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UNIVERSITAS PGRI ADI BUANA SURABAYA

FAKULTAS TEKNIK

Program Studi : Teknik Lingkungan - Perencanaan Wilayah Kota
Teknik Industri - Teknik Elektro - PVKK

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Pembimbing	SAGITA ROCHMAN, ST, M.Si			
Periode Bimbingan	Gasal/Genap Tahun 2020 / 2021			
Judul Skripsi	APLIKASI DAN SISTEM MONITORING PENENTUAN LOKASI TITIK GANGGUAN SALURAN TRANSMISI SUTT BERBASIS ANDROID			
KEGIATAN KONSULTASI / BIMBINGAN				
No	Tanggal	Materi pembimbingan	Keterangan	Paraf
1.	11 Desember 2020	Revisi Latar belakang	ACC	
2	25 Desember 2020	Revisi Rumusan Masalah	ACC	
3	28 Desember 2020	Bab II Penambahan pustaka/teori	ACC	
4	8 Januari 2021	Bab III Revisi Desain awal	ACC	
5	11 Januari 2021	Metode pengambilan data	ACC	
6	15 Januari 2021	Bab IV Revisi analisis data	ACC	
7.		Pengajian data	ACC	
8	18 - Januari 2021	Bab V Revisi kesimpulan/saran	ACC	
Dinyatakan selesai tanggal : 21 Januari 2021				



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Surabaya, 21 Januari 2021
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JAWI KUSWANTO



FORM REVISI PROPOSAL TUGAS AKHIR

Nama Mahasiswa : Jawi Kuswanto
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Judul Proposal Tugas Akhir : Aplikasi dan Sistem Monitoring
Pemertkuan titik Lokasi Gangguan
Saluran Transmisi berbasis Android

Ujian Tanggal :

No Bab.	Tanggal	Materi Konsultasi	Keterangan Catatan	Tanda Tangan Penguji
I	02 Feb 2021	latar belakang . Penelitian	-	Aa
II	05. Feb 2021	Luang Ujicup	-	Aa
III	08 Feb 2021	Hasil Uji ditambah	-	Aa
IV	10 Feb 2021	Referensi penelitian	-	Aa
V	10 Feb 2021	Tata Cara Penulisan	-	Aa

Disetujui Dosen Penguji

Pada Tanggal,.....

Penguji I,

(Dr. Budi Prijo S.)

Penguji II,

(Rana Ditya W.)

- a. Penyelesaian Revisi paling lambat 2 minggu dari pelaksanaan Ujian Proposal Tugas Akhir.
b. Pengetikan, penjilidan, penandatngani Proposal Tugas Akhir dan mengumpulkan Proposal Tugas Akhir paling lambat 2 minggu dari revisi.
- Apabila sampai batas waktu tersebut (point 1,a dan b) mahasiswa belum menyelesaikan revisi dan tanda tangan, maka **Ujian dinyatakan Gugur.**
- a. Foto copy Form Revisi diserahkan ke Program Studi
b. Proposal Tugas Akhir yang sudah direvisi diserahkan ke Program Studi 2 (Dua) eksemplar yang sudah dijilid softcover. (warna cover sesuai masing-masing program studi).

LAMPIRAN

Source Code Alat

```
// Inisiasi Awal

#define BLYNK_PRINT Serial

#include <ESP32WiFi.h>

#include <BlynkSimpleEsp8266.h>

#include <PZEM004T.h>

#include <Wire.h>

// #include <LCD.h> // D4 SDA & D3 SCL //

#include <LiquidCrystal_I2C.h>

//inisiasi LCD DISPLAY

LiquidCrystal_I2C lcd(0x27, 16, 2);

//LiquidCrystal_I2C lcd(0x27 ,2,1,0,4,5,6,7,3, POSITIVE);

//inisiasi PZEM-004T

PZEM004T pzem(12,14);//nodemcu berarti D6 dan D5 sebagai RX, TX

IPAddress ip (192,168,1,1);

//Inisiasi variabel pengukuran

float voltage_blynk=0;

float current_blynk=0;

float power_blynk=0;

float energy_blynk=0;

float faktordaya_blynk=0;

89// auth yang tertera pada apps BLYNK

char auth[] = "t1Qr3t2YtBDNyfgbB0EDL9ESpGwR1UDq";

//SSID jaringan wifi yang digunakan
```

```

//Password jaringan tersebut
char ssid[] = "PASSION";
char pass[] = "Unipa1";
BlynkTimer timer;
unsigned long lastMillis=0;

//inisiasi variabel cosphi
/*int pin = 15;
float pulsewidth=0;
float pf=0;
float phase=0;
float rads = 57.29577951;
float degree = 360;
float freq = 50;
void powerfactor ()
{
pulsewidth = pulseIn (pin,HIGH);
phase =( degree * freq * pulsewidth / 1000000);
pf = cos(phase * 3.1415 / 180 );
//lcd.setCursor (0,0);
// lcd.print(phase);
90// lcd.setCursor(0,1);
//lcd.print (pf);
faktordaya_blynk=pf;
Serial.print ("pulse="); Serial.print(pulsewidth);
Serial.print("Cosphi= "); Serial.print(pf);
Serial.print("Sudut= "); Serial.print(phase);

```

```

//Serial.print("Time="); Serial.print(lastMillis );
delay (500);
}
*/

void mySensorDataSend()
{ float p = (pzem.power(ip)*0.94);
float v = pzem.voltage(ip);
float i = pzem.current(ip);
/// Read meter PZEM
{
if(v < 0.0) v=0.0;
{ voltage_blynk =v; } //V
Serial.print("V= "); Serial.print(v); Serial.print(" Volt ");
lcd.setCursor(0,0);
lcd.print("V= ");
lcd.setCursor(2,0);
91 lcd.print(v);
}
{
if(i < 0.0 ) i=0.0;
{ current_blynk=i; }
Serial.print("I= "); Serial.print(i); Serial.print(" Ampere ");
lcd.setCursor(9,0);
lcd.print("I= ");
lcd.setCursor(11,0);
lcd.print(i);
}
}

```

```

}

{
if(p < 0.0) p=0.0;

{power_blynk=(p); } //kW

Serial.print("P= "); Serial.print(p); Serial.print(" Watt ");

lcd.setCursor(9,1);

lcd.print("P= ");

lcd.setCursor(11,1);

lcd.print(p);

}

92 {

float pf = (p/(v*i));

/*((pzem.power(ip))/((pzem.voltage(ip))*(pzem.current(ip)))));*/

if ( pf > 1.0 )

{ ( pf = 1.0); faktordaya_blynk=pf; }

else if ( pf < 0.0 )

{ ( pf = 0.0); faktordaya_blynk=pf; }

else

{

//pf=((pzem.power(ip))/((pzem.voltage(ip))*(pzem.current(ip))));

pf = (p/(v*i));

}

lcd.setCursor(0,1);

lcd.print("Pf=");

lcd.setCursor(3,1);

lcd.print(pf);

```

```

Serial.print("PF= "); Serial.print(pf); Serial.print(" ");
faktordaya_blynk=pf;
}
{
float e = pzem.energy(ip);
if(e < 0.0) e=0.0;
{ energy_blynk =e; } //kWh
Serial.print("E= "); Serial.println(e);
// lcd.setCursor(0,1);
// lcd.print("E=");
93 // lcd.setCursor(2,1);
// lcd.print(e);
}
//delay(8000);
// lcd.print( " \n" );
//Blynk.virtualWrite(V5,millis()/1000);
//Publish data every 10 seconds (10000 milliseconds). Change this value to publish
at
a different interval.
if (millis() - lastMillis > 10000) {
lastMillis = millis();
//Serial.print("Time Elapsed Total = ");
//Serial.println(lastMillis);
Blynk.virtualWrite(V1, voltage_blynk);
Blynk.virtualWrite(V2, current_blynk );
Blynk.virtualWrite(V3, power_blynk);

```

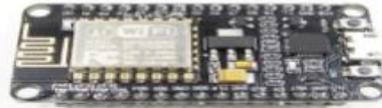
```

Blynk.virtualWrite(V4, energy_blynk );
Blynk.virtualWrite(V5, lastMillis );
Blynk.virtualWrite(V6, faktordaya_blynk);
}
}
void setup(){
// Debug console
Serial.begin(9600);
pzem.setAddress(ip);
9495
Blynk.begin(auth, ssid, pass, "blynk-cloud.com",8442);
timer.setInterval(10000L, mySensorDataSend);
Wire.begin(2,0);
lcd.init(); // initializing the LCD
lcd.backlight(); // Enable or Turn On the backlight
}
void loop(){
// powerfactor();
Blynk.run();
timer.run(); // Initiates BlynkTimer
}

```

LAMPIRAN 3 :

NODEMCU LOLIN V3



Lolin NodeMCU V3 is an open source IoT platform. It uses the Lua scripting language. The eLua project is the basis of board, and built on the ESP8266 SDK 1.4. NodeMCU uses many open source projects, such as lua-cjson, and spiffs. The NodeMCU runs on the ESP8266 Wi-Fi SoC, and hardware which based on the ESP-12 module.

The Lolin NodeMCU V3 board ads USB/UART converter chip as well as decoupled LDO power supply. Also the board adds 2 miniature push buttons. The most important feature is that it breaks out all ESP8266 pins to board headers. The board headers are breadboard compatible 2.54 mm pitch headers.

The Lolin NodeMCU board uses the CH340G USB/UART converter chip. You will need to download and install the proper driver to get going with the development. You can find the drivers here:

NodeMCU CH340/CH340G Driver Download page (if not automatically recognised): [Click Here](#)

For MAC users please check this link .

PLACA NodeMCU 1.0 (V2)

PINOUT

IO/OUT | **ADC IN** | **RESERVA** | **RESERVA** | **SDIO DATA1** | **SDIO DATA2** | **SDIO DATA3** | **SDIO CMD** | **SDIO CLK** | **GND** | **3.3V** | **EN** | **RESET** | **GND** | **VCC**

GPIO 16 | **GPIO 02** | **GPIO 04** | **GPIO 06** | **GPIO 08** | **GPIO 10** | **GPIO 12** | **GPIO 14** | **GPIO 18** | **GPIO 20** | **GPIO 22** | **GPIO 24** | **GPIO 26** | **GPIO 28** | **GPIO 30** | **GPIO 32** | **GPIO 34** | **GPIO 36** | **GPIO 38** | **GPIO 40** | **GPIO 42** | **GPIO 44** | **GPIO 46** | **GPIO 48** | **GPIO 50** | **GPIO 52** | **GPIO 54** | **GPIO 56** | **GPIO 58** | **GPIO 60** | **GPIO 62** | **GPIO 64** | **GPIO 66** | **GPIO 68** | **GPIO 70** | **GPIO 72** | **GPIO 74** | **GPIO 76** | **GPIO 78** | **GPIO 80** | **GPIO 82** | **GPIO 84** | **GPIO 86** | **GPIO 88** | **GPIO 90** | **GPIO 92** | **GPIO 94** | **GPIO 96** | **GPIO 98** | **GPIO 100** | **GPIO 102** | **GPIO 104** | **GPIO 106** | **GPIO 108** | **GPIO 110** | **GPIO 112** | **GPIO 114** | **GPIO 116** | **GPIO 118** | **GPIO 120** | **GPIO 122** | **GPIO 124** | **GPIO 126** | **GPIO 128** | **GPIO 130** | **GPIO 132** | **GPIO 134** | **GPIO 136** | **GPIO 138** | **GPIO 140** | **GPIO 142** | **GPIO 144** | **GPIO 146** | **GPIO 148** | **GPIO 150** | **GPIO 152** | **GPIO 154** | **GPIO 156** | **GPIO 158** | **GPIO 160** | **GPIO 162** | **GPIO 164** | **GPIO 166** | **GPIO 168** | **GPIO 170** | **GPIO 172** | **GPIO 174** | **GPIO 176** | **GPIO 178** | **GPIO 180** | **GPIO 182** | **GPIO 184** | **GPIO 186** | **GPIO 188** | **GPIO 190** | **GPIO 192** | **GPIO 194** | **GPIO 196** | **GPIO 198** | **GPIO 200** | **GPIO 202** | **GPIO 204** | **GPIO 206** | **GPIO 208** | **GPIO 210** | **GPIO 212** | **GPIO 214** | **GPIO 216** | **GPIO 218** | **GPIO 220** | **GPIO 222** | **GPIO 224** | **GPIO 226** | **GPIO 228** | **GPIO 230** | **GPIO 232** | **GPIO 234** | **GPIO 236** | **GPIO 238** | **GPIO 240** | **GPIO 242** | **GPIO 244** | **GPIO 246** | **GPIO 248** | **GPIO 250** | **GPIO 252** | **GPIO 254** | **GPIO 256** | **GPIO 258** | **GPIO 260** | **GPIO 262** | **GPIO 264** | **GPIO 266** | **GPIO 268** | **GPIO 270** | **GPIO 272** | **GPIO 274** | **GPIO 276** | **GPIO 278** | **GPIO 280** | **GPIO 282** | **GPIO 284** | **GPIO 286** | **GPIO 288** | **GPIO 290** | **GPIO 292** | **GPIO 294** | **GPIO 296** | **GPIO 298** | **GPIO 300** | **GPIO 302** | **GPIO 304** | **GPIO 306** | **GPIO 308** | **GPIO 310** | **GPIO 312** | **GPIO 314** | **GPIO 316** | **GPIO 318** | **GPIO 320** | **GPIO 322** | **GPIO 324** | **GPIO 326** | **GPIO 328** | **GPIO 330** | **GPIO 332** | **GPIO 334** | **GPIO 336** | **GPIO 338** | **GPIO 340** | **GPIO 342** | **GPIO 344** | **GPIO 346** | **GPIO 348** | **GPIO 350** | **GPIO 352** | **GPIO 354** | **GPIO 356** | **GPIO 358** | **GPIO 360** | **GPIO 362** | **GPIO 364** | **GPIO 366** | **GPIO 368** | **GPIO 370** | **GPIO 372** | **GPIO 374** | **GPIO 376** | **GPIO 378** | **GPIO 380** | **GPIO 382** | **GPIO 384** | **GPIO 386** | **GPIO 388** | **GPIO 390** | **GPIO 392** | **GPIO 394** | **GPIO 396** | **GPIO 398** | **GPIO 400** | **GPIO 402** | **GPIO 404** | **GPIO 406** | **GPIO 408** | **GPIO 410** | **GPIO 412** | **GPIO 414** | **GPIO 416** | **GPIO 418** | **GPIO 420** | **GPIO 422** | **GPIO 424** | **GPIO 426** | **GPIO 428** | **GPIO 430** | **GPIO 432** | **GPIO 434** | **GPIO 436** | **GPIO 438** | **GPIO 440** | **GPIO 442** | **GPIO 444** | **GPIO 446** | **GPIO 448** | **GPIO 450** | **GPIO 452** | **GPIO 454** | **GPIO 456** | **GPIO 458** | **GPIO 460** | **GPIO 462** | **GPIO 464** | **GPIO 466** | **GPIO 468** | **GPIO 470** | **GPIO 472** | **GPIO 474** | **GPIO 476** | **GPIO 478** | **GPIO 480** | **GPIO 482** | **GPIO 484** | **GPIO 486** | **GPIO 488** | **GPIO 490** | **GPIO 492** | **GPIO 494** | **GPIO 496** | **GPIO 498** | **GPIO 500** | **GPIO 502** | **GPIO 504** | **GPIO 506** | **GPIO 508** | **GPIO 510** | **GPIO 512** | **GPIO 514** | **GPIO 516** | **GPIO 518** | **GPIO 520** | **GPIO 522** | **GPIO 524** | **GPIO 526** | **GPIO 528** | **GPIO 530** | **GPIO 532** | **GPIO 534** | **GPIO 536** | **GPIO 538** | **GPIO 540** | **GPIO 542** | **GPIO 544** | **GPIO 546** | **GPIO 548** | **GPIO 550** | **GPIO 552** | **GPIO 554** | **GPIO 556** | **GPIO 558** | **GPIO 560** | **GPIO 562** | **GPIO 564** | **GPIO 566** | **GPIO 568** | **GPIO 570** | **GPIO 572** | **GPIO 574** | **GPIO 576** | **GPIO 578** | **GPIO 580** | **GPIO 582** | **GPIO 584** | **GPIO 586** | **GPIO 588** | **GPIO 590** | **GPIO 592** | **GPIO 594** | **GPIO 596** | **GPIO 598** | **GPIO 600** | **GPIO 602** | **GPIO 604** | **GPIO 606** | **GPIO 608** | **GPIO 610** | **GPIO 612** | **GPIO 614** | **GPIO 616** | **GPIO 618** | **GPIO 620** | **GPIO 622** | **GPIO 624** | **GPIO 626** | **GPIO 628** | **GPIO 630** | **GPIO 632** | **GPIO 634** | **GPIO 636** | **GPIO 638** | **GPIO 640** | **GPIO 642** | **GPIO 644** | **GPIO 646** | **GPIO 648** | **GPIO 650** | **GPIO 652** | **GPIO 654** | **GPIO 656** | **GPIO 658** | **GPIO 660** | **GPIO 662** | **GPIO 664** | **GPIO 666** | **GPIO 668** | **GPIO 670** | **GPIO 672** | **GPIO 674** | **GPIO 676** | **GPIO 678** | **GPIO 680** | **GPIO 682** | **GPIO 684** | **GPIO 686** | **GPIO 688** | **GPIO 690** | **GPIO 692** | **GPIO 694** | **GPIO 696** | **GPIO 698** | **GPIO 700** | **GPIO 702** | **GPIO 704** | **GPIO 706** | **GPIO 708** | **GPIO 710** | **GPIO 712** | **GPIO 714** | **GPIO 716** | **GPIO 718** | **GPIO 720** | **GPIO 722** | **GPIO 724** | **GPIO 726** | **GPIO 728** | **GPIO 730** | **GPIO 732** | **GPIO 734** | **GPIO 736** | **GPIO 738** | **GPIO 740** | **GPIO 742** | **GPIO 744** | **GPIO 746** | **GPIO 748** | **GPIO 750** | **GPIO 752** | **GPIO 754** | **GPIO 756** | **GPIO 758** | **GPIO 760** | **GPIO 762** | **GPIO 764** | **GPIO 766** | **GPIO 768** | **GPIO 770** | **GPIO 772** | **GPIO 774** | **GPIO 776** | **GPIO 778** | **GPIO 780** | **GPIO 782** | **GPIO 784** | **GPIO 786** | **GPIO 788** | **GPIO 790** | **GPIO 792** | **GPIO 794** | **GPIO 796** | **GPIO 798** | **GPIO 800** | **GPIO 802** | **GPIO 804** | **GPIO 806** | **GPIO 808** | **GPIO 810** | **GPIO 812** | **GPIO 814** | **GPIO 816** | **GPIO 818** | **GPIO 820** | **GPIO 822** | **GPIO 824** | **GPIO 826** | **GPIO 828** | **GPIO 830** | **GPIO 832** | **GPIO 834** | **GPIO 836** | **GPIO 838** | **GPIO 840** | **GPIO 842** | **GPIO 844** | **GPIO 846** | **GPIO 848** | **GPIO 850** | **GPIO 852** | **GPIO 854** | **GPIO 856** | **GPIO 858** | **GPIO 860** | **GPIO 862** | **GPIO 864** | **GPIO 866** | **GPIO 868** | **GPIO 870** | **GPIO 872** | **GPIO 874** | **GPIO 876** | **GPIO 878** | **GPIO 880** | **GPIO 882** | **GPIO 884** | **GPIO 886** | **GPIO 888** | **GPIO 890** | **GPIO 892** | **GPIO 894** | **GPIO 896** | **GPIO 898** | **GPIO 900** | **GPIO 902** | **GPIO 904** | **GPIO 906** | **GPIO 908** | **GPIO 910** | **GPIO 912** | **GPIO 914** | **GPIO 916** | **GPIO 918** | **GPIO 920** | **GPIO 922** | **GPIO 924** | **GPIO 926** | **GPIO 928** | **GPIO 930** | **GPIO 932** | **GPIO 934** | **GPIO 936** | **GPIO 938** | **GPIO 940** | **GPIO 942** | **GPIO 944** | **GPIO 946** | **GPIO 948** | **GPIO 950** | **GPIO 952** | **GPIO 954** | **GPIO 956** | **GPIO 958** | **GPIO 960** | **GPIO 962** | **GPIO 964** | **GPIO 966** | **GPIO 968** | **GPIO 970** | **GPIO 972** | **GPIO 974** | **GPIO 976** | **GPIO 978** | **GPIO 980** | **GPIO 982** | **GPIO 984** | **GPIO 986** | **GPIO 988** | **GPIO 990** | **GPIO 992** | **GPIO 994** | **GPIO 996** | **GPIO 998** | **GPIO 1000** | **GPIO 1002** | **GPIO 1004** | **GPIO 1006** | **GPIO 1008** | **GPIO 1010** | **GPIO 1012** | **GPIO 1014** | **GPIO 1016** | **GPIO 1018** | **GPIO 1020** | **GPIO 1022** | **GPIO 1024** | **GPIO 1026** | **GPIO 1028** | **GPIO 1030** | **GPIO 1032** | **GPIO 1034** | **GPIO 1036** | **GPIO 1038** | **GPIO 1040** | **GPIO 1042** | **GPIO 1044** | **GPIO 1046** | **GPIO 1048** | **GPIO 1050** | **GPIO 1052** | **GPIO 1054** | **GPIO 1056** | **GPIO 1058** | **GPIO 1060** | **GPIO 1062** | **GPIO 1064** | **GPIO 1066** | **GPIO 1068** | **GPIO 1070** | **GPIO 1072** | **GPIO 1074** | **GPIO 1076** | **GPIO 1078** | **GPIO 1080** | **GPIO 1082** | **GPIO 1084** | **GPIO 1086** | **GPIO 1088** | **GPIO 1090** | **GPIO 1092** | **GPIO 1094** | **GPIO 1096** | **GPIO 1098** | **GPIO 1100** | **GPIO 1102** | **GPIO 1104** | **GPIO 1106** | **GPIO 1108** | **GPIO 1110** | **GPIO 1112** | **GPIO 1114** | **GPIO 1116** | **GPIO 1118** | **GPIO 1120** | **GPIO 1122** | **GPIO 1124** | **GPIO 1126** | **GPIO 1128** | **GPIO 1130** | **GPIO 1132** | **GPIO 1134** | **GPIO 1136** | **GPIO 1138** | **GPIO 1140** | **GPIO 1142** | **GPIO 1144** | **GPIO 1146** | **GPIO 1148** | **GPIO 1150** | **GPIO 1152** | **GPIO 1154** | **GPIO 1156** | **GPIO 1158** | **GPIO 1160** | **GPIO 1162** | **GPIO 1164** | **GPIO 1166** | **GPIO 1168** | **GPIO 1170** | **GPIO 1172** | **GPIO 1174** | **GPIO 1176** | **GPIO 1178** | **GPIO 1180** | **GPIO 1182** | **GPIO 1184** | **GPIO 1186** | **GPIO 1188** | **GPIO 1190** | **GPIO 1192** | **GPIO 1194** | **GPIO 1196** | **GPIO 1198** | **GPIO 1200** | **GPIO 1202** | **GPIO 1204** | **GPIO 1206** | **GPIO 1208** | **GPIO 1210** | **GPIO 1212** | **GPIO 1214** | **GPIO 1216** | **GPIO 1218** | **GPIO 1220** | **GPIO 1222** | **GPIO 1224** | **GPIO 1226** | **GPIO 1228** | **GPIO 1230** | **GPIO 1232** | **GPIO 1234** | **GPIO 1236** | **GPIO 1238** | **GPIO 1240** | **GPIO 1242** | **GPIO 1244** | **GPIO 1246** | **GPIO 1248** | **GPIO 1250** | **GPIO 1252** | **GPIO 1254** | **GPIO 1256** | **GPIO 1258** | **GPIO 1260** | **GPIO 1262** | **GPIO 1264** | **GPIO 1266** | **GPIO 1268** | **GPIO 1270** | **GPIO 1272** | **GPIO 1274** | **GPIO 1276** | **GPIO 1278** | **GPIO 1280** | **GPIO 1282** | **GPIO 1284** | **GPIO 1286** | **GPIO 1288** | **GPIO 1290** | **GPIO 1292** | **GPIO 1294** | **GPIO 1296** | **GPIO 1298** | **GPIO 1300** | **GPIO 1302** | **GPIO 1304** | **GPIO 1306** | **GPIO 1308** | **GPIO 1310** | **GPIO 1312** | **GPIO 1314** | **GPIO 1316** | **GPIO 1318** | **GPIO 1320** | **GPIO 1322** | **GPIO 1324** | **GPIO 1326** | **GPIO 1328** | **GPIO 1330** | **GPIO 1332** | **GPIO 1334** | **GPIO 1336** | **GPIO 1338** | **GPIO 1340** | **GPIO 1342** | **GPIO 1344** | **GPIO 1346** | **GPIO 1348** | **GPIO 1350** | **GPIO 1352** | **GPIO 1354** | **GPIO 1356** | **GPIO 1358** | **GPIO 1360** | **GPIO 1362** | **GPIO 1364** | **GPIO 1366** | **GPIO 1368** | **GPIO 1370** | **GPIO 1372** | **GPIO 1374** | **GPIO 1376** | **GPIO 1378** | **GPIO 1380** | **GPIO 1382** | **GPIO 1384** | **GPIO 1386** | **GPIO 1388** | **GPIO 1390** | **GPIO 1392** | **GPIO 1394** | **GPIO 1396** | **GPIO 1398** | **GPIO 1400** | **GPIO 1402** | **GPIO 1404** | **GPIO 1406** | **GPIO 1408** | **GPIO 1410** | **GPIO 1412** | **GPIO 1414** | **GPIO 1416** | **GPIO 1418** | **GPIO 1420** | **GPIO 1422** | **GPIO 1424** | **GPIO 1426** | **GPIO 1428** | **GPIO 1430** | **GPIO 1432** | **GPIO 1434** | **GPIO 1436** | **GPIO 1438** | **GPIO 1440** | **GPIO 1442** | **GPIO 1444** | **GPIO 1446** | **GPIO 1448** | **GPIO 1450** | **GPIO 1452** | **GPIO 1454** | **GPIO 1456** | **GPIO 1458** | **GPIO 1460** | **GPIO 1462** | **GPIO 1464** | **GPIO 1466** | **GPIO 1468** | **GPIO 1470** | **GPIO 1472** | **GPIO 1474** | **GPIO 1476** | **GPIO 1478** | **GPIO 1480** | **GPIO 1482** | **GPIO 1484** | **GPIO 1486** | **GPIO 1488** | **GPIO 1490** | **GPIO 1492** | **GPIO 1494** | **GPIO 1496** | **GPIO 1498** | **GPIO 1500** | **GPIO 1502** | **GPIO 1504** | **GPIO 1506** | **GPIO 1508** | **GPIO 1510** | **GPIO 1512** | **GPIO 1514** | **GPIO 1516** | **GPIO 1518** | **GPIO 1520** | **GPIO 1522** | **GPIO 1524** | **GPIO 1526** | **GPIO 1528** | **GPIO 1530** | **GPIO 1532** | **GPIO 1534** | **GPIO 1536** | **GPIO 1538** | **GPIO 1540** | **GPIO 1542** | **GPIO 1544** | **GPIO 1546** | **GPIO 1548** | **GPIO 1550** | **GPIO 1552** | **GPIO 1554** | **GPIO 1556** | **GPIO 1558** | **GPIO 1560** | **GPIO 1562** | **GPIO 1564** | **GPIO 1566** | **GPIO 1568** | **GPIO 1570** | **GPIO 1572** | **GPIO 1574** | **GPIO 1576** | **GPIO 1578** | **GPIO 1580** | **GPIO 1582** | **GPIO 1584** | **GPIO 1586** | **GPIO 1588** | **GPIO 1590** | **GPIO 1592** | **GPIO 1594** | **GPIO 1596** | **GPIO 1598** | **GPIO 1600** | **GPIO 1602** | **GPIO 1604** | **GPIO 1606** | **GPIO 1608** | **GPIO 1610** | **GPIO 1612** | **GPIO 1614** | **GPIO 1616** | **GPIO 1618** | **GPIO 1620** | **GPIO 1622** | **GPIO 1624** | **GPIO 1626** | **GPIO 1628** | **GPIO 1630** | **GPIO 1632** | **GPIO 1634** | **GPIO 1636** | **GPIO 1638** | **GPIO 1640** | **GPIO 1642** | **GPIO 1644** | **GPIO 1646** | **GPIO 1648** | **GPIO 1650** | **GPIO 1652** | **GPIO 1654** | **GPIO 1656** | **GPIO 1658** | **GPIO 1660** | **GPIO 1662** | **GPIO 1664** | **GPIO 1666** | **GPIO 1668** | **GPIO 1670** | **GPIO 1672** | **GPIO 1674** | **GPIO 1676** | **GPIO 1678** | **GPIO 1680** | **GPIO 1682** | **GPIO 1684** | **GPIO 1686** | **GPIO 1688** | **GPIO 1690** | **GPIO 1692** | **GPIO 1694** | **GPIO 1696** | **GPIO 1698** | **GPIO 1700** | **GPIO 1702** | **GPIO 1704** | **GPIO 1706** | **GPIO 1708** | **GPIO 1710** | **GPIO 1712** | **GPIO 1714** | **GPIO 1716** | **GPIO 1718** | **GPIO 1720** | **GPIO 1722** | **GPIO 1724** | **GPIO 1726** | **GPIO 1728** | **GPIO 1730** | **GPIO 1732** | **GPIO 1734** | **GPIO 1736** | **GPIO 1738** | **GPIO 1740** | **GPIO 1742** | **GPIO 1744** | **GPIO 1746** | **GPIO 1748** | **GPIO 1750** | **GPIO 1752** | **GPIO 1754** | **GPIO 1756** | **GPIO 1758** | **GPIO 1760** | **GPIO 1762** | **GPIO 1764** | **GPIO 1766** | **GPIO 1768** | **GPIO 1770** | **GPIO 1772** | **GPIO 1774** | **GPIO 1776** | **GPIO 1778** | **GPIO 1780** | **GPIO 1782** | **GPIO 1784** | **GPIO 1786** | **GPIO 1788** | **GPIO 1790** | **GPIO 1792** | **GPIO 1794** | **GPIO 1796** | **GPIO 1798** | **GPIO 1800** | **GPIO 1802** | **GPIO 1804** | **GPIO 1806** | **GPIO 1808** | **GPIO 1810** | **GPIO 1812** | **GPIO 1814** | **GPIO 1816** | **GPIO 1818** | **GPIO 1820** | **GPIO 1822** | **GPIO 1824** | **GPIO 1826** | **GPIO 1828** | **GPIO 1830** | **GPIO 1832** | **GPIO 1834** | **GPIO 1836** | **GPIO 1838** | **GPIO 1840** | **GPIO 1842** | **GPIO 1844** | **GPIO 1846** | **GPIO 1848** | **GPIO 1850** | **GPIO 1852** | **GPIO 1854** | **GPIO 1856** | **GPIO 1858**