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#include <EEPROMex.h>
int triggerPort = 7;
int echoPort = 8;
int led_error=6;
int led_presa_dati=13;
// connessione display (pin)
void setup() {

pinMode( triggerPort, OUTPUT );
pinMode( echoPort, INPUT );
pinMode(led_error,OUTPUT);
pinMode(led_presa_dati,OUTPUT);
Serial.begin( 9600 );
Serial.println( "Sensore ultrasuoni: ");
Serial.print( "distanza: \n" );
}

void loop() {
int i;
int j;
j=0;
float duration[100];
float r[100];

digitalWrite(led_presa_dati, HIGH);
digitalWrite(led_error, HIGH);
delay(100);
digitalWrite(led_presa_dati, LOW);
digitalWrite(led_error, LOW);

delay(10000);

digitalWrite(led_presa_dati, HIGH);
digitalWrite(led_error, HIGH);
delay(100);
digitalWrite(led_presa_dati, LOW);
digitalWrite(led_error, LOW);
delay(1000);

digitalWrite(led_presa_dati, HIGH);

for (i = 0; i < 100; i = i + 1)
{
//porta bassa l'uscita del trigger
digitalWrite( triggerPort, LOW );
//invia un impulso di 10microsec su trigger
digitalWrite( triggerPort, HIGH );
delayMicroseconds( 10 );
digitalWrite( triggerPort, LOW );
duration[i] = pulseIn( echoPort, HIGH );
if( duration[i] > 38000 ) {
duration[i]=0;
digitalWrite(led_error, HIGH);
}
}
}

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}
delay(20);
digitalWrite(led_error, LOW);
}
digitalWrite(led_presa_dati, LOW);
for(i=0; i<100; i++)
{
    EEPROM.writeFloat(j,duration[i]);
    j=j+4;
}
exit(1);
}
```