Instituto Politécnico Nacional


Escuela Superior de Computo

Materia:

Introducción a los microcontroladores.

Profesor:

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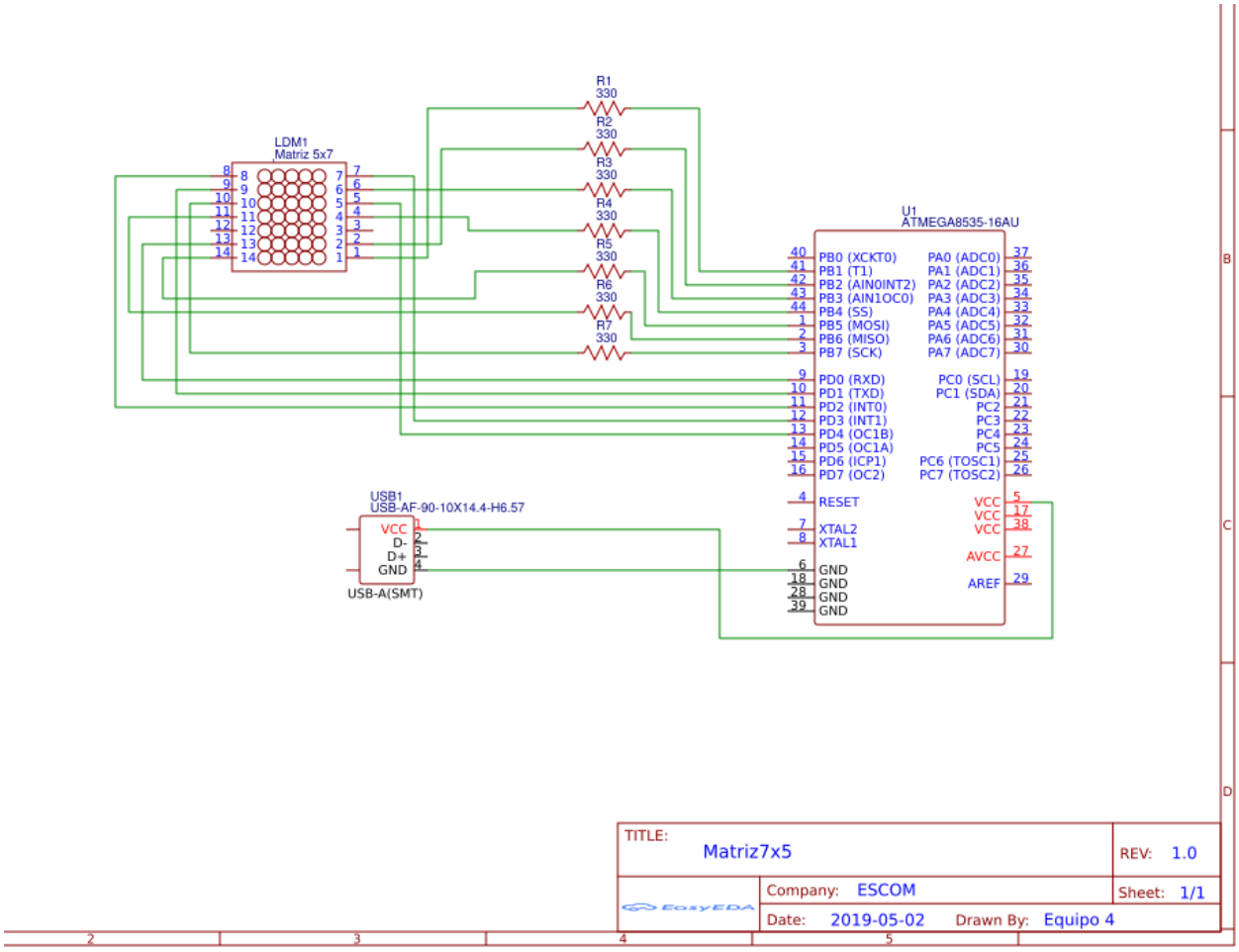
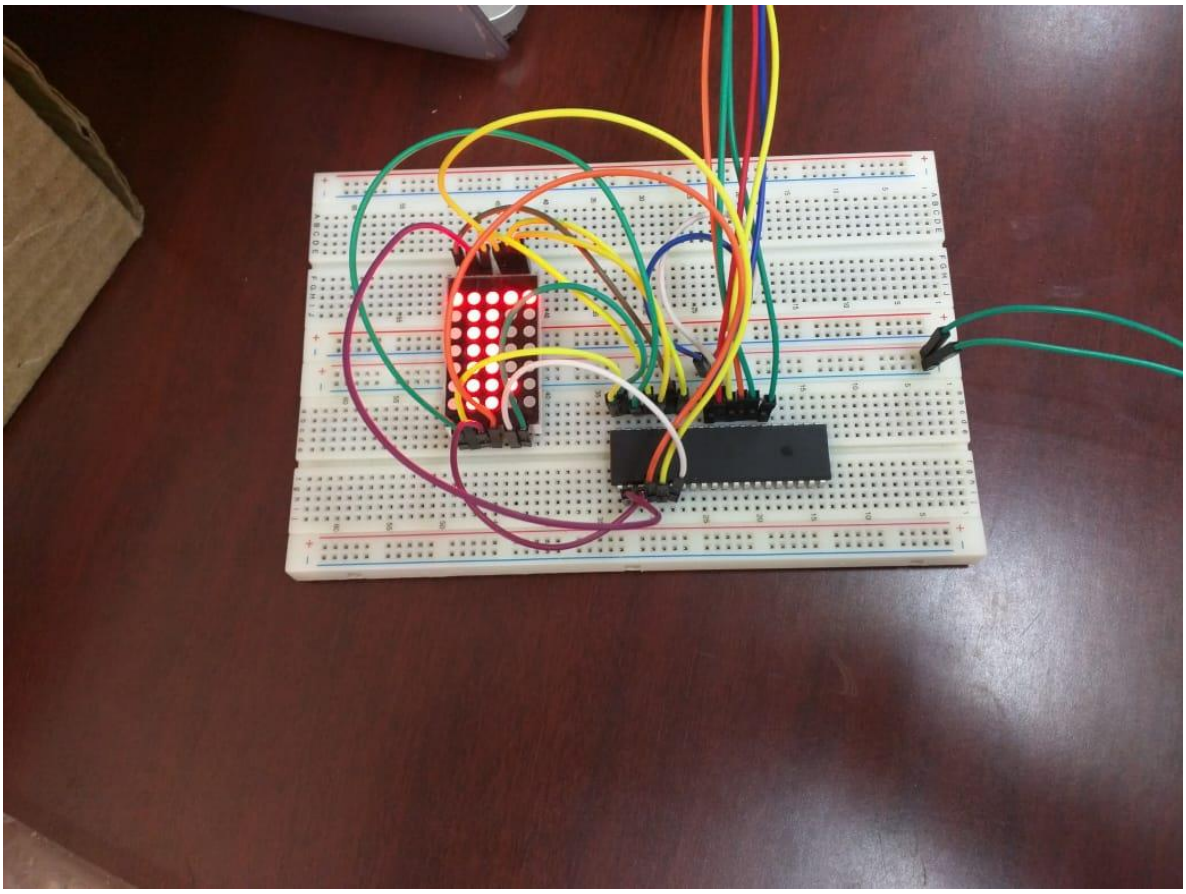
Practica N°17

Matriz 7x5


R1
330
R2
330
R3
330
R4
330
R5
330
R6
330
R7
330
LDM1
Matriz 5x7
U1
ATMEGA8535-16AU
PB0 (XCKT0)
PB1 (T1)
PB2 (AIN0INT2)
PB3 (AIN1OC0)
PB4 (SS)
PB5 (MOSI)
PB6 (MISO)
PB7 (SCK)
PD0 (RXD)
PD1 (TXD)
PD2 (INT0)
PD3 (INT1)
PD4 (OC1B)
PD5 (OC1A)
PD6 (ICP1)
PD7 (OC2)
PA0 (ADC0)
PA1 (ADC1)
PA2 (ADC2)
PA3 (ADC3)
PA4 (ADC4)
PA5 (ADC5)
PA6 (ADC6)
PA7 (ADC7)
PC0 (SCL)
PC1 (SDA)
PC2
PC3
PC4
PC5
PC6 (TOSC1)
PC7 (TOSC2)
RESET
XTAL2
XTAL1
AVCC
AREF
VCC
GND
USB1
USB-AF-90-10X14.4-H6.57
USB-A(SMT)
TITLE:
Matriz7x5
REV: 1.0
Company: ESCOM
Sheet: 1/1
Date: 2019-05-02
Drawn By: Equipo 4



1.

```
/*****************************************************
This program was created by the
CodeWizardAVR V2.60 Evaluation
Automatic Program Generator
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http://www.hpinfotech.com

Project :
Version :
Date    : 26/03/2019
Author  : Equipo 4
Company :
Comments:


Chip type               : ATmega8535L
Program type            : Application
AVR Core Clock frequency: 1,000000 MHz
Memory model            : Small
External RAM size       : 0
Data Stack size         : 128
*****************************************************/

#include <mega8535.h>
#include <delay.h>

// Declare your global variables here

const char col[5]={0x10,0x08,0x04,0x02,0x01};

int i=0,j,n;
int num[10][5]={{0x41,0x3e,0x3e,0x00,0x41},
                        {0x7e,0x5e,0x00,0x00,0x7e},
                        {0x4e,0x3c,0x38,0x02,0x46},
                        {0x5d,0x3e,0x36,0x00,0x49},
                        {0x07,0x77,0x77,0x00,0x00},
                        {0x8c,0x36,0x36,0x30,0x39},
                        {0x41,0x36,0x36,0x30,0x39},
                        {0x3f,0x37,0x37,0x00,0x0f},
                        {0x49,0x36,0x36,0x00,0x49},
                        {0x4d,0x36,0x36,0x00,0x41}};

void main(void)
{
DDRD=0xff;
DDRC=0xff;

PORTC=0x10;
while (1)
      {


      for(i=0; i<10; i++){
      for(n=0; n<250; n++){
       for(j=0; j<5; j++){
        PORTC=~col[j];
       PORTD=~num[i][j];

        delay_ms(1);
       }
       }
```

```
62.         }
63.
64.       }
65.
66. }
```