# Modul 2 : ESP32

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kel : 10 / B
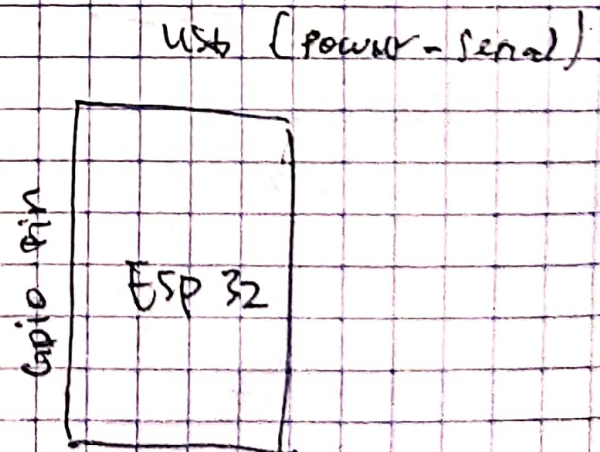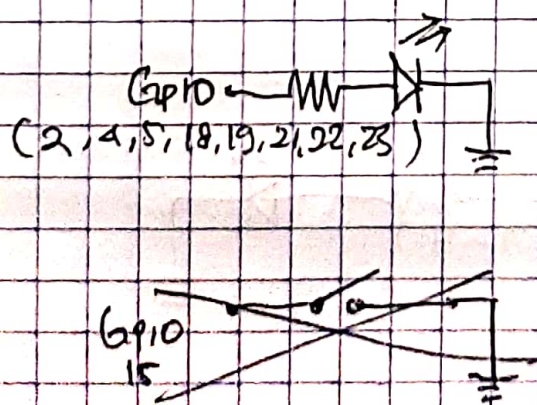
## Percobaan II.1 : Output digital

### A. Setting Alat

- Komponen yang digunakan :
  1) ESP 32
  2) LED x 8
  3) Resistor x 9
  4. Push Button
  5. Jumper .

- Rangkaian percobaan .

## B. Data Hasil Percobaan

**led**

| clock | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 |   |   |   |   |   |   |   |   |
| 1 | X |   |   |   |   |   |   |   |
| 2 |   | X |   |   |   |   |   |   |
| 3 |   |   | X |   |   |   |   |   |
| 4 | — | — | — | || | — | — | — | — |
| 5 |   |   |   |   | X |   |   |   |
| 6 |   |   |   |   |   | X |   |   |
| 7 |   |   |   |   |   |   | X |   |
| 8 | X |   |   |   |   |   |   |   |
| 9 |   | X |   |   |   |   |   |   |
| 10 | — | — | — | || | — | — | — | — |

*time*

Setelah Modif

**led**

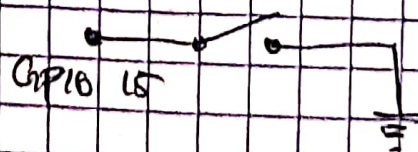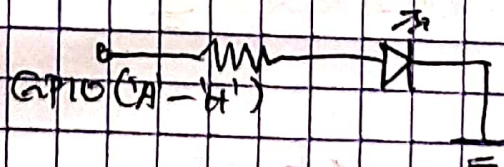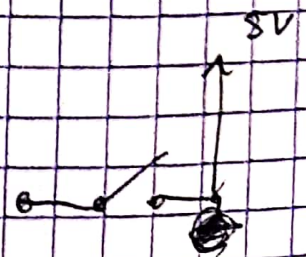| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 |   |   |   |   |   |   |   |   |
| 1 | X | X | X | X | X | X | X | X |
| 2 |   |   |   |   |   |   |   |   |
| 3 | X | X | X | X | X | X | X | X |
| n | — | — | — | || | — | — | — | — |

Sebelum modif.

## C. Kejadian LAB.

- tidak ada.

## Percobaan 2S2 : Input Digital.

### A. Setting Alat



Internal Pullup          Internal Pulldown.

- Komponen :
  1) ESP 32
  2) Led
  3) Resistor
  4) Jumper
  5) Push button .

B. Hasil Percobaan .

Pattern

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | X |  |  |  |  |  |  |  |
| 2 |  | X |  |  |  |  |  |  |
| 3 |  |  | X |  |  |  |  |  |
| 4 |  |  |  | — ll — |  |  |  |  |
| 5 |  |  |  |  | X |  |  |  |
| 6 |  |  |  |  |  | X |  |  |
| 7 | X |  |  |  |  |  |  |  |
| 8 |  | X |  |  |  |  |  |  |
| 9 |  |  |  | — ll — |  |  |  |  |

*ketika PB ditekan*

Grafik trigger Pullup -



terminal CH Osilosko dibalik



Grafik trigger Puldown .

tegangan Led : 3,213 V

Arus Led : 1,2 mA

tegangan GPIO : 3,25 V

tegang 5V :

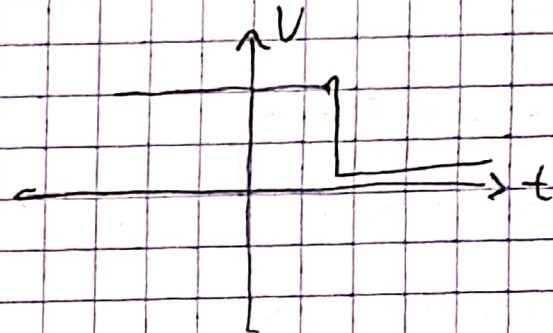- 1 led : 5,06 V
- 2 led : 5,06 V
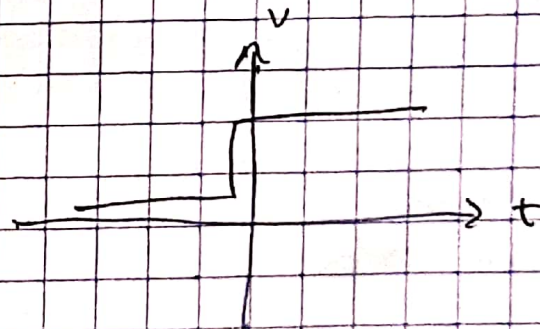- 3 led : 5,06 V
- 4 led : 5,05 V
- 5 led : 5,06 V
- 6 led : 5,05 V
- 7 led : 5,05 V
- 8 led : 5,04 V

C. Kejadian lab
- tidak ada

<u>Percobaan</u> ~~26~~ 261

A. Setting Alat.
Rangkaian dan komponen ~~Sesuai~~ Sama dgn Percobaan 251

B. Hasil Data

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| 1 | X | X | X | X | X | X | X | X |
| 2 | | | | | | | | |
| 3 | X | X | X | X | X | X | X | X |
| 4 | | — "" — | | | | | | |

sebelum modif

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| 1 | X | | | | | | | |
| 2 | | X | | | | | | |
| 3 | | | | X | | | | |
| 4 | | | | —11— | | | | |
| 5 | | | | | | | X | |
| 6 | | | | | | | | X |
| 7 | X | | | | | | | |
| 8 | | X | | | | | | |
| 9 | | | | —11— | | | | |

C Kejadian
- tidak ada

Percobaan 262 : Input digital.

A. Setting Alat

Rangkaian dan komponen sama dgn 252.

B. Hasil Percobaan.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 | X | | | | | | | |
| 1 | | X | | | | | | |
| 2 | | | X | | | | | |
| 3 | | | — | " | — | | | |
| 4 | | | | | | X | | |
| 5 | | | | | | | X | |
| 6 | X | | | | | | | |
| 7 | | X | | | | | | |
| 8 | | | — | U | — | | | |

A B C D E F G H
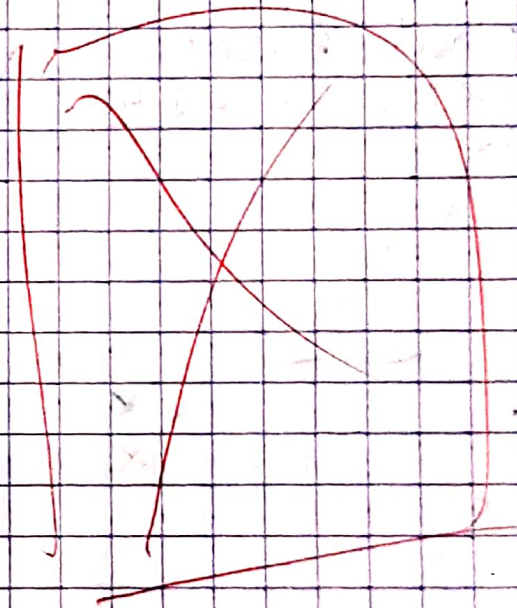
C. Hasil percobaan
~ lancar

Percobaan 266 : 10E.

A. Setting Alat.
Sama dengan 252 rangkaian dan komponen.

B. Hasil

[ on ]          Off

led OFF          led On
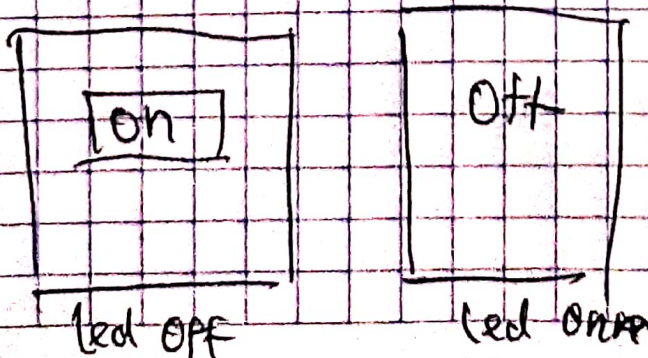
Percobaan
C. Kejadian :
— tidak ada :

Percobaan 265 : interupt timer.

A. Setting Alat
sama dengan rangkaian 252.

B. Hasil Percobaan.

| | A | B | C | P | E | F | G | H1 |
|---|---|---|---|---|---|---|---|---|
| 0 | X | | | | | | | |
| 1 | | X | | | | | | |
| 2 | | | X | | | | | |
| 3 | | | | X | | | | |
| 4 | | | —H— | | | | | |
| | | | | | | X | X | |
| | | | | | | | X | |
| | X | | | | | | | |
| | | X | | | | | | |

C. Kejadian
— tidak Ada

Percobaan 269 :

A. Setting Alat
sama dengan perc 252.

B. Hasil

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| 1 | X | X | X | X | X | X | X | X |
| 2 | | | | | | | | |
| 3 | X | X | X | X | X | X | X | X |
| 4 | | | — | " | — | | | |

Sebelum modif

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 0 | X | X | X | X | | | | |
| 1 | | | | | X | X | X | X |
| 2 | X | X | X | X | | | | |
| 3 | | | | | X | X | X | X |
| 4 | | | — | " | — | | | |

Hasil mod .

C. Kejadian .

~tidak ada .

Silit

Sidartha P