

НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ УКРАЇНИ "КИЇВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ імені ІГОРЯ СІКОРСЬКОГО"

Факультет прикладної математики

Кафедра системного програмування і спеціалізованих комп'ютерних систем

Лабораторна робота № 8

з дисципліни «Периферійні пристрої»

Викон	ав: Стецюренко I. C,
(Студент групи КВ-03
Іеревірив(ла):	

Лабораторна робота №8

Мікропроцесорна система управління з складною логікою об'єкта

Функціональна схема

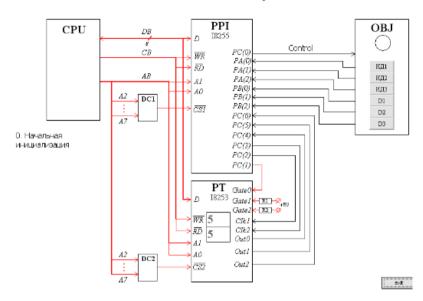


Рис. 13 Схема електричної функціональної МПСУ

Умова

Побудувати схему електричну функціональну МПСУ Записати алгоритм управління з врахуванням схемотехніки МПСУ Написати програму управління на асемблері. Порти: РУС I8255 — 1FH і I8253 — 1BH

Змоделювати функціонування системи на моніторі комп'ютера Відобразити алгоритм функціонування.

Опис об'єкта

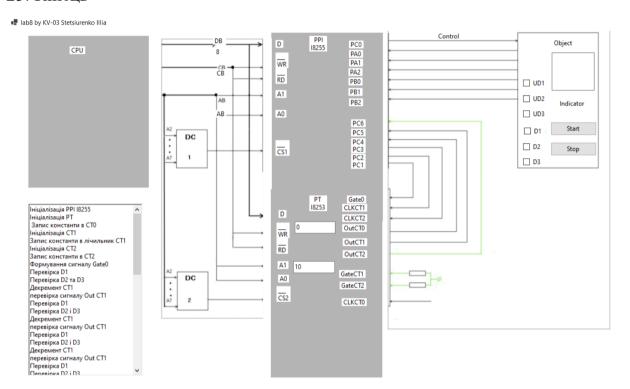
Сигнал готовності формують датчики об'єкта: Д1 самостійно запускає систему (датчик являється ведучим), при відсутності сигналу Д1 систему запускають сумісно датчики Д2, Д3 Час очікування сигналу готовності задається Ст.1 І8253 (константа 0АН). По закінченню вказаного часу система вимикається (перехід на кінець). Управління лінією Control виконується по мажоритарному принципу інформаційними сигналами ІД1, ІД2, ІД3 (2 з 3 вмикають лінію управління). Час очікування ІД1, ІД2, ІД3 задається Ст.2 І8253 (константа 0АН). По закінченню вказаного часу система

вимикається (перехід на кінець). Витримка вмк./вимкн. стану лінії Control задається Ст.0 I8253 (константа 64H)

Алгоритм функціонування системи

- 1. Ініціалізація І8255. режим 0.
- 2. Ініціалізація І8253. Установка режиму Ст 0.
- 3. Запис константи в Cч0 64h
- 4. Ініціалізація І8253. Установка режиму Ст 1.
- 5. Запис константи в Ст1 0Ah
- 6. Ініціалізація І8253. Установка режиму Ст 2.
- 7. Запис константи в C + 2 0Ah
- 8. Формування Gate0
- 9. Перевірка наявності сигналу готовності D1 (якщо так п. 14.1, інакше п. 10)
- 10. Перевірка наявності сигналу готовності D2 и D3 (якщо так п. 14, інакше п.11)
- 11. Декремент Ст1.
- 12. Перевірка Out1 Якщо Out1=0, то перехід до п.9, інакше п.13
- 13. Перехід на кінець (п.25)
- 14. Виділення Коду ІД1, ІД2, ІД3
- 14.1 . Порівняння з кодом 03H (якщо так п.18, інакше п.14.2)
- 14.2. Порівняння з кодом 05H (якщо так п.18, інакше п.14.3)
- 14.3 . Порівняння з кодом 06H (якщо так п.18, інакше п.14.4)
- 14.4. Порівняння з кодом 07H (якщо так п.18, інакше п.15.)
- 15. Декремент Ст.2
- 16. Перевірка Out2 (Out2 = 0 п.14.1, інакше п.17)
- 17. Перехід на кінець (п.25)
- 18. Включення лінії «Control»
- 19. Перезапуск Ст.0.

- 20. Очікування Out0 = 1
- 21. Виключення лінії «Control»
- 22. Перезапуск Ст.0
- 23. Очікування Out0 = 1
- 24. Перехід на п. 9
- 25. Кінець



Програма керування на ассемблері

```
; установка режиму роботи МС 18255 (установка УС-1)
begin:
mov al, 9AH ;10011010B
out 1Fh, al
; установка режиму роботи МС 18253 Ст0
mov al, 10H
out 1Bh, al
; запис константи в Ст0
mov al, 64H
out 18h, al
; установка режиму роботи МС 18253 Ст1
mov al, 50H ;01010000B
out 1Bh, al
; запис константи в Ст1
mov al, OAH
out 19h, al
; Установка режиму роботи МС 18253 Ст2
mov al, 90H ;10010000B
out 1Bh, al
; Запис константи в Сч2 - ОАһ
```

```
mov al, OAH
out 1Ah, al
; Формування Gate0
mov al, 03H
out 1Fh, al
; Перевірка наявності сигналу готовності D1 (якщо так - п. 14.1, інакше -
\pi.10)
m1:
in al, 1DH
test al, 01H
jnz m2
; Перевірка наявності сигналу готовності D2 и D3 (якщо так - п. 14.1,
інакше - п.11)
In al, 1DH
test al , 06H
jnz m2
; Декремент Ст1.
mov al, 05H 00000101B
out 1FH, al
; Перевірка Outl (Якщо Outl=0, то перехід \pi.9, інакше \pi.13)
in al, 1EH
test al 20H
jz m1
; Перехід на кінець
jmp exit
; Виділення Коду ІД1, ІД2, ІД3
; Порівняння з кодом ОЗН (якщо так - п.18, інакше - п.14.2)
m2:
in al, 1CH
test al,03H
jnz m3
; Порівняння з кодом 05Н (якщо так - п.18, інакше - п.14.3)
in al, 1ch
test al, 05H
jnz m3
; Порівняння з кодом ОбН (якщо так - п.18, інакше - п.14.4)
in al, 1ch
test al,06H
jnz m3
; Порівняння з кодом 07Н (якщо так - п.18, інакше - п.15)
in al, 1ch
test al,07H
jnz m3
; Декремент Ст.2.
mov al, 07H
out 1FH, al
; Перевірка Out2 (Out2 = 0 - перехід до \pi.14.1, іначе 17)
in al, 1EH
test al, 40H
jz m2
; Перехід на кінець.
jmp exit
; Включення лінії «Control»
mov al, 01H
out 1FH, al
; Перезапуск Ст.О.
{\tt mov \ al} , 10H
out 1BH, al
; Очікування Out0 = 1
```

```
m4:
in al ,1EH
test al, 10H
; Виключення лінії «Control»
mov al, 00H
out 1FH, al
; Перезапуск Ст.0.
mov al ,10H
out 1BH, al
; Очікування Out0 = 1
in al ,1EH
test al, 10H
jz m5
; Перехід на п. 9
jmp begin
; Кінець
exit:
```

Код програми розроблений в Visual Studio на С#:

```
using System;
namespace lab8
    partial class Form1
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be
disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
            if (disposing && (components != null))
                components.Dispose();
            base.Dispose(disposing);
        }
        #region Windows Form Designer generated code
        /// <summary>
        \ensuremath{///} Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        private void InitializeComponent()
            this.components = new System.ComponentModel.Container();
```

```
System.ComponentModel.ComponentResourceManager resources = new
System.ComponentModel.ComponentResourceManager(typeof(Form1));
            this.pictureBox1 = new System.Windows.Forms.PictureBox();
            this.pictureBox2 = new System.Windows.Forms.PictureBox();
            this.pictureBox3 = new System.Windows.Forms.PictureBox();
            this.GrRight = new System.Windows.Forms.PictureBox();
            this.BlLeft = new System.Windows.Forms.PictureBox();
            this.button1 = new System.Windows.Forms.Button();
            this.button2 = new System.Windows.Forms.Button();
            this.turned = new System.Windows.Forms.PictureBox();
            this.D1 = new System.Windows.Forms.CheckBox();
            this.D2 = new System.Windows.Forms.CheckBox();
            this.D3 = new System.Windows.Forms.CheckBox();
            this.timer1 = new System.Windows.Forms.Timer(this.components);
            this.Out0 = new System.Windows.Forms.PictureBox();
            this.timer2 = new System.Windows.Forms.Timer(this.components);
            this.timer3 = new System.Windows.Forms.Timer(this.components);
            this.timer4 = new System.Windows.Forms.Timer(this.components);
            this.Clock1 = new System.Windows.Forms.TextBox();
            this.Clock2 = new System.Windows.Forms.TextBox();
            this.Clk1 = new System.Windows.Forms.PictureBox();
            this.fin = new System.Windows.Forms.Timer(this.components);
            this.turnoff no = new System.Windows.Forms.PictureBox();
            this.Clk2 = new System.Windows.Forms.PictureBox();
            this.turnedoff D1 = new System.Windows.Forms.PictureBox();
            this.Out1 = new System.Windows.Forms.PictureBox();
            this.Out2 = new System.Windows.Forms.PictureBox();
            this.trash gather = new
System.Windows.Forms.Timer(this.components);
            this.Gate0 = new System.Windows.Forms.PictureBox();
            this.Control = new System.Windows.Forms.PictureBox();
            this.UD1 = new System.Windows.Forms.PictureBox();
            this.UD2 = new System.Windows.Forms.PictureBox();
            this.UD3 = new System.Windows.Forms.PictureBox();
            this.UD33 = new System.Windows.Forms.PictureBox();
            this.UD22 = new System.Windows.Forms.PictureBox();
            this.UD11 = new System.Windows.Forms.PictureBox();
            this.NoLight = new System.Windows.Forms.PictureBox();
            this.Light = new System.Windows.Forms.PictureBox();
            this.Yes = new System.Windows.Forms.PictureBox();
            this.label1 = new System.Windows.Forms.Label();
            this.label4 = new System.Windows.Forms.Label();
            this.label5 = new System.Windows.Forms.Label();
            this.label6 = new System.Windows.Forms.Label();
            this.label7 = new System.Windows.Forms.Label();
            this.label8 = new System.Windows.Forms.Label();
            this.label9 = new System.Windows.Forms.Label();
            this.label10 = new System.Windows.Forms.Label();
            this.label11 = new System.Windows.Forms.Label();
            this.label12 = new System.Windows.Forms.Label();
            this.label13 = new System.Windows.Forms.Label();
            this.label14 = new System.Windows.Forms.Label();
            this.label15 = new System.Windows.Forms.Label();
            this.label16 = new System.Windows.Forms.Label();
            this.label17 = new System.Windows.Forms.Label();
            this.label18 = new System.Windows.Forms.Label();
            this.label19 = new System.Windows.Forms.Label();
            this.label20 = new System.Windows.Forms.Label();
            this.label21 = new System.Windows.Forms.Label();
            this.label22 = new System.Windows.Forms.Label();
            this.label23 = new System.Windows.Forms.Label();
```

```
this.label24 = new System.Windows.Forms.Label();
            this.label25 = new System.Windows.Forms.Label();
            this.label26 = new System.Windows.Forms.Label();
            this.label27 = new System.Windows.Forms.Label();
            this.label28 = new System.Windows.Forms.Label();
            this.label29 = new System.Windows.Forms.Label();
            this.label30 = new System.Windows.Forms.Label();
            this.label31 = new System.Windows.Forms.Label();
            this.label32 = new System.Windows.Forms.Label();
            this.label33 = new System.Windows.Forms.Label();
            this.label34 = new System.Windows.Forms.Label();
            this.label35 = new System.Windows.Forms.Label();
            this.label36 = new System.Windows.Forms.Label();
            this.label37 = new System.Windows.Forms.Label();
            this.label38 = new System.Windows.Forms.Label();
            this.label39 = new System.Windows.Forms.Label();
            this.label40 = new System.Windows.Forms.Label();
            this.label41 = new System.Windows.Forms.Label();
            this.label42 = new System.Windows.Forms.Label();
            this.label43 = new System.Windows.Forms.Label();
            this.label44 = new System.Windows.Forms.Label();
            this.label45 = new System.Windows.Forms.Label();
            this.label46 = new System.Windows.Forms.Label();
            this.res = new System.Windows.Forms.RichTextBox();
            this.D10 = new System.Windows.Forms.CheckBox();
            this.D20 = new System.Windows.Forms.CheckBox();
            this.D30 = new System.Windows.Forms.CheckBox();
            this.CLK = new System.Windows.Forms.PictureBox();
            this.label47 = new System.Windows.Forms.Label();
((System.ComponentModel.ISupportInitialize)(this.pictureBox1)).BeginInit()
((System.ComponentModel.ISupportInitialize)(this.pictureBox2)).BeginInit()
((System.ComponentModel.ISupportInitialize)(this.pictureBox3)).BeginInit()
((System.ComponentModel.ISupportInitialize)(this.GrRight)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.BlLeft)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.turned)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Out0)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Clk1)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.turnoff no)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Clk2)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.turnedoff D1)).BeginInit(
((System.ComponentModel.ISupportInitialize)(this.Out1)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Out2)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Gate0)).BeginInit();
```

```
((System.ComponentModel.ISupportInitialize)(this.Control)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD1)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD2)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD3)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD33)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD22)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.UD11)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.NoLight)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Light)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.Yes)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.CLK)).BeginInit();
            this.SuspendLayout();
            // pictureBox1
            this.pictureBox1.BackColor =
System.Drawing.SystemColors.ActiveBorder;
            this.pictureBox1.Location = new System.Drawing.Point(49, 14);
            this.pictureBox1.Margin = new System.Windows.Forms.Padding(4,
5, 4, 5);
            this.pictureBox1.Name = "pictureBox1";
            this.pictureBox1.Size = new System.Drawing.Size(264, 388);
            this.pictureBox1.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.pictureBox1.TabIndex = 0;
            this.pictureBox1.TabStop = false;
            // pictureBox2
            this.pictureBox2.BackColor =
System.Drawing.SystemColors.ActiveBorder;
            this.pictureBox2.Location = new System.Drawing.Point(582, 6);
            this.pictureBox2.Margin = new System.Windows.Forms.Padding (4,
5, 4, 5);
            this.pictureBox2.Name = "pictureBox2";
            this.pictureBox2.Size = new System.Drawing.Size(214, 361);
            this.pictureBox2.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.AutoSize;
            this.pictureBox2.TabIndex = 1;
            this.pictureBox2.TabStop = false;
            this.pictureBox2.Click += new
System.EventHandler(this.pictureBox2 Click);
            // pictureBox3
            this.pictureBox3.BackColor =
System.Drawing.SystemColors.ActiveBorder;
            this.pictureBox3.Location = new System.Drawing.Point(581,
406);
```

```
this.pictureBox3.Margin = new System.Windows.Forms.Padding(4,
5, 4, 5);
            this.pictureBox3.Name = "pictureBox3";
            this.pictureBox3.Size = new System.Drawing.Size(214, 361);
            this.pictureBox3.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.AutoSize;
            this.pictureBox3.TabIndex = 2;
            this.pictureBox3.TabStop = false;
            // GrRight
            this.GrRight.Image =
((System.Drawing.Image) (resources.GetObject("GrRight.Image")));
            this.GrRight.Location = new System.Drawing.Point(315, 16);
            this.GrRight.Margin = new System.Windows.Forms.Padding(4, 5,
4, 5);
            this.GrRight.Name = "GrRight";
            this.GrRight.Size = new System.Drawing.Size(268, 716);
            this.GrRight.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.GrRight.TabIndex = 3;
            this.GrRight.TabStop = false;
            this.GrRight.Visible = false;
            // BlLeft
            this.BlLeft.Image =
((System.Drawing.Image) (resources.GetObject("BlLeft.Image")));
            this.BlLeft.Location = new System.Drawing.Point(321, 18);
            this.BlLeft.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.BlLeft.Name = "BlLeft";
            this.BlLeft.Size = new System.Drawing.Size(262, 718);
            this.BlLeft.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.BlLeft.TabIndex = 5;
            this.BlLeft.TabStop = false;
            // button1
            this.button1.Location = new System.Drawing.Point(1194, 233);
            this.button1.Margin = new System.Windows.Forms.Padding(4, 5,
4, 5);
            this.button1.Name = "button1";
            this.button1.Size = new System.Drawing.Size(100, 35);
            this.button1.TabIndex = 6;
            this.button1.Text = "Start";
            this.button1.UseVisualStyleBackColor = true;
            this.button1.Click += new
System.EventHandler(this.button1 Click);
            // button2
            this.button2.Location = new System.Drawing.Point(1194, 286);
            this.button2.Margin = new System.Windows.Forms.Padding(4, 5,
4, 5);
            this.button2.Name = "button2";
            this.button2.Size = new System.Drawing.Size(100, 35);
            this.button2.TabIndex = 7;
            this.button2.Text = "Stop";
            this.button2.UseVisualStyleBackColor = true;
```

```
this.button2.Click += new
System.EventHandler(this.button2 Click);
            // turned
            //
            this.turned.Image =
((System.Drawing.Image) (resources.GetObject("turned.Image")));
            this.turned.Location = new System.Drawing.Point(795, -10);
            this.turned.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.turned.Name = "turned";
            this.turned.Size = new System.Drawing.Size(570, 775);
            this.turned.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.turned.TabIndex = 8;
            this.turned.TabStop = false;
            //
            // D1
            //
            this.D1.AutoSize = true;
            this.D1.Location = new System.Drawing.Point(1134, 122);
            this.D1.Margin = new System.Windows.Forms.Padding(4, 5, 4, 5);
            this.D1.Name = "D1";
            this.D1.Size = new System.Drawing.Size(60, 24);
            this.D1.TabIndex = 9;
            this.D1.Text = "UD1";
            this.D1.UseVisualStyleBackColor = true;
            this.D1.CheckedChanged += new
System.EventHandler(this.D1 CheckedChanged);
            //
            // D2
            //
            this.D2.AutoSize = true;
            this.D2.Location = new System.Drawing.Point(1134, 162);
            this.D2.Margin = new System.Windows.Forms.Padding(4, 5, 4, 5);
            this.D2.Name = "D2";
            this.D2.Size = new System.Drawing.Size(60, 24);
            this.D2.TabIndex = 10;
            this.D2.Text = "UD2";
            this.D2.UseVisualStyleBackColor = true;
            this.D2.CheckedChanged += new
System.EventHandler(this.D2 CheckedChanged);
            //
            // D3
            //
            this.D3.AutoSize = true;
            this.D3.Location = new System.Drawing.Point(1134, 201);
            this.D3.Margin = new System.Windows.Forms.Padding(4, 5, 4, 5);
            this.D3.Name = "D3";
            this.D3.Size = new System.Drawing.Size(60, 24);
            this.D3.TabIndex = 11;
            this.D3.Text = "UD3";
            this.D3.UseVisualStyleBackColor = true;
            this.D3.CheckedChanged += new
System.EventHandler(this.D3 CheckedChanged);
            // timer1
            this.timer1.Interval = 500;
            this.timer1.Tick += new System.EventHandler(this.timer1 Tick);
```

```
// Out0
            //
            this.Out0.Image =
((System.Drawing.Image) (resources.GetObject("OutO.Image")));
            this.OutO.Location = new System.Drawing.Point(795, -9);
            this.OutO.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Out0.Name = "Out0";
            this.OutO.Size = new System.Drawing.Size(555, 786);
            this.Out0.SizeMode =
System. Windows. Forms. Picture Box Size Mode. Zoom;
            this.Out0.TabIndex = 12;
            this.Out0.TabStop = false;
            this.Out0.Visible = false;
            // timer2
            //
            this.timer2.Interval = 1000;
            this.timer2.Tick += new System.EventHandler(this.timer2 Tick);
            // timer3
            this.timer3.Interval = 1000;
            this.timer3.Tick += new System.EventHandler(this.timer3 Tick);
            // timer4
            this.timer4.Interval = 1000;
            this.timer4.Tick += new System.EventHandler(this.timer4 Tick);
            //
            // Clock1
            //
            this.Clock1.Location = new System.Drawing.Point(633, 488);
            this.Clock1.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Clock1.Name = "Clock1";
            this.Clock1.Size = new System.Drawing.Size(88, 27);
            this.Clock1.TabIndex = 13;
            this.Clock1.Text = "10";
            this.Clock1.TextChanged += new
System.EventHandler(this.Clock1 TextChanged);
            // Clock2
            this.Clock2.Location = new System.Drawing.Point(630, 589);
            this.Clock2.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Clock2.Name = "Clock2";
            this.Clock2.Size = new System.Drawing.Size(91, 27);
            this.Clock2.TabIndex = 14;
            this.Clock2.Text = "10";
            this.Clock2.TextChanged += new
System.EventHandler(this.Clock2 TextChanged);
            //
            // Clk1
            this.Clk1.Image =
((System.Drawing.Image)(resources.GetObject("Clk1.Image")));
            this.Clk1.Location = new System.Drawing.Point(788, -3);
            this.Clk1.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
```

```
this.Clk1.Name = "Clk1";
            this.Clk1.Size = new System.Drawing.Size(565, 783);
            this.Clk1.SizeMode =
System. Windows. Forms. Picture Box Size Mode. Zoom;
            this.Clk1.TabIndex = 15;
            this.Clk1.TabStop = false;
            this.Clk1.Visible = false;
            // fin
            //
            this.fin.Interval = 1000;
            this.fin.Tick += new System.EventHandler(this.fin Tick);
            //
            // turnoff_no
            //
            this.turnoff no.Image =
((System.Drawing.Image) (resources.GetObject("turnoff no.Image")));
            this.turnoff no.Location = new System.Drawing.Point(795, 1);
            this.turnoff no.Margin = new System.Windows.Forms.Padding(4,
5, 4, 5);
            this.turnoff no.Name = "turnoff no";
            this.turnoff no.Size = new System.Drawing.Size(565, 761);
            this.turnoff no.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.turnoff no.TabIndex = 16;
            this.turnoff no.TabStop = false;
            this.turnoff no.Visible = false;
            // Clk2
            //
            this.Clk2.Image =
((System.Drawing.Image) (resources.GetObject("Clk2.Image")));
            this.Clk2.Location = new System.Drawing.Point(791, -1);
            this.Clk2.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Clk2.Name = "Clk2";
            this.Clk2.Size = new System.Drawing.Size(562, 766);
            this.Clk2.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.Clk2.TabIndex = 17;
            this.Clk2.TabStop = false;
            this.Clk2.Visible = false;
            // turnedoff D1
            this.turnedoff D1.Image =
((System.Drawing.Image) (resources.GetObject("turnedoff D1.Image")));
            this.turnedoff D1.Location = new System.Drawing.Point(799, -
29);
            this.turnedoff D1.Margin = new System.Windows.Forms.Padding(4,
5, 4, 5);
            this.turnedoff D1.Name = "turnedoff D1";
            this.turnedoff D1.Size = new System.Drawing.Size(594, 830);
            this.turnedoff D1.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.turnedoff D1.TabIndex = 18;
            this.turnedoff D1.TabStop = false;
            this.turnedoff D1.Visible = false;
            // Out1
            //
```

```
this.Out1.Image =
((System.Drawing.Image) (resources.GetObject("Out1.Image")));
            this.Out1.Location = new System.Drawing.Point(795, -13);
            this.Out1.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Out1.Name = "Out1";
            this.Out1.Size = new System.Drawing.Size(589, 793);
            this.Out1.SizeMode =
System. Windows. Forms. Picture Box Size Mode. Zoom;
            this.Out1.TabIndex = 19;
            this.Out1.TabStop = false;
            this.Out1.Visible = false;
            this.Out1.Click += new System.EventHandler(this.Out1 Click);
            // Out2
            //
            this.Out2.Image =
((System.Drawing.Image) (resources.GetObject("Out2.Image")));
            this.Out2.Location = new System.Drawing.Point(795, -1);
            this.Out2.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Out2.Name = "Out2";
            this.Out2.Size = new System.Drawing.Size(570, 775);
            this.Out2.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.Out2.TabIndex = 20;
            this.Out2.TabStop = false;
            this.Out2.Visible = false;
            // trash gather
            //
            this.trash gather.Interval = 1000;
            this.trash gather.Tick += new
System. EventHandler (this. trash gather Tick);
            // Gate0
            this.Gate0.Image =
((System.Drawing.Image) (resources.GetObject("Gate0.Image")));
            this. Gate 0. Location = new System. Drawing. Point (794, -11);
            this. Gate 0. Margin = new System. Windows. Forms. Padding (4, 5, 4,
5);
            this.Gate0.Name = "Gate0";
            this.Gate0.Size = new System.Drawing.Size(570, 775);
            this.Gate0.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.Gate0.TabIndex = 21;
            this.Gate0.TabStop = false;
            this.Gate0.Visible = false;
            //
            // Control
            this.Control.Image =
((System.Drawing.Image) (resources.GetObject("Control.Image")));
            this.Control.Location = new System.Drawing.Point(794, 25);
            this.Control.Margin = new System.Windows.Forms.Padding(4, 5,
4, 5);
            this.Control.Name = "Control";
            this.Control.Size = new System.Drawing.Size(343, 19);
            this.Control.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
```

```
this.Control.TabIndex = 23:
            this.Control.TabStop = false;
            this.Control.Visible = false;
            // UD1
            //
            this.UD1.Image =
((System.Drawing.Image)(resources.GetObject("UD1.Image")));
            this.UD1.Location = new System.Drawing.Point(795, 54);
            this.UD1.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.UD1.Name = "UD1";
            this.UD1.Size = new System.Drawing.Size(334, 10);
            this.UD1.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD1.TabIndex = 24;
            this.UD1.TabStop = false;
            this.UD1.Visible = false;
            // UD2
            //
            this.UD2.Image =
((System.Drawing.Image) (resources.GetObject("UD2.Image")));
            this.UD2.Location = new System.Drawing.Point(794, 77);
            this. UD2. Margin = new System. Windows. Forms. Padding (4, 5, 4,
5);
            this.UD2.Name = "UD2";
            this.UD2.Size = new System.Drawing.Size(337, 10);
            this.UD2.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD2.TabIndex = 25;
            this.UD2.TabStop = false;
            this.UD2.Visible = false;
            // UD3
            //
            this.UD3.Image =
((System.Drawing.Image)(resources.GetObject("UD3.Image")));
            this.UD3.Location = new System.Drawing.Point(795, 101);
            this.UD3.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.UD3.Name = "UD3";
            this.UD3.Size = new System.Drawing.Size(335, 10);
            this.UD3.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD3.TabIndex = 26;
            this.UD3.TabStop = false;
            this.UD3.Visible = false;
            // UD33
            //
            this.UD33.Image =
((System.Drawing.Image) (resources.GetObject("UD33.Image")));
            this.UD33.Location = new System.Drawing.Point(795, 175);
            this.UD33.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.UD33.Name = "UD33";
            this.UD33.Size = new System.Drawing.Size(335, 10);
            this.UD33.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD33.TabIndex = 29;
```

```
this.UD33.TabStop = false;
            this.UD33.Visible = false;
            // UD22
            //
            this.UD22.Image =
((System.Drawing.Image)(resources.GetObject("UD22.Image")));
            this.UD22.Location = new System.Drawing.Point(795, 151);
            this. UD22. Margin = new System. Windows. Forms. Padding (4, 5, 4,
5);
            this.UD22.Name = "UD22";
            this.UD22.Size = new System.Drawing.Size(339, 10);
            this.UD22.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD22.TabIndex = 28;
            this.UD22.TabStop = false;
            this.UD22.Visible = false;
            // UD11
            this.UD11.Image =
((System.Drawing.Image)(resources.GetObject("UD11.Image")));
            this.UD11.Location = new System.Drawing.Point(795, 126);
            this. UD11. Margin = new System. Windows. Forms. Padding (4, 5, 4,
5);
            this.UD11.Name = "UD11";
            this.UD11.Size = new System.Drawing.Size(335, 10);
            this.UD11.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.UD11.TabIndex = 27;
            this.UD11.TabStop = false;
            this.UD11.Visible = false;
            // NoLight
            this. No Light. Location = new System. Drawing. Point (1197, 56);
            this. No Light. Margin = new System. Windows. Forms. Padding (4, 5,
4, 5);
            this.NoLight.Name = "NoLight";
            this.NoLight.Size = new System.Drawing.Size(95, 99);
            this.NoLight.TabIndex = 30;
            this.NoLight.TabStop = false;
            // Light
            this.Light.BorderStyle =
System.Windows.Forms.BorderStyle.FixedSingle;
            this.Light.Location = new System.Drawing.Point(1197, 56);
            this.Light.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.Light.Name = "Light";
            this.Light.Size = new System.Drawing.Size(94, 97);
            this.Light.TabIndex = 31;
            this.Light.TabStop = false;
            this.Light.Click += new System.EventHandler(this.Light Click);
            //
            // Yes
            this.Yes.BackColor = System.Drawing.Color.Lime;
            this.Yes.BorderStyle =
System.Windows.Forms.BorderStyle.FixedSingle;
```

```
this. Yes. Location = new System. Drawing. Point (1195, 56);
            this. Yes. Margin = new System. Windows. Forms. Padding (4, 5, 4,
5);
            this.Yes.Name = "Yes";
            this. Yes. Size = new System. Drawing. Size (94, 97);
            this.Yes.TabIndex = 32;
            this.Yes.TabStop = false;
            this.Yes.Visible = false;
            // label1
            this.label1.AutoSize = true;
            this.label1.Location = new System.Drawing.Point(1165, 248);
            this.label1.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label1.Name = "label1";
            this.label1.Size = new System.Drawing.Size(28, 20);
            this.label1.TabIndex = 33;
            this.label1.Text = "D1";
            // label4
            this.label4.AutoSize = true;
            this.label4.Location = new System.Drawing.Point(1198, 21);
            this.label4.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label4.Name = "label4";
            this.label4.Size = new System.Drawing.Size(53, 20);
            this.label4.TabIndex = 36;
            this.label4.Text = "Object";
            // label5
            this.label5.AutoSize = true;
            this.label5.Location = new System.Drawing.Point(1210, 176);
            this.label5.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label5.Name = "label5";
            this.label5.Size = new System.Drawing.Size(68, 20);
            this.label5.TabIndex = 37;
            this.label5.Text = "Indicator";
            // label6
            this.label6.AutoSize = true;
            this.label6.Location = new System.Drawing.Point(665, 14);
            this.label6.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label6.Name = "label6";
            this.label6.Size = new System.Drawing.Size(45, 40);
            this.label6.TabIndex = 38;
            this.label6.Text = " PPI\r\n18255";
            // label7
            this.label7.AutoSize = true;
            this.label7.Location = new System.Drawing.Point(139, 40);
            this.label7.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label7.Name = "label7";
            this.label7.Size = new System.Drawing.Size(36, 20);
```

```
this.label7.TabIndex = 39:
            this.label7.Text = "CPU";
            // label8
            this.label8.AutoSize = true;
            this.label8.Location = new System.Drawing.Point(454, 16);
            this.label8.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label8.Name = "label8";
            this.label8.Size = new System.Drawing.Size(29, 20);
            this.label8.TabIndex = 40;
            this.label8.Text = "DB";
            // label9
            this.label9.AutoSize = true;
            this.label9.Location = new System.Drawing.Point(457, 44);
            this.label9.Margin = new System.Windows.Forms.Padding(4, 0, 4,
0);
            this.label9.Name = "label9";
            this.label9.Size = new System.Drawing.Size(17, 20);
            this.label9.TabIndex = 41;
            this.label9.Text = "8";
            // label10
            this.label10.AutoSize = true;
            this.label10.Location = new System.Drawing.Point(458, 98);
            this.label10.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label10.Name = "label10";
            this.label10.Size = new System.Drawing.Size(27, 20);
            this.label10.TabIndex = 42;
            this.label10.Text = "CB";
            // label11
            this.label11.AutoSize = true;
            this.label11.Location = new System.Drawing.Point(458, 202);
            this.label11.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label11.Name = "label11";
            this.label11.Size = new System.Drawing.Size(28, 20);
            this.label11.TabIndex = 43;
            this.label11.Text = "AB";
            //
            // label12
            this.label12.AutoSize = true;
            this.label12.Location = new System.Drawing.Point(944, 4);
            this.label12.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label12.Name = "label12";
            this.label12.Size = new System.Drawing.Size(58, 20);
            this.label12.TabIndex = 44;
            this.label12.Text = "Control";
            // label13
            this.label13.AutoSize = true;
```

```
this.label13.Location = new System.Drawing.Point(591, 24);
            this.label13.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label13.Name = "label13";
            this.label13.Size = new System.Drawing.Size(20, 20);
            this.label13.TabIndex = 45;
            this.label13.Text = "D";
            // label14
            this.label14.AutoSize = true;
            this.label14.Location = new System.Drawing.Point (591, 56);
            this.label14.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label14.Name = "label14";
            this.label14.Size = new System.Drawing.Size(32, 40);
            this.label14.TabIndex = 46;
            this.label14.Text = " \r\nWR";
            // label15
            this.label15.AutoSize = true;
            this.label15.Location = new System.Drawing.Point(593, 491);
            this.label15.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label15.Name = "label15";
            this.label15.Size = new System.Drawing.Size(32, 40);
            this.label15.TabIndex = 47;
            this.label15.Text = "___\r\nWR";
            //
            // label16
            //
            this.label16.AutoSize = true;
            this.label16.Location = new System.Drawing.Point(591, 96);
            this.label16.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label16.Name = "label16";
            this.label16.Size = new System.Drawing.Size(29, 40);
            this.label16.TabIndex = 48;
            this.label16.Text = "___\r\nRD";
            // label17
            this.label17.AutoSize = true;
            this.label17.Location = new System.Drawing.Point(593, 531);
            this.label17.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label17.Name = "label17";
            this.label17.Size = new System.Drawing.Size(29, 40);
            this.label17.TabIndex = 49;
            this.label17.Text = " \r\nRD";
            // label18
            this.label18.AutoSize = true;
            this.label18.Location = new System.Drawing.Point(591, 280);
            this.label18.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label18.Name = "label18";
            this.label18.Size = new System.Drawing.Size(34, 40);
            this.label18.TabIndex = 50;
```

```
this.label18.Text = " \r\nCS1";
            // label19
            this.label19.AutoSize = true;
            this.label19.Location = new System.Drawing.Point(593, 654);
            this.label19.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label19.Name = "label19";
            this.label19.Size = new System.Drawing.Size(34, 40);
            this.label19.TabIndex = 51;
            this.label19.Text = " \r\nCS2";
            // label20
            //
            this.label20.AutoSize = true;
            this.label20.Location = new System.Drawing.Point(598, 458);
            this.label20.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label20.Name = "label20";
            this.label20.Size = new System.Drawing.Size(20, 20);
            this.label20.TabIndex = 52;
            this.label20.Text = "D";
            // label21
            this.label21.AutoSize = true;
            this.label21.Location = new System.Drawing.Point(595, 589);
            this.label21.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label21.Name = "label21";
            this.label21.Size = new System.Drawing.Size(27, 20);
            this.label21.TabIndex = 53;
            this.label21.Text = "A1";
            // label22
            this.label22.AutoSize = true;
            this.label22.Location = new System.Drawing.Point(596, 624);
            this.label22.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label22.Name = "label22";
            this.label22.Size = new System.Drawing.Size(27, 20);
            this.label22.TabIndex = 54;
            this.label22.Text = "A0";
            //
            // label23
            this.label23.AutoSize = true;
            this.label23.Location = new System.Drawing.Point(591, 202);
            this.label23.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label23.Name = "label23";
            this.label23.Size = new System.Drawing.Size(27, 20);
            this.label23.TabIndex = 56;
            this.label23.Text = "A0";
            // label24
            this.label24.AutoSize = true;
            this.label24.Location = new System.Drawing.Point(591, 152);
```

```
this.label24.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label24.Name = "label24";
            this.label24.Size = new System.Drawing.Size(27, 20);
            this.label24.TabIndex = 55;
            this.label24.Text = "A1";
            // label25
            this.label25.AutoSize = true;
            this.label25.Location = new System.Drawing.Point(665, 421);
            this.label25.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label25.Name = "label25";
            this.label25.Size = new System.Drawing.Size(45, 40);
            this.label25.TabIndex = 57;
            this.label25.Text = " PT\r\n18253";
            // label26
            this.label26.AutoSize = true;
            this.label26.Location = new System.Drawing.Point(752, 25);
            this.label26.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label26.Name = "label26";
            this.label26.Size = new System.Drawing.Size(34, 20);
            this.label26.TabIndex = 58;
            this.label26.Text = "PCO";
            // label27
            //
            this.label27.AutoSize = true;
            this.label27.Location = new System.Drawing.Point(752, 49);
            this.label27.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label27.Name = "label27";
            this.label27.Size = new System.Drawing.Size(34, 20);
            this.label27.TabIndex = 59;
            this.label27.Text = "PAO";
            // label28
            this.label28.AutoSize = true;
            this.label28.Location = new System.Drawing.Point(752, 72);
            this.label28.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label28.Name = "label28";
            this.label28.Size = new System.Drawing.Size(34, 20);
            this.label28.TabIndex = 60;
            this.label28.Text = "PA1";
            //
            // label29
            this.label29.AutoSize = true;
            this.label29.Location = new System.Drawing.Point(751, 96);
            this.label29.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label29.Name = "label29";
            this.label29.Size = new System.Drawing.Size(34, 20);
            this.label29.TabIndex = 61;
            this.label29.Text = "PA2";
```

```
' labe130
            this.label30.AutoSize = true;
            this.label30.Location = new System.Drawing.Point(751, 120);
            this.label30.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label30.Name = "label30";
            this.label30.Size = new System.Drawing.Size(34, 20);
            this.label30.TabIndex = 62;
            this.label30.Text = "PB0";
            // label31
            //
            this.label31.AutoSize = true;
            this.label31.Location = new System.Drawing.Point(752, 173);
            this.label31.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label31.Name = "label31";
            this.label31.Size = new System.Drawing.Size(34, 20);
            this.label31.TabIndex = 63;
            this.label31.Text = "PB2";
            // labe132
            this.label32.AutoSize = true;
            this.label32.Location = new System.Drawing.Point(757, 294);
            this.label32.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label32.Name = "label32";
            this.label32.Size = new System.Drawing.Size(34, 20);
            this.label32.TabIndex = 64;
            this.label32.Text = "PC3";
            // label33
            this.label33.AutoSize = true;
            this.label33.Location = new System.Drawing.Point(751, 147);
            this.label33.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label33.Name = "label33";
            this.label33.Size = new System.Drawing.Size(34, 20);
            this.label33.TabIndex = 65;
            this.label33.Text = "PB1";
            // labe134
            //
            this.label34.AutoSize = true;
            this.label34.Location = new System.Drawing.Point(756, 226);
            this.label34.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label34.Name = "label34";
            this.label34.Size = new System.Drawing.Size(34, 20);
            this.label34.TabIndex = 66;
            this.label34.Text = "PC6";
            // labe135
            this.label35.AutoSize = true;
            this.label35.Location = new System.Drawing.Point(757, 250);
```

```
this.label35.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label35.Name = "label35";
            this.label35.Size = new System.Drawing.Size(34, 20);
            this.label35.TabIndex = 67;
            this.label35.Text = "PC5";
            // label36
            this.label36.AutoSize = true;
            this.label36.Location = new System.Drawing.Point (747, 421);
            this.label36.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label36.Name = "label36";
            this.label36.Size = new System.Drawing.Size(48, 20);
            this.label36.TabIndex = 68;
            this.label36.Text = "Gate0";
            // labe137
            this.label37.AutoSize = true;
            this.label37.Location = new System.Drawing.Point(756, 334);
            this.label37.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label37.Name = "label37";
            this.label37.Size = new System.Drawing.Size(34, 20);
            this.label37.TabIndex = 69;
            this.label37.Text = "PC1";
            // label38
            //
            this.label38.AutoSize = true;
            this.label38.Location = new System.Drawing.Point(756, 314);
            this.label38.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label38.Name = "label38";
            this.label38.Size = new System.Drawing.Size(34, 20);
            this.label38.TabIndex = 70;
            this.label38.Text = "PC2";
            // label39
            this.label39.AutoSize = true;
            this.label39.Location = new System.Drawing.Point(756, 274);
            this.label39.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label39.Name = "label39";
            this.label39.Size = new System.Drawing.Size(34, 20);
            this.label39.TabIndex = 71;
            this.label39.Text = "PC4";
            //
            // label40
            this.label40.AutoSize = true;
            this.label40.Location = new System.Drawing.Point(737, 442);
            this.label40.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label40.Name = "label40";
            this.label40.Size = new System.Drawing.Size(59, 20);
            this.label40.TabIndex = 72;
            this.label40.Text = "CLKCT1";
```

```
'label41
            this.label41.AutoSize = true;
            this.label41.Location = new System.Drawing.Point (737, 469);
            this.label41.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label41.Name = "label41";
            this.label41.Size = new System.Drawing.Size(59, 20);
            this.label41.TabIndex = 73;
            this.label41.Text = "CLKCT2";
            // label42
            //
            this.label42.AutoSize = true;
            this.label42.Location = new System.Drawing.Point(737, 495);
            this.label42.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label42.Name = "label42";
            this.label42.Size = new System.Drawing.Size(58, 20);
            this.label42.TabIndex = 74;
            this.label42.Text = "OutCTO";
            // labe143
            this.label43.AutoSize = true;
            this.label43.Location = new System.Drawing.Point(738, 531);
            this.label43.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label43.Name = "label43";
            this.label43.Size = new System.Drawing.Size(58, 20);
            this.label43.TabIndex = 75;
            this.label43.Text = "OutCT1";
            // label44
            this.label44.AutoSize = true;
            this.label44.Location = new System.Drawing.Point(738, 561);
            this.label44.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label44.Name = "label44";
            this.label44.Size = new System.Drawing.Size(58, 20);
            this.label44.TabIndex = 76;
            this.label44.Text = "OutCT2";
            // label45
            //
            this.label45.AutoSize = true;
            this.label45.Location = new System.Drawing.Point(730, 612);
            this.label45.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label45.Name = "label45";
            this.label45.Size = new System.Drawing.Size(65, 20);
            this.label45.TabIndex = 77;
            this.label45.Text = "GateCT1";
            // label46
            this.label46.AutoSize = true;
            this.label46.Location = new System.Drawing.Point(731, 641);
```

```
this.label46.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label46.Name = "label46";
            this.label46.Size = new System.Drawing.Size(65, 20);
            this.label46.TabIndex = 78;
            this.label46.Text = "GateCT2";
            // res
            //
            this.res.Location = new System.Drawing.Point(49, 442);
            this.res.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.res.Name = "res";
            this.res.Size = new System.Drawing.Size(250, 438);
            this.res.TabIndex = 80;
            this.res.Text = "";
            // D10
            //
            this.D10.AutoSize = true;
            this.D10.Location = new System.Drawing.Point(1136, 246);
            this.D10.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.D10.Name = "D10";
            this.D10.Size = new System.Drawing.Size(50, 24);
            this.D10.TabIndex = 84;
            this.D10.Text = "D1";
            this.D10.UseVisualStyleBackColor = true;
            this.D10.CheckedChanged += new
System.EventHandler(this.D10 CheckedChanged);
            // D20
            //
            this.D20.AutoSize = true;
            this.D20.Location = new System.Drawing.Point(1134, 286);
            this.D20.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.D20.Name = "D20";
            this.D20.Size = new System.Drawing.Size(50, 24);
            this.D20.TabIndex = 85;
            this.D20.Text = "D2";
            this.D20.UseVisualStyleBackColor = true;
            this.D20.CheckedChanged += new
System. EventHandler (this. D20 CheckedChanged);
            //
            // D30
            //
            this.D30.AutoSize = true;
            this.D30.Location = new System.Drawing.Point(1134, 324);
            this.D30.Margin = new System.Windows.Forms.Padding(4, 5, 4,
5);
            this.D30.Name = "D30";
            this.D30.Size = new System.Drawing.Size(50, 24);
            this.D30.TabIndex = 86;
            this.D30.Text = "D3";
            this.D30.UseVisualStyleBackColor = true;
            this.D30.CheckedChanged += new
System. EventHandler (this. D30 CheckedChanged);
            // CLK
```

```
this.CLK.Image =
((System.Drawing.Image) (resources.GetObject("CLK.Image")));
            this.CLK.Location = new System.Drawing.Point(803, 684);
            this.CLK.Margin = new System.Windows.Forms.Padding (4, 5, 4,
5);
            this.CLK.Name = "CLK";
            this.CLK.Size = new System.Drawing.Size(104, 20);
            this.CLK.SizeMode =
System.Windows.Forms.PictureBoxSizeMode.Zoom;
            this.CLK.TabIndex = 22;
            this.CLK.TabStop = false;
            this.CLK.Visible = false;
            //
            // label47
            this.label47.AutoSize = true;
            this.label47.Location = new System.Drawing.Point(736, 684);
            this.label47.Margin = new System.Windows.Forms.Padding(4, 0,
4, 0);
            this.label47.Name = "label47";
            this.label47.Size = new System.Drawing.Size(59, 20);
            this.label47.TabIndex = 79;
            this.label47.Text = "CLKCTO";
            // Form1
            this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 20F);
            this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
            this.BackColor = System.Drawing.SystemColors.ButtonHighlight;
            this.ClientSize = new System.Drawing.Size(1712, 1202);
            this.Controls.Add(this.D30);
            this.Controls.Add(this.D20);
            this.Controls.Add(this.D10);
            this.Controls.Add(this.res);
            this.Controls.Add(this.label47);
            this.Controls.Add(this.label46);
            this.Controls.Add(this.label45);
            this.Controls.Add(this.label44);
            this.Controls.Add(this.label43);
            this.Controls.Add(this.label42);
            this.Controls.Add(this.label41);
            this.Controls.Add(this.label40);
            this.Controls.Add(this.label39);
            this.Controls.Add(this.label38);
            this.Controls.Add(this.label37);
            this.Controls.Add(this.label36);
            this.Controls.Add(this.label35);
            this.Controls.Add(this.label34);
            this.Controls.Add(this.label33);
            this.Controls.Add(this.label32);
            this.Controls.Add(this.label31);
            this.Controls.Add(this.label30);
            this.Controls.Add(this.label29);
            this.Controls.Add(this.label28);
            this.Controls.Add(this.label27);
            this.Controls.Add(this.label26);
            this.Controls.Add(this.label25);
            this.Controls.Add(this.Clock2);
            this.Controls.Add(this.Clock1);
            this.Controls.Add(this.label23);
            this.Controls.Add(this.label24);
```

```
this.Controls.Add(this.label21);
           this.Controls.Add(this.label20);
           this.Controls.Add(this.label19);
           this.Controls.Add(this.label18);
           this.Controls.Add(this.label17);
           this.Controls.Add(this.label16);
           this.Controls.Add(this.label15);
           this.Controls.Add(this.label14);
           this.Controls.Add(this.label13);
           this.Controls.Add(this.label12);
           this.Controls.Add(this.label11);
           this.Controls.Add(this.label10);
           this.Controls.Add(this.label9);
           this.Controls.Add(this.label8);
           this.Controls.Add(this.label7);
           this.Controls.Add(this.label6);
           this.Controls.Add(this.label5);
           this.Controls.Add(this.label4);
           this.Controls.Add(this.label1);
           this.Controls.Add(this.D3);
           this.Controls.Add(this.D2);
           this.Controls.Add(this.D1);
           this.Controls.Add(this.button2);
           this.Controls.Add(this.button1);
           this.Controls.Add(this.Yes);
           this.Controls.Add(this.Light);
           this.Controls.Add(this.NoLight);
           this.Controls.Add(this.UD33);
           this.Controls.Add(this.UD22);
           this.Controls.Add(this.UD11);
           this.Controls.Add(this.UD3);
           this.Controls.Add(this.UD2);
           this.Controls.Add(this.UD1);
           this.Controls.Add(this.Control);
           this.Controls.Add(this.pictureBox3);
           this.Controls.Add(this.CLK);
           this.Controls.Add(this.pictureBox1);
           this.Controls.Add(this.GrRight);
           this.Controls.Add(this.BlLeft);
           this.Controls.Add(this.pictureBox2);
           this.Controls.Add(this.Clk1);
           this.Controls.Add(this.Out0);
           this.Controls.Add(this.turned);
           this.Controls.Add(this.Out2);
           this.Controls.Add(this.Gate0);
           this.Controls.Add(this.Out1);
           this.Controls.Add(this.turnedoff D1);
           this.Controls.Add(this.Clk2);
           this.Controls.Add(this.turnoff no);
           this. Margin = new System. Windows. Forms. Padding (4, 5, 4, 5);
           this.Name = "Form1";
           this.Text = "Form1";
((System.ComponentModel.ISupportInitialize)(this.pictureBox1)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.pictureBox2)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.pictureBox3)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.GrRight)).EndInit();
```

this.Controls.Add(this.label22);

```
((System.ComponentModel.ISupportInitialize)(this.BlLeft)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.turned)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Out0)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Clk1)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.turnoff no)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Clk2)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.turnedoff D1)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Outl)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Out2)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Gate0)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Control)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD1)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD2)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD3)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD33)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD22)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.UD11)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.NoLight)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Light)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.Yes)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.CLK)).EndInit();
           this.ResumeLayout(false);
           this.PerformLayout();
       #endregion
       private System.Windows.Forms.PictureBox pictureBox1;
       private System.Windows.Forms.PictureBox pictureBox2;
       private System.Windows.Forms.PictureBox pictureBox3;
       private System.Windows.Forms.PictureBox GrRight;
       private System.Windows.Forms.PictureBox BlLeft;
       private System.Windows.Forms.Button button1;
       private System.Windows.Forms.Button button2;
       private System.Windows.Forms.PictureBox turned;
       private System.Windows.Forms.CheckBox D1;
       private System.Windows.Forms.CheckBox D2;
       private System.Windows.Forms.CheckBox D3;
       private System.Windows.Forms.Timer timer1;
```

```
private System.Windows.Forms.PictureBox Out0;
private System.Windows.Forms.Timer timer2;
private System.Windows.Forms.Timer timer3;
private System.Windows.Forms.Timer timer4;
private System.Windows.Forms.TextBox Clock1;
private System.Windows.Forms.TextBox Clock2;
private System.Windows.Forms.PictureBox Clk1;
private System.Windows.Forms.Timer fin;
private System.Windows.Forms.PictureBox turnoff no;
private System.Windows.Forms.PictureBox Clk2;
private System.Windows.Forms.PictureBox turnedoff D1;
private System.Windows.Forms.PictureBox Out1;
private System.Windows.Forms.PictureBox Out2;
private System.Windows.Forms.Timer trash gather;
private System.Windows.Forms.PictureBox Gate0;
private System.Windows.Forms.PictureBox Control;
private System.Windows.Forms.PictureBox UD1;
private System.Windows.Forms.PictureBox UD2;
private System.Windows.Forms.PictureBox UD3;
private System.Windows.Forms.PictureBox UD33;
private System.Windows.Forms.PictureBox UD22;
private System.Windows.Forms.PictureBox UD11;
private System.Windows.Forms.PictureBox NoLight;
private System.Windows.Forms.PictureBox Light;
private System.Windows.Forms.PictureBox Yes;
private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.Label label5;
private System.Windows.Forms.Label label6;
private System.Windows.Forms.Label label7;
private System.Windows.Forms.Label label8;
private System.Windows.Forms.Label label9;
private System.Windows.Forms.Label label10;
private System.Windows.Forms.Label label11;
private System.Windows.Forms.Label label12;
private System.Windows.Forms.Label label13;
private System.Windows.Forms.Label label14;
private System.Windows.Forms.Label label15;
private System.Windows.Forms.Label label16;
private System.Windows.Forms.Label label17;
private System.Windows.Forms.Label label18;
private System.Windows.Forms.Label label19;
private System.Windows.Forms.Label label20;
private System.Windows.Forms.Label label21;
private System.Windows.Forms.Label label22;
private System.Windows.Forms.Label label23;
private System.Windows.Forms.Label label24;
private System.Windows.Forms.Label label25;
private System.Windows.Forms.Label label26;
private System.Windows.Forms.Label label27;
private System.Windows.Forms.Label label28;
private System.Windows.Forms.Label label29;
private System.Windows.Forms.Label label30;
private System.Windows.Forms.Label label31;
private System.Windows.Forms.Label label32;
private System.Windows.Forms.Label label33;
private System.Windows.Forms.Label label34;
private System.Windows.Forms.Label label35;
private System.Windows.Forms.Label label36;
private System.Windows.Forms.Label label37;
private System.Windows.Forms.Label label38;
```

```
private System.Windows.Forms.Label label39;
private System.Windows.Forms.Label label40;
private System.Windows.Forms.Label label41;
private System.Windows.Forms.Label label42;
private System.Windows.Forms.Label label43;
private System.Windows.Forms.Label label44;
private System.Windows.Forms.Label label44;
private System.Windows.Forms.Label label46;
private System.Windows.Forms.RichTextBox res;
private System.Windows.Forms.CheckBox D10;
private System.Windows.Forms.CheckBox D20;
private System.Windows.Forms.CheckBox D30;
private System.Windows.Forms.PictureBox CLK;
private System.Windows.Forms.Label label47;
}
```