**Lampiran 1**

Listing program dari seluruh sistem.

```
#include <mega8.h>
#include <alcd.h>
#include <stdio.h>
#include <delay.h>

unsigned long Rata2, Data[10], H, S, V;
unsigned char buf[33], k;
unsigned int i;

void Read_P_Sensor(void)
{
    PORTB.0 = 1;
    delay_us(35);
    PORTB.0 = 0;

    TCNT1 = 0;
    while (PINB.1 == 0)

    TCCR1B = 0x02;
    while ((PINB.1 == 1) && !(TIFR & 0x80)
    TCCR1B = 0x00;
    S = TCNT1;
    H = 240-(S*10/29);
}
```
void main(void)
{
    // Port B initialization
    PORTB=0xFE;
    DDRB=0x01;

    // Port C initialization
    PORTC=0x00;
    DDRC=0x00;

    // Port D initialization
    PORTD=0x00;
    DDRD=0x00;

    // USART initialization
    // USART Baud Rate: 9600
    UCSRA=0x00;
    UCSRB=0x18;
    UCSRC=0x86;
    UBRRH=0x00;
    UBRRRL=0x19;

    lcd_init(16);
    lcd_gotoxy(0,0);
    lcd_putsf("    FUEL TANK");
    lcd_gotoxy(0,1);
    lcd_putsf("  MONITORING");
    delay_ms(2000);

    while (1)
    {
        Rata2 = 0;
    }
for(i=1;i<11;i++) {Read_P_Sensor(); Data[i]=H; delay_ms(50); }
for(i=1;i<11;i++) {Rata2 = Rata2+Data[i];}
Rata2 = (Rata2*104/1000);

if ((Rata2 >= 0) && (Rata2 < 75)) { k = 33; }
if ((Rata2 >= 75) && (Rata2 < 135)) { k = 35; }
if ((Rata2 >= 135) && (Rata2 < 180)) { k = 37; }
if (Rata2 >= 180) { k = 38; }

V = (Rata2*k);

lcd_clear();
sprintf(buf, " H : %i mm", Rata2);
lcd_gotoxy(0,0);
lcd_puts(buf);

sprintf(buf, " V : %i mL", V);
lcd_gotoxy(0,1);
lcd_puts(buf);

printf("*H");
printf("%i", Rata2);
printf("*");

printf("*V");
printf("%i", V);
printf("*");

if (V > 5000) { printf("*LR0G255B0"); printf("*"); }
if (V < 5000) { printf("*LR255G0B0"); printf("*"); }
if (V < 500) { printf("*D"); printf("*"); }
delay_ms(500);

} 
} 

Lampiran 2

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