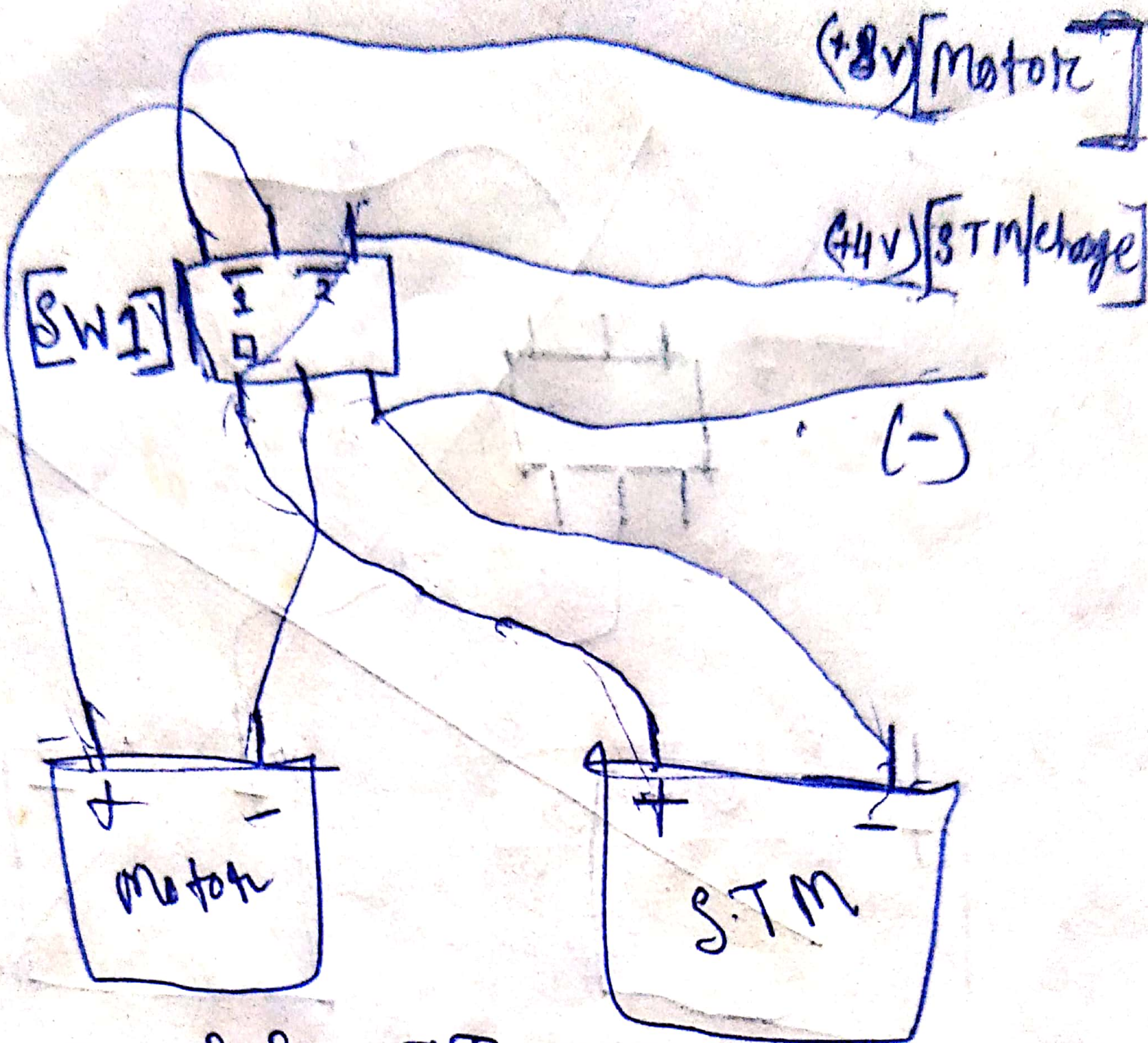
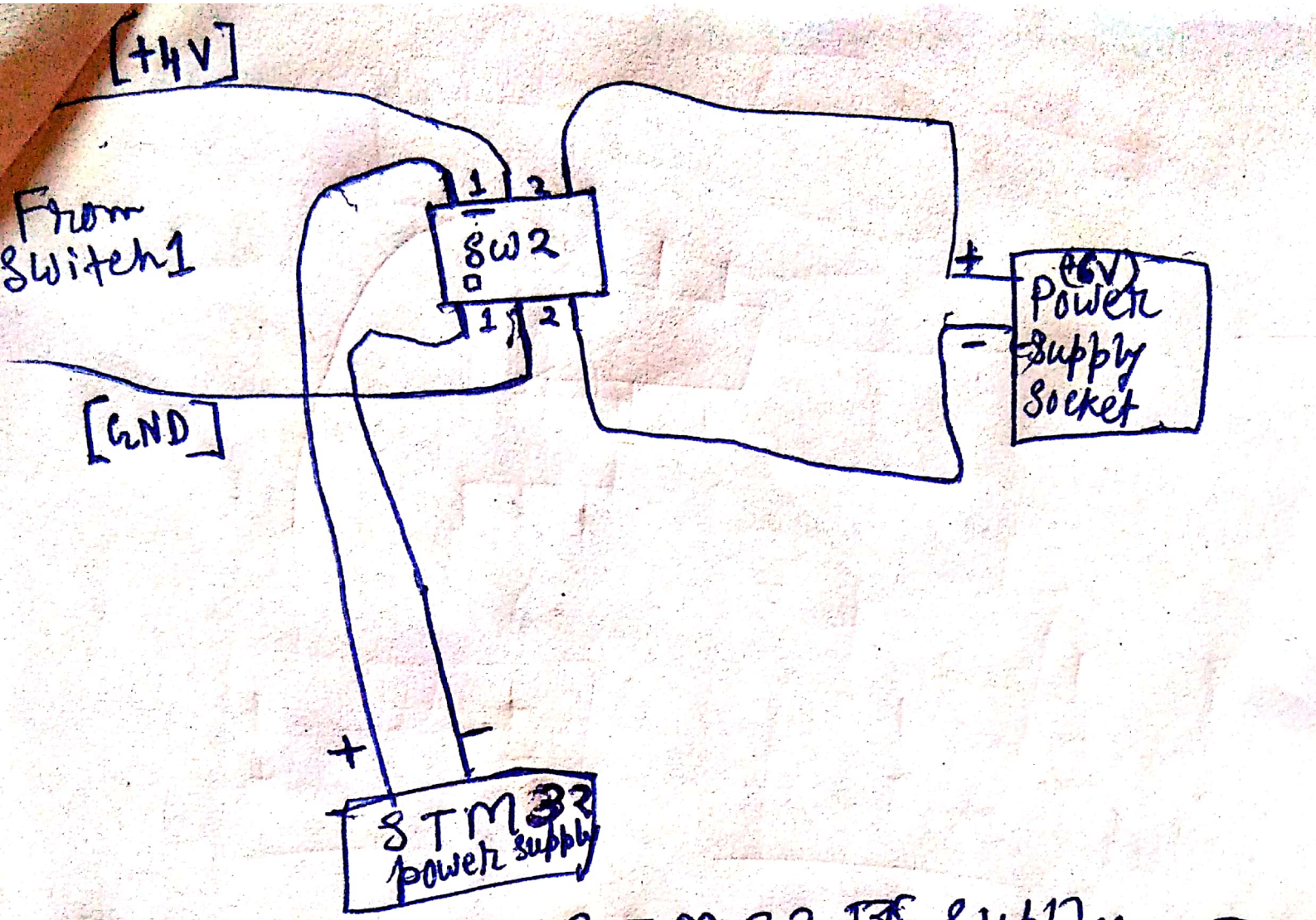


* 4V এর লাইনটি একবার STM কে supply দেবে একবার charge হবে। By an another switch .

① নং position এ থাকলে STM কে supply দিবে

② নং position এ থাকলে charge হবে ও একইসময় motor driver এর (+8V) supply বন্ধ থাকবে।



① যদি position -এ STM32 এর supply যাবে,

② যদি position এ Power Supply থেকে current battery তে যাবে।

(i) Bluetooth → tx — PA_3 → Rx (STM)
Rx — PA_2 → Tx (STM)
State — PA_8
5V
Serial 2

(ii) Wifi → tx — PA_10 → Rx (STM)
Rx — PA_9 → Tx (STM)
3.3
Serial 1

(iii) RF → Data — PB_12
5V

(iv) NRF → SCK — PA_5
MISO — PA_6
MOSI — PA_7
CSN — PB_15
CE — PA_4
3.3

LCD Display
RS — PB_11
E — PB_10
D4 — PB_6
D5 — PB_7
D6 — PB_8
D7 — PB_9
5V

(v) Motor Driver → (G) IN4 — PB_9 (Black)
(E) IN3 — PB_1
(Y) IN2 — PB_0
(B) IN1 — PB_8 (Blue)
3.3

4-Button
(U) B+1 — PB_4
(D) B+2 — PA_15
(L) B+3 — PB_3
(R) B+4 — PB_5
5V
3.3

(vi) Distance Sensor → trig — PA_13 → Blue
echo — PA_14 → Green
5V

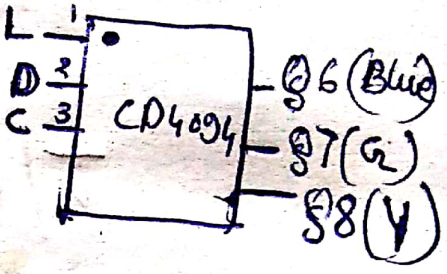
(vii) ~~Led~~
~~(viii) Buzzer~~

(viii) Shift Register → shift — PB_14 (1)
CLK — PB_13 (3)
Data — PB_15 (2)

Shift Register এ latch pin Low থাকবে [Micro-controller থেকে Shift register] এ data যাবে 8 bit per clock pulse. But কোন output এ change হবে না, যখন latch pin High হবে then সেই output এ যাবে।

S4595 — LCD Display

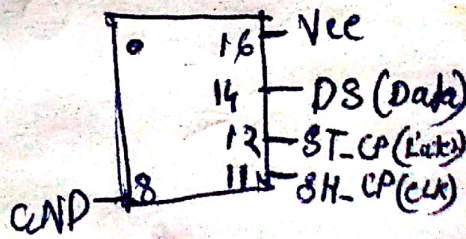
Q0 → D7
Q1 → D6
Q2 → D5
Q3 → D4
Q6 → E
Q7 → RS

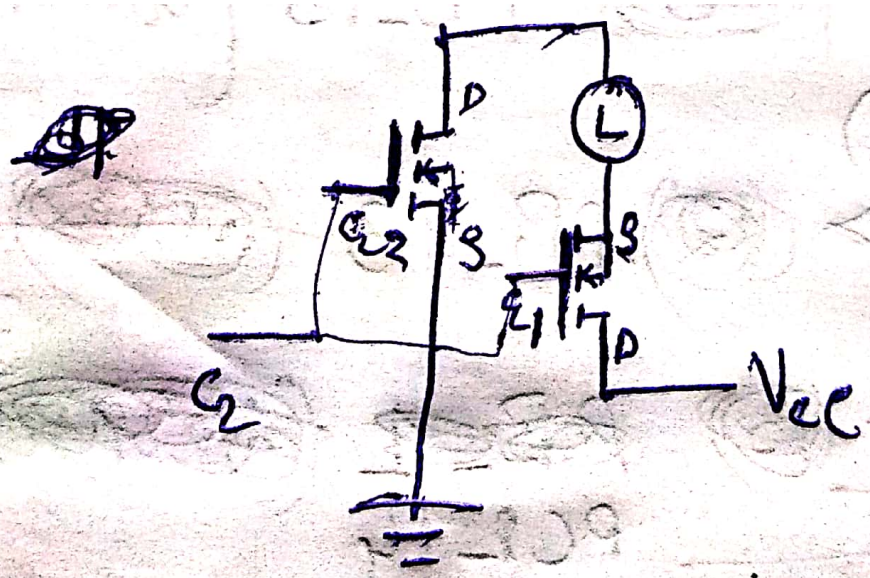


74HC595 — STM32

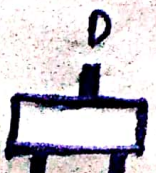
(Data) DS (14) → PB_15 (Green)
(CLK) SH_CP (11) → PB_13 (Yellow)
(L) ST_CP (12) → PB_14 (Blue)

$\overline{OE}$ + GND = GND
$\overline{MR}$ + VCC = VCC

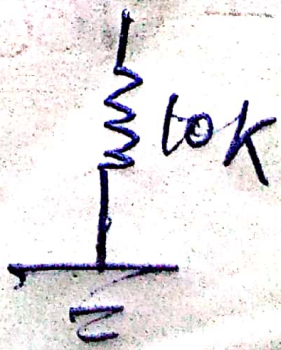




Q_1 & Q_2 short ↔ R_L



(A2SHB)
(N-channel MOSFET)



Compus module – SDA – PB_7

SCL – PB_6

IR – Sensor –

IR – Shift_Register

VCC & GND – Shift_Register

D1 – PA_0

D2 – PA_1

D3 – PA_2

D4 – PA_3

D5 – PA_4

D6 – PA_5

D7 – PA_6

D8 – PA_7

Analog Reading —

i) Full White portion — 3095

Full White portion but white shadow on it — 3126

ii) Sensor on Just black Line — ~~32000~~ (3150 - 3200)

iii) Sensor on blackline — 3220 - 3240

Ang (+ve) (Ang > 0) [Compus Module]

(Ang < 90°) — Left (slow)

(Ang > 90° && Ang < 180°) — Left (fast)

(Ang > 180 && Ang < 270) — Right (fast)

(Ang > 270) — Right (slow)

→ only for 360: [360 − 50 = 310 > 270]

Ang (−ve) → (Ang < 0)

(Ang > −90) — Right (slow)

(Ang < −90 && Ang > −180) — Right (fast)

(Ang < −180 && Ang > −270) — Left (fast)

(Ang < −270) — Left (slow)