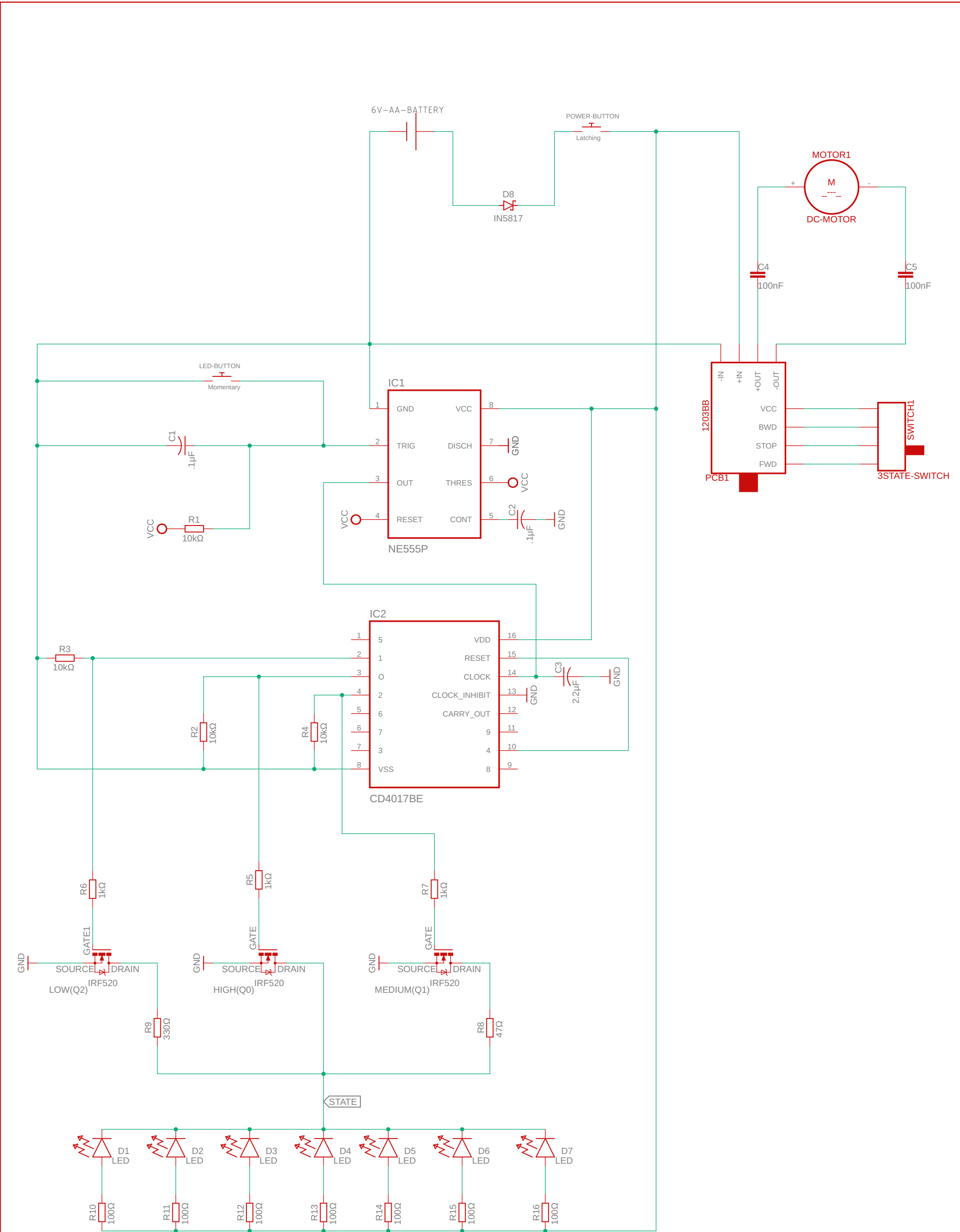




Full Circuit Schematic (With Ceramci Capacitor @Motor1)

TITLE: Full Circuit w/ CC v2

Document Number: SS-001

REV:

Date:

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Circuit Parts List (Grouped by Function)

Power and Brightness Control:

Qty	Value	Device	Parts
4	AA	ANY	6V-AA-BATTERY
3	IRF520	NMOSFET IRF520	HIGH(Q0), LOW(Q2), MEDIUM(Q1)
7	LED	WHITE-LED	D1, D2, D3, D4, D5, D6, D7
1	IN5817	SCHOTTKY DIODE	D8

Motor Control:

Qty	Value	Device	Parts
1	DC-MOTOR	DC-MOTOR	MOTOR1
1	3STATE-SWITCH	3STATE-SWITCH	SWITCH1
1	1203BB	MOTOR CONTROLLER	PCB1

Resistors:

Qty	Value	Device	Parts
7	100Ω	R_AXIAL-7.2MM- PITCH	R10, R11, R12, R13, R14, R15, R16
4	10kΩ	R_AXIAL-7.2MM- PITCH	R1, R2, R3, R4
3	1kΩ	R_AXIAL-7.2MM- PITCH	R5, R6, R7
1	330Ω	R_AXIAL-7.2MM- PITCH	R9
1	47Ω	R_AXIAL-7.2MM- PITCH	R8

Capacitors:

Qty	Value	Device	Parts
2	0.1μF	ELECTROLYTIC CAPACITOR	C1, C2
2	100nF	CERAMIC CAPACITOR	C4, C5

1	2.2μF	ELECTROLYTIC CAPACITOR	C3
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Buttons & Switches:

Qty	Value	Device	Parts
1	Latching	SWITCH PUSH BUTTON	POWER-BUTTON
1	Momentary	SWITCH PUSH BUTTON	LED-BUTTON

ICs:

Qty	Value	Device	Parts
1	NE555P	TIMER	IC1
1	CD4017BE	DECADE COUNTER	IC2

Materials and Fasteners List

Fasteners:

Qty	Type
11	M3 Hex Countersunk Flathead
6	M3 Hex Button Head

Materials and Fabrication Process:

Material	Fabrication Process
PETG or PLA Filament	3D Print for Body
TPU Filament	3D Print for Lube Gasket
Rubber (Thickness = .125")	Manually Cut (OD = 4")
Lubricant	Apply to Rotating Components