'test1

C2 = 0
C1 = 1
'*****
B5 = 0
B4 = 1

B2 = 0
B1 = 1
'*****
If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then
C5 = 1
C4 = 1                                         'test0

C2 = 1
C1 = 1
'*****
B5 = 1
B4 = 1

B2 = 1
B1 = 1
If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Testok
'***
Else
Goto Testno
End If
'*****

7401:
Config Portc = &B011011
Config Portb = &B11011011
Gosub Clear
Icon = 1
Waitms 10
C4 = 0
C3 = 1

C1 = 0
C0 = 1
'*****

B4 = 0
B3 = 1

B1 = 0
B0 = 1
'*****
If Pinc.5 = 1 And Pinc.2 = 1 And Pinb.5 = 1 And Pinb.2 = 1 Then
C4 = 1

```

```

    C3 = 1

    C1 = 1
    C0 = 1
    '*****

    B4 = 1
    B3 = 1

    B1 = 1
    B0 = 1
If Pinc.5 = 0 And Pinc.2 = 0 And Pinb.5 = 0 And Pinb.2 = 0 Then Goto Testok
Else
    Goto Testno
End If

7402:
    Config Portc = &B011011
    Config Portb = &B11011011
    Gosub Clear
    Icon = 1
    Waitms 10

    C4 = 0
    C3 = 0

    C1 = 0
    C0 = 0
    '*****

    B4 = 0
    B3 = 0

    B1 = 0
    B0 = 0
    If Pinc.5 = 1 And Pinc.2 = 1 And Pinb.5 = 1 And Pinb.2 = 1 Then
        '***
        C4 = 1
        C3 = 0

        C1 = 1
        C0 = 0
        '*****

        B4 = 1
        B3 = 0

        B1 = 1
        B0 = 0
    If Pinc.5 = 0 And Pinc.2 = 0 And Pinb.5 = 0 And Pinb.2 = 0 Then Goto Testok
    Else
        Goto Testno
    End If
    Goto Main
'*****

7403:
    Config Portc = &B110110
    Config Portb = &B11110110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0
    C4 = 1

    C2 = 0
    C1 = 1
    '*****
    B5 = 0
    B4 = 1

```

```
B2 = 0
B1 = 1
'*****
If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then
'****
C5 = 1
C4 = 1

C2 = 1
C1 = 1

' *****
B5 = 1
B4 = 1

B2 = 1
B1 = 1

If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
Goto Main
7404:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
Pinb.2 = 1 And Pinb.0 = 1 Then

C5 = 1
C3 = 1
C1 = 1

B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
Goto Main
7405:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 0

C3 = 0
```

```
C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
  Pinb.2 = 1 And Pinb.0 = 1 Then
'***
C5 = 1

C3 = 1

C1 = 1
'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
  Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If

7406:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
  Pinb.2 = 1 And Pinb.0 = 1 Then
C5 = 1

C3 = 1

C1 = 1

'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
  Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If

'*****
7407:
```



```
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 1

C3 = 1

C1 = 1

'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
Pinb.2 = 1 And Pinb.0 = 1 Then

'***
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0

If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If

7408:
Config Portc = &B110110
Config Portb = &B11110110
Gosub Clear
Icon = 1
Waitms 10
C5 = 1
C4 = 1

C2 = 1
C1 = 1

'*****
B5 = 1
B4 = 1

B2 = 1
B1 = 1
If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then

'***
C5 = 0
C4 = 1

C2 = 0
C1 = 1

'*****
B5 = 0
```

```

    B4 = 1

    B2 = 0
    B1 = 1
If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Testok
    Else
        Goto Testno
    End If

'*****
7409:
    Config Portc = &B110110
    Config Portb = &B11110110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 1
    C4 = 1

    C2 = 1
    C1 = 1

    '*****
    B5 = 1
    B4 = 1

    B2 = 1
    B1 = 1
    If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then

        '***
        C5 = 0
        C4 = 1

        C2 = 0
        C1 = 1

        ' *****
        B5 = 0
        B4 = 1

        B2 = 0
        B1 = 1
    If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Testok
        Else
            Goto Testno
        End If
    '*****
7410:
    Config Portc = &B111110
    Config Portb = &B11101110
    Gosub Clear
    Icon = 1
    Waitms 10

    C5 = 0
    C4 = 0
    C3 = 0
    C2 = 0
    C1 = 1

    '*****
    B5 = 1

    B3 = 0
    B2 = 0
    B1 = 1
    If Pinc.0 = 1 And Pinb.4 = 1 And Pinb.0 = 1 Then
        '***

```

```

C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1

'*****
B5 = 1

B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.4 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
'*****
Goto Main
7411:
Gosub Clear
Goto Main
7412:
Config Portc = &B111110
Config Portb = &B11101110
Gosub Clear
Icon = 1
Waitms 10
C5 = 0
C4 = 0
C3 = 0
C2 = 0
C1 = 1
'*****
B5 = 1

B3 = 0
B2 = 0
B1 = 1
If Pinc.0 = 1 And Pinb.4 = 1 And Pinb.0 = 1 Then
'*****
C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1
'*****
B5 = 1

B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.4 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
7413:
Config Portc = &B111110
Config Portb = &B11111110
Gosub Clear
Icon = 1
Waitms 10
C5 = 0
C4 = 1
C3 = 1
C2 = 0
C1 = 1
'*****
B5 = 0
B4 = 1

```

```
B3 = 1
B2 = 0
B1 = 1
If Pinc.0 = 1 And Pinb.0 = 1 Then
'*****
C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1
'*****
B5 = 1
B4 = 1
B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
'*****
Goto Main
7414:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
Pinb.2 = 1 And Pinb.0 = 1 Then
'*****
C5 = 1

C3 = 1

C1 = 1

'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If

'*****
Goto Main
7415:
Config Portc = &B111110
Config Portb = &B11101110
Gosub Clear
Icon = 1
Waitms 10
```

```

C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1

'*****
B5 = 1

B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 1 And Pinb.4 = 1 And Pinb.0 = 1 Then

'****
C5 = 1
C4 = 1
C3 = 0
C2 = 1
C1 = 1

'*****
B5 = 0

B3 = 0
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.4 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If

7416:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
Pinb.2 = 1 And Pinb.0 = 1 Then

'****
C5 = 1

C3 = 1

C1 = 1

'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And Pinb.2 =
And Pinb.0 = 0 Then Goto Testok

```

```
Else
Goto Testno
End If
'*****
```

7417:

```
    Config Portc = &B101010
    Config Portb = &B11101010
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 1

    C3 = 1

    C1 = 1

    '*****
    B5 = 1

    B3 = 1

    B1 = 1
    If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 _
    And Pinb.2 = 1 And Pinb.0 = 1 Then

        '***
        C5 = 0

        C3 = 0

        C1 = 0

        '*****
        B5 = 0

        B3 = 0

        B1 = 0

        If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And _
        Pinb.2 = 0 And Pinb.0 = 0 Then Goto Testok
    Else
        Goto Testno
    End If
```

7418:

```
    Config Portc = &B111110
    Config Portb = &B11111110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0
    C4 = 1
    C3 = 1
    C2 = 0
    C1 = 1

    '*****
    B5 = 0
    B4 = 1
    B3 = 1
    B2 = 0
    B1 = 1
    If Pinc.0 = 1 And Pinb.0 = 1 Then

        '***
        C5 = 1
        C4 = 1
```

```
C3 = 1
C2 = 1
C1 = 1

'*****
B5 = 1
B4 = 1
B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
Goto Main
'*****
7419:
    Config Portc = &B101010
    Config Portb = &B11101010
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0

    C3 = 0

    C1 = 0

    '*****
    B5 = 0

    B3 = 0

    B1 = 0
    If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
    Pinb.2 = 1 And Pinb.0 = 1 Then

    '***
    C5 = 1

    C3 = 1

    C1 = 1

    '*****
    B5 = 1

    B3 = 1

    B1 = 1
    If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And Pinb.2 =
    And Pinb.0 = 0 Then Goto Testok
    Else
    Goto Testno
    End If

    '***
    Goto Main

7420:
    Config Portc = &B111110
    Config Portb = &B11111110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0
    C4 = 1
    C3 = 1
```

```
C2 = 0
C1 = 1

'*****
B5 = 0
B4 = 1
B3 = 1
B2 = 0
B1 = 1
If Pinc.0 = 1 And Pinb.0 = 1 Then

'****
C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1

'*****
B5 = 1
B4 = 1
B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
Goto Main
7421:
Config Portc = &B111110
Config Portb = &B1111110
Gosub Clear
Icon = 1
Waitms 10
C5 = 1
C4 = 1
C3 = 1
C2 = 1
C1 = 1

'*****
B5 = 1
B4 = 1
B3 = 1
B2 = 1
B1 = 1
If Pinc.0 = 1 And Pinb.0 = 1 Then

'****
C5 = 0
C4 = 1
C3 = 0
C2 = 1
C1 = 0

'*****
B5 = 0
B4 = 1
B3 = 0
B2 = 1
B1 = 0
If Pinc.0 = 0 And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
Goto Main
7422:
Config Portc = &B111110
```



```

    Config Portb = &B11111110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0
    C4 = 1
    C3 = 1
    C2 = 0
    C1 = 1

    '*****
    B5 = 0
    B4 = 1
    B3 = 1
    B2 = 0
    B1 = 1
    If Pinc.0 = 1 And Pinb.0 = 1 Then

        '***
        C5 = 1
        C4 = 1
        C3 = 1
        C2 = 1
        C1 = 1

        '*****
        B5 = 1
        B4 = 1
        B3 = 1
        B2 = 1
        B1 = 1
        If Pinc.0 = 0 And Pinb.0 = 0 Then Goto Testok
        Else
            Goto Testno
        End If
        Goto Main
        '*****
7423:                                                                    '16pin
    Gosub Clear                                                                    '16pin

    Goto Main
7424:
    Config Portc = &B110110
    Config Portb = &B11110110
    Gosub Clear
    Icon = 1
    Waitms 10
    C5 = 0
    C4 = 1

    C2 = 0
    C1 = 1

    '*****
    B5 = 0
    B4 = 1

    B2 = 0
    B1 = 1
    '*****
    If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then
        '***
        C5 = 1
        C4 = 1

        C2 = 1
        C1 = 1

        '*****

```

```
B5 = 1
B4 = 1

B2 = 1
B1 = 1

If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Te
'***

Else
Goto Testno
End If
Goto Main
'*****

7425:
Gosub Clear

Goto Main
7426:
Config Portc = &B110110
Config Portb = &B11110110
Gosub Clear
Icon = 1
Waitms 10
C5 = 0
C4 = 1                                     'test1

C2 = 0
C1 = 1
'*****
B5 = 0
B4 = 1

B2 = 0
B1 = 1
'*****
If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then
C5 = 1
C4 = 1                                     'test0

C2 = 1
C1 = 1
'*****
B5 = 1
B4 = 1

B2 = 1
B1 = 1

If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Te
'***

Else
Goto Testno
End If
Goto Main
'*****

7427:

Config Portc = &B111110
Config Portb = &B11101110
Gosub Clear
Icon = 1
Waitms 10
C5 = 0
C4 = 0
C3 = 0
C2 = 0
C1 = 0
```

```

'*****
B5 = 0

B3 = 0
B2 = 0
B1 = 0
If Pinc.0 = 1 And Pinb.4 = 1 And Pinb.0 = 1 Then

'***
C5 = 1
C4 = 1
C3 = 0
C2 = 1
C1 = 1

'*****
B5 = 0

B3 = 0
B2 = 1
B1 = 1
If Pinc.0 = 0 And Pinb.4 = 0 And Pinb.0 = 0 Then Goto Testok

Else
Goto Testno
End If

    Goto Main
'*****
7428:
Config Portc = &B011011
Config Portb = &B11011011
Gosub Clear
Icon = 1
Waitms 10

C4 = 0
C3 = 0

C1 = 0
C0 = 0
'*****

B4 = 0
B3 = 0

B1 = 0
B0 = 0
If Pinc.5 = 1 And Pinc.2 = 1 And Pinb.5 = 1 And Pinb.2 = 1 Then
'***
    C4 = 1
    C3 = 0

    C1 = 1
    C0 = 0
'*****

B4 = 1
B3 = 0

B1 = 1
B0 = 0
If Pinc.5 = 0 And Pinc.2 = 0 And Pinb.5 = 0 And Pinb.2 = 0 Then Goto Te
Else
Goto Testno
End If
    Goto Main
'*****

```

```
7429:                                     'namaloom
      Gosub Clear
      Goto Main
7430:
      Gosub Clear
      Icon = 1
      Waitms 10
      Config Portc = &B 111111
      Config Portb = &B11111111
      C5 = 0
      C4 = 1
      C3 = 0
      C2 = 1
      C1 = 0
      C0 = 1
      '*****
      B5 = 1
      B4 = 1
      B3 = 0
      B2 = 1
      B1 = 1
      If Pinb.0 = 1 Then
      '***
          C5 = 1
          C4 = 1
          C3 = 1
          C2 = 1
          C1 = 1
          C0 = 1
          '*****
          B5 = 1
          B4 = 1
          B3 = 1
          B2 = 1
          B1 = 1
          If Pinb.0 = 0 Then Goto Testok
          Else
          Goto Testno
          End If

          '*****
          Goto Main
7431:
      '16pin
      Gosub Clear

      Goto Main
7432:
      Config Portc = &B110110
      Config Portb = &B11110110
      Gosub Clear
      Icon = 1
      Waitms 10
      C5 = 0
      C4 = 1                                     'test1

      C2 = 0
      C1 = 1
      '*****
      B5 = 0
      B4 = 1

      B2 = 0
      B1 = 1
      '*****
      If Pinc.3 = 1 And Pinc.0 = 1 And Pinb.3 = 1 And Pinb.0 = 1 Then
      C5 = 0
```

```

C4 = 0                                     'test0

C2 = 0
C1 = 0
'*****
B5 = 0
B4 = 0

B2 = 0
B1 = 0

If Pinc.3 = 0 And Pinc.0 = 0 And Pinb.3 = 0 And Pinb.0 = 0 Then Goto Te
'***

Else
Goto Testno
End If
Goto Main
'*****
7433:
Config Portc = &B011011
Config Portb = &B11011011
Gosub Clear
Icon = 1
Waitms 10

C4 = 0
C3 = 0

C1 = 0
C0 = 0
'*****

B4 = 0
B3 = 0

B1 = 0
B0 = 0
If Pinc.5 = 1 And Pinc.2 = 1 And Pinb.5 = 1 And Pinb.2 = 1 Then
'***
    C4 = 1
    C3 = 0

    C1 = 1
    C0 = 0
    '*****

    B4 = 1
    B3 = 0

    B1 = 1
    B0 = 0
    If Pinc.5 = 0 And Pinc.2 = 0 And Pinb.5 = 0 And Pinb.2 = 0 Then Goto Te
    Else
    Goto Testno
    End If
    Goto Main
    '*****
7434:
Config Portc = &B101010
Config Portb = &B11101010
Gosub Clear
Icon = 1
Waitms 10
C5 = 1

C3 = 1

C1 = 1

```

```
'*****
B5 = 1

B3 = 1

B1 = 1
If Pinc.4 = 1 And Pinc.2 = 1 And Pinc.0 = 1 And Pinb.4 = 1 And _
Pinb.2 = 1 And Pinb.0 = 1 Then

'***
C5 = 0

C3 = 0

C1 = 0

'*****
B5 = 0

B3 = 0

B1 = 0

If Pinc.4 = 0 And Pinc.2 = 0 And Pinc.0 = 0 And Pinb.4 = 0 And Pinb.2 =
And Pinb.0 = 0 Then Goto Testok
Else
Goto Testno
End If
'*****
Testok:
Ok = 1
Wait 1
Ok = 0
Goto Main
Testno:
No = 1
Wait 1
No = 0
Goto Main

Clear:

Number0 = 0
Number1 = 0
Number2 = 0
Number3 = 0
Number4 = 0
Counteric = 0
Return
End
```

