  <h3 itemprop="name headline" style="border: 0px; box-sizing: border-box; color: #757575; font-size: 19px; letter-spacing: 0px; line-height: 29px; margin: 0px 0px 7px; padding-bottom: 0px; padding-left: 0px; padding-right: 0px; padding-top: 4px !important; padding: 4px 0px 0px; position: relative; text-align: center; text-indent: -1px;">Mikro 2024 Percobaan 1 Modul 2</h3> <br style="box-sizing: border-box;" /> [KEMBALI KE MENU SEBELUMNYA]
 DAFTAR ISI<br style="box-sizing: border-box;" /> 1. Foto Hardware dan Diagram Blok 2. Prosedur Percobaan 3. Rangkaian Simulasi dan Prinsip Kerja 4. Flowchart dan Listing Program 5. Kondisi <a href="#V"

style="border: 0px; box-sizing: border-box; color: #597e00; margin: 0px; padding: 0px; text-decoration-line: none; transition: all 0.3s ease 0s;">6. Video Simulasi 7. Link Download <h1 style="border: 0px; box-sizing: border-box; color: #757575; font-size: 21px; letter-spacing: 0px; line-height: 30px; margin: 0px 0px 7px; padding-bottom: 0px; padding-left: 0px; padding-right: 0px; padding-top: 4px !important; padding: 4px 0px 0px; position: relative; text-indent: -1px;">Percobaan II</h1> PWM, ADC, dan Interrupt <h3 style="border: 0px; box-sizing: border-box; color: #757575; font-size: 19px; letter-spacing: 0px; line-height: 29px; margin: 0px 0px 7px; padding-bottom: 0px; padding-left: 0px; padding-right: 0px; padding-top: 4px !important; padding: 4px 0px 0px; position: relative; text-align: justify; text-indent: -1px;">1. Foto Hardware dan Diagram Blok [Kembali]</h3>   1. Arduino Uno

         2. LDR
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 <div class="separator" style="clear: both;
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style="font-family: verdana;">5. Power Supply
 <div

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      6. Ground

     7. Potensiometer

     8. Dipswitch <div class="separator"

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L293D
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/> <div style="border: 0px; box-sizing: border-box; color: #444444;
font-size: 15px; margin: 0px; padding: 0px; text-align: justify;"><span style="border: 0px;
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verdana;">Diagram Blok: <div style="border: 0px; box-sizing:

border-box; color: #444444; font-size: 15px; margin: 0px; padding: 0px; text-align: justify;"> <br style="box-sizing: border-box;" /> <br style="box-sizing: border-box;" />

 <br style="box-sizing: border-box;" /> <h3 style="border: 0px; box-sizing: border-box; color: #757575; font-size: 19px; letter-spacing: 0px; line-height: 29px; margin: 0px 0px 7px; padding-bottom: 0px; padding-left: 0px; padding-right: 0px; padding-top: 4px !important; padding: 4px 0px 0px; position: relative; text-align: justify; text-indent: -1px;">2. Prosedur Percobaan [Kembali]</h3> + Rangkai semua komponen + buat program di aplikasi arduino

IDE + setelah selesai masukkan program ke arduino + jalankan program pada simulasi dan cobakan dengan modul <br style="box-sizing: border-box;" /> 3. Rangkaian Simulasi dan Prinsip Kerja [Kembali] <br style="box-sizing: border-box;" />

 Prinsip Kerja
 Pada rangkaian ini menggunakan komponen antara lain yaitu Arduino Uno, Sensor LDR, resistor, LCD, driver motor dan motor DC.
 Pada percobaan ini kita menggunakan semua komponen dengan prosedur yang diinginkan dan dengan output yang diinginkan dimana nanti ada beberapa kondisi yang seusai dengan perintah dari percobaan atau yang disuruh pada percobaan yang dipilih dimana,ketika Ketika ADC > 500 dan 2 switch aktif, motor berputar ke kiri dan muncul karakter pada kolom 2 LCD mikrokontroler. Mikrokontroler kemudian mengaktifkan pin output untuk menyalakan LCD dan menuliskan "Motor Kekiri". <div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align:

justify;">

 <br style="box-sizing: border-box;" /> <h3 style="border: 0px; box-sizing: border-box; color: #757575; font-size: 19px; letter-spacing: 0px; line-height: 29px; margin: 0px 0px 7px; padding-bottom: 0px; padding-left: 0px; padding-right: 0px; padding-top: 4px !important; padding: 4px 0px 0px; position: relative; text-align: justify; text-indent: -1px;">4. Flowchart dan Listing Program [Kembali]</h3> <br style="box-sizing: border-box;" /><br style="box-sizing: border-box;" /> Listing Program: #include <LiquidCrystal.h>
 // Inisialisasi pin const int LDR_PIN = A0; const int MOTOR_EN_PIN = A1; const <span style="color:

#0ca1a6;">int MOTOR_OUT1_PIN = A2; const int MOTOR_OUT2_PIN = A3; const int DIPSW_PIN[] = {2, 3, 4, 5}; const int LCD_RS_PIN = 13; const int LCD_EN_PIN = 12; const int LCD_D4_PIN = 11; const int LCD_D5_PIN = 10; const int LCD_D6_PIN = 9; const int LCD_D7_PIN = 8;
 // Konfigurasi LCD LiquidCrystal lcd(LCD_RS_PIN, LCD_EN_PIN, LCD_D4_PIN, LCD_D5_PIN, LCD_D6_PIN, LCD_D7_PIN);
 void setup() {   // Inisialisasi pin mode   pinMode(LDR_PIN, INPUT);   pinMode(MOTOR_EN_PIN, OUTPUT);   pinMode(MOTOR_OUT1_PIN, OUTPUT);   pinMode(MOTOR_OUT2_PIN, OUTPUT);   for (int i = 0; i < 4; i++) {   pinMode(DIPSW_PIN[i], INPUT_PULLUP);   }   // Inisialisasi LCD   lcd.begin(16, 2); }
 void loop() {   // Baca nilai LDR   int ldrValue = analogRead(LDR_PIN);   // Cek kondisi ADC > 500 dan 2 switch aktif   if (ldrValue > 500 && checkSwitches()) {   // Aktifkan motor berputar ke kiri   digitalWrite(MOTOR_EN_PIN, HIGH);   digitalWrite(MOTOR_OUT1_PIN, LOW);   digitalWrite(MOTOR_OUT2_PIN, HIGH);

    // Tampilkan karakter pada kolom 2 LCD   lcd.setCursor(0, 1);   lcd.print("Motor kekiri");   } else {   // Matikan motor dan bersihkan LCD jika tidak memenuhi kondisi   digitalWrite(MOTOR_EN_PIN, LOW);   digitalWrite(MOTOR_OUT1_PIN, LOW);   digitalWrite(MOTOR_OUT2_PIN, LOW);   lcd.clear();   }   delay(100); // Delay untuk stabilitas }
 // Fungsi untuk memeriksa apakah dua switch aktif bool checkSwitches() {   bool switch1_active = digitalRead(DIPSW_PIN[0]) == LOW;   bool switch2_active = digitalRead(DIPSW_PIN[1]) == LOW;
   // Mengembalikan nilai true hanya jika kedua switch diaktifkan   return switch1_active && switch2_active; }
 5. Kondisi [Kembali]   Percobaan 1 Kondisi 2 : " Ketika ADC > 500 dan 2 switch aktif, motor berputar ke kiri dan muncul karakter pada kolom 2 LCD" <p style="border: 0px; box-sizing: border-box;

margin: 0px 0px 15px; padding: 0px; text-align: justify;">6. Video Simulasi [Kembali]

<br style="box-sizing: border-box;" /> 7. Link Download <a href="#home" style="border: 0px; box-sizing: border-box; color: #597e00; margin: 0px; padding: 0px; text-decoration-line: none; transition: all 0.3s ease
0s;">[Kembali] <object class="BLOG_video_class" contentid="f4186709a53ce1c8" height="266" id="BLOG_video-f4186709a53ce1c8" width="320"></object>
 □ HTML↠ klik disini<br style="box-sizing: border-box;" />□ Aplikasi↠ klik disini<br style="box-sizing: border-box;" />□ Video Percobaan↠ klik disini <p style="border: 0px; box-sizing:

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