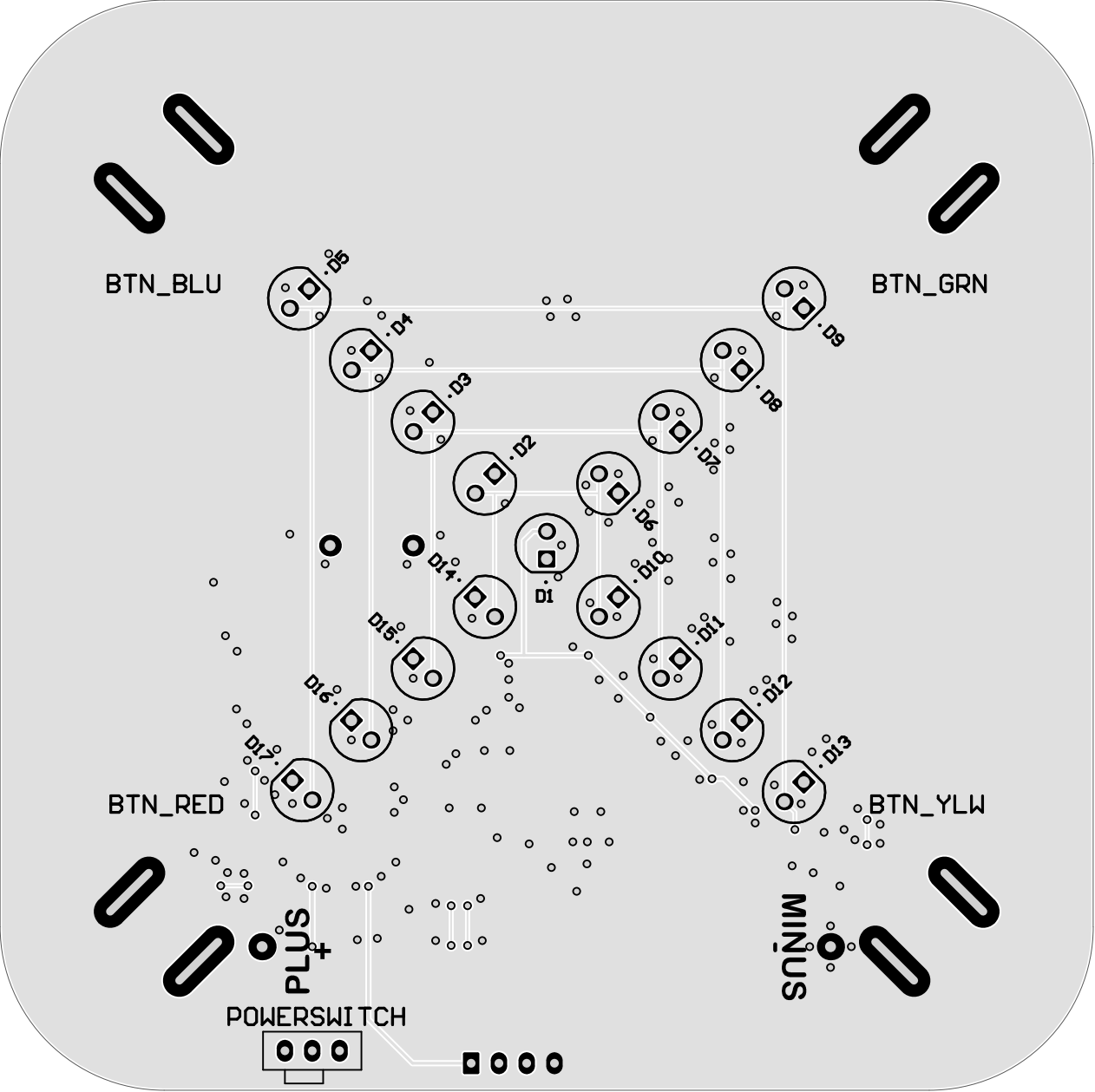
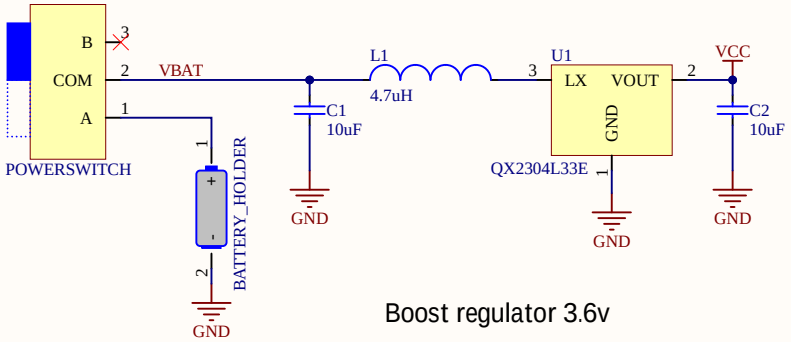
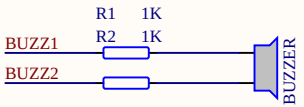

BTN_BLU
BTN_GRN
BTN_RED
BTN_YLW
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
PLUS
+
MINUS
POWERSWITCH

R11
R10
R9
R8
R12
R13
R14
R15
Q1
Q2
Q3
Q4
R3
R20
C5
C3
U2
C4
R21
R2
R1
C2
U1
L1
C1
R18
R19
R17
R16
R4
R5
R6
R7
BUZZER
MINUS
PLUS
BATTERY_HOLDER
DEBUG

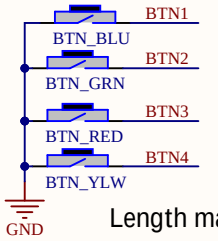


Boost regulator 3.6v



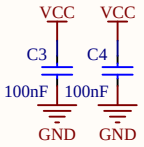
Buzzer

Buttons

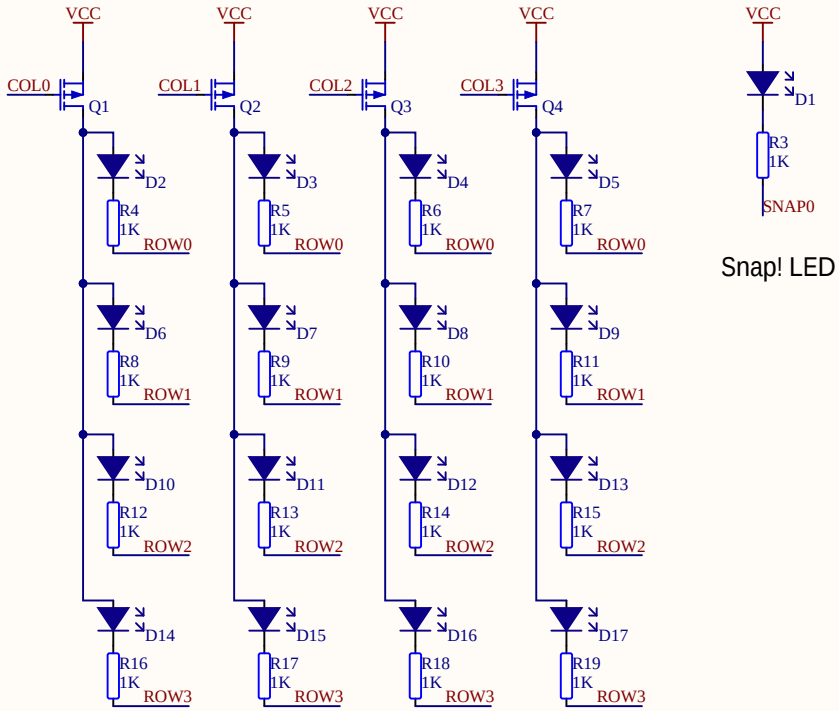


Length match BTN[1..4]

Near pins 17,1

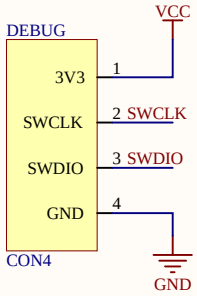


MCU decoupling

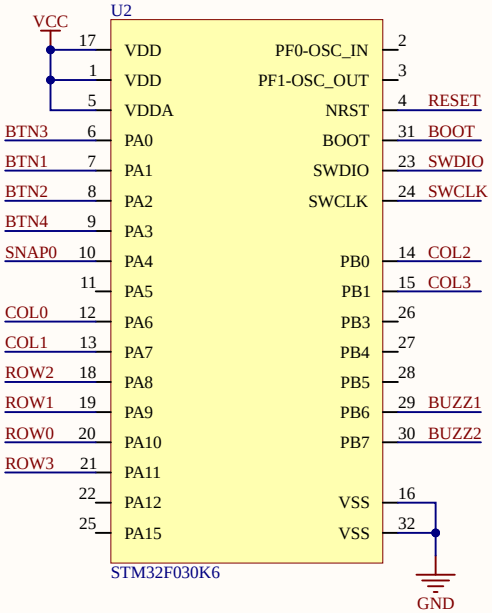


Score LEDs

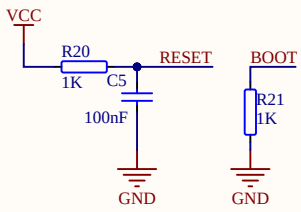
Snap! LED



Debug header



MCU



Reset / boot

Title		
Size A4	Number	Revision
Date: 3/01/2021		Sheet of
File: C:\dev\react4\pcb\react4\react4.SchDoc		Drawn By:

Comment	Description	Designator	Footprint	Quantity
BATTERY		BATTERY_HOLDER	BATTERY_HOLDER_KEYSTONE_2460	1
BUTTON		BTN_BLU	BUTTON_BLUE	1
BUTTON		BTN_GRN	BUTTON_GREEN	1
BUTTON		BTN_RED	BUTTON_RED	1
BUTTON		BTN_YLW	BUTTON_YELLOW	1
BUZZER		BUZZER	PIEZO_BUZZER	1
Capacitor	Capacitor	C1, C2	CAPC_1206_3216X16L	2
CAPACITOR	Capacitor	C3, C4, C5	CAPC_0603_1608X08L	3
LED	5mm through hole LED	D1	LED WHITE	1
LED	5mm through hole LED	D2, D3, D4, D5	LED BLUE	4
LED	5mm through hole LED	D6, D7, D8, D9	LED GREEN	4
LED	5mm through hole LED	D10, D11, D12, D13	LED YELLOW	4
LED	5mm through hole LED	D14, D15, D16, D17	LED RED	4
CON4		DEBUG	CON4	1
INDUCTOR	Inductor	L1	INDC3216X09L	1
SPDT SWITCH		POWERSWITCH	MSK-12D19	1
MOSFET-P		Q1, Q2, Q3, Q4	SOT95P237X110-3L	4
Resistor	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21	RESC_0603_1608X08L	21
QX2304L33E		U1	SOT89-150P350X160-3L	1
STM32F030K6		U2	TQFP80P900X900X160-32L	1

Design Rules Verification Report

Filename : C:\dev\react4\pcb\react4\react4.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.152mm) (All),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=0.152mm) (Max=2.54mm) (Preferred=0.152mm) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm)	0
Hole Size Constraint (Min=0.025mm) (Max=7.62mm) (All)	0
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.127mm) (All),(All)	0
Silk To Solder Mask (Clearance=0mm) (IsPad),(All)	0
Silk to Silk (Clearance=0mm) (All),(All)	0
Net Antennae (Tolerance=0mm) (All)	0
Height Constraint (Min=0mm) (Max=25.4mm) (Prefered=12.7mm) (All)	0
Total	0