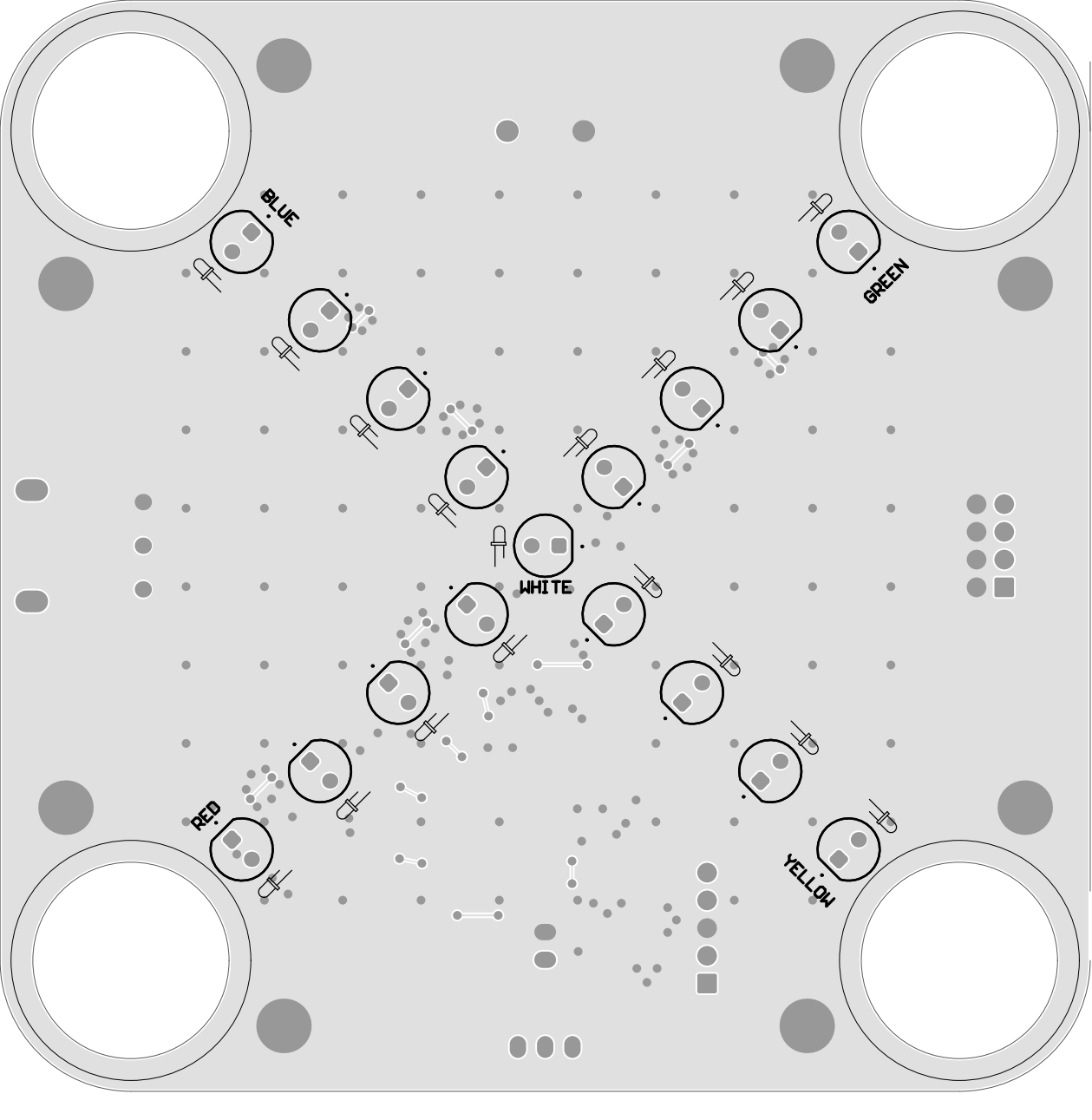
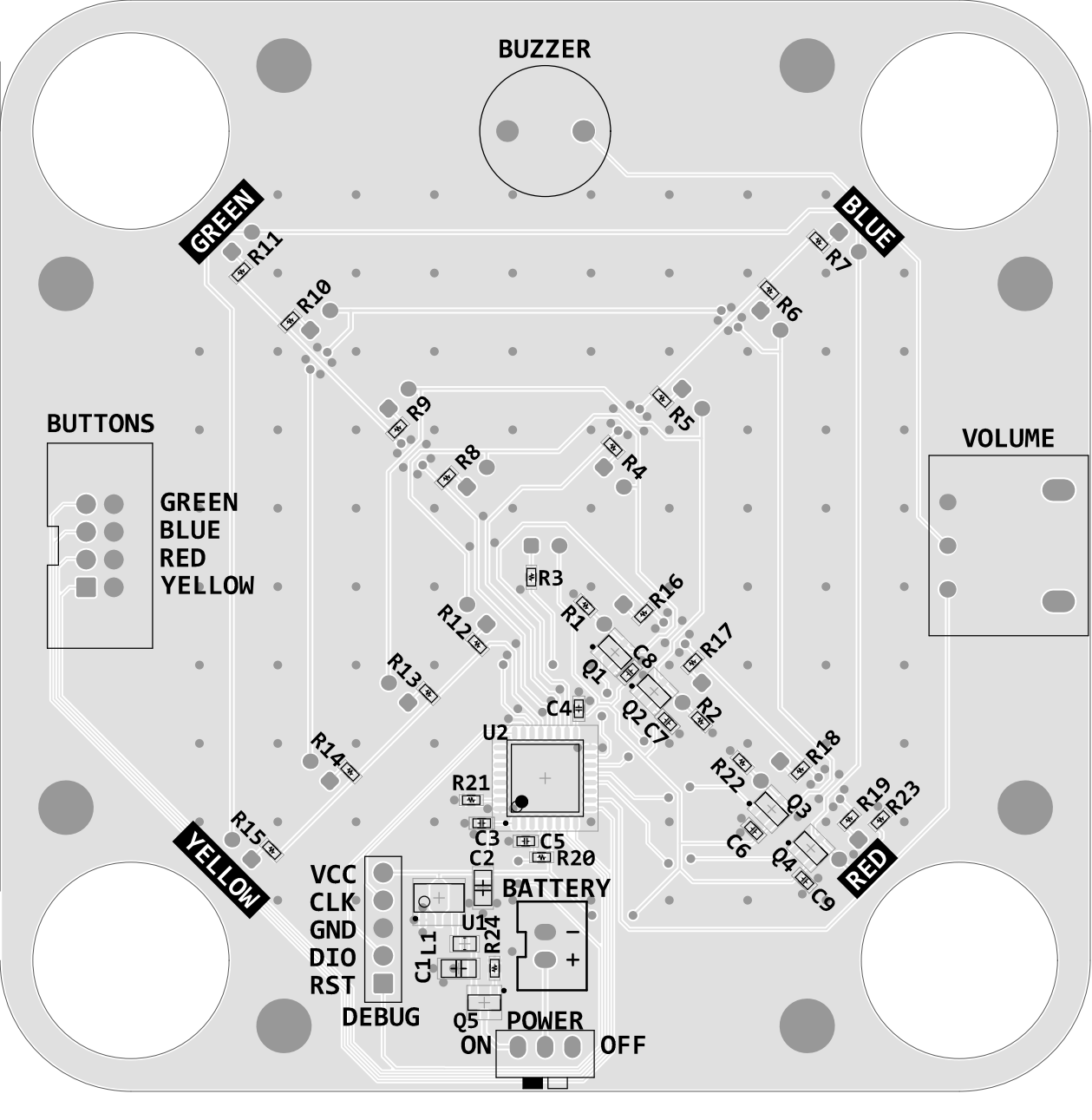
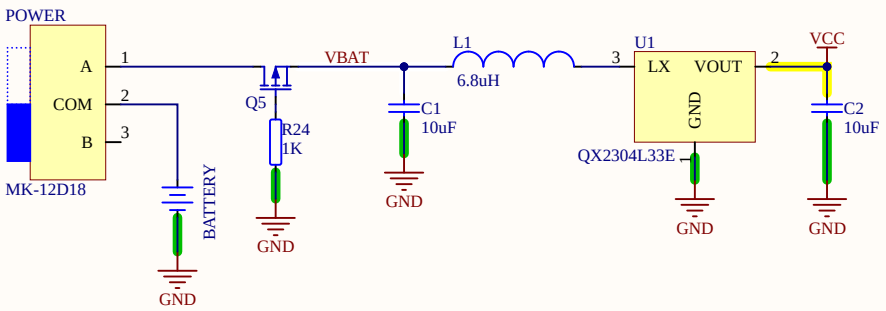
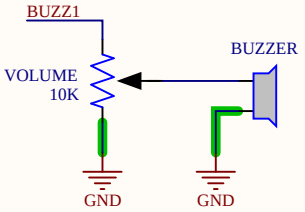

BLUE
GREEN
WHITE
RED
YELLOW

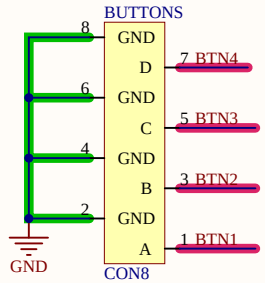

BUZZER
GREEN
BLUE
YELLOW
RED
BUTTONS
GREEN
BLUE
RED
YELLOW
VOLUME
VCC
CLK
GND
DIO
RST
DEBUG
BATTERY
POWER
ON
OFF
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
C1
C2
C3
C4
C5
C6
C7
C8
C9
L1
Q1
Q2
Q3
Q4
Q5
U1
U2



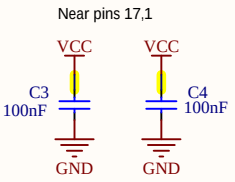
Boost regulator 3.6v



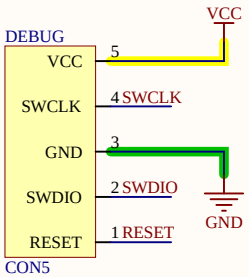
Buzzer



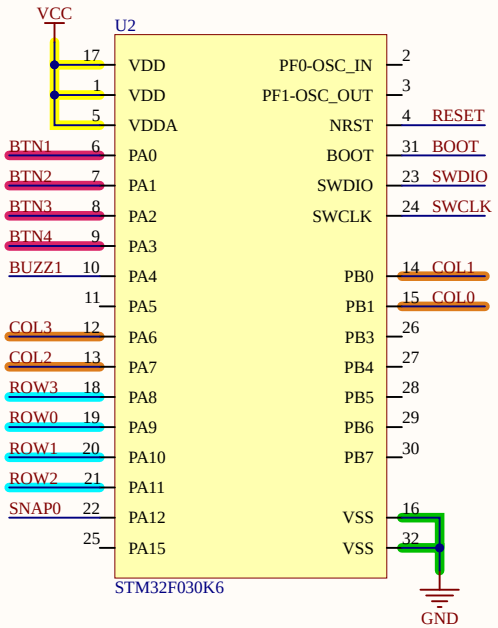
Buttons header



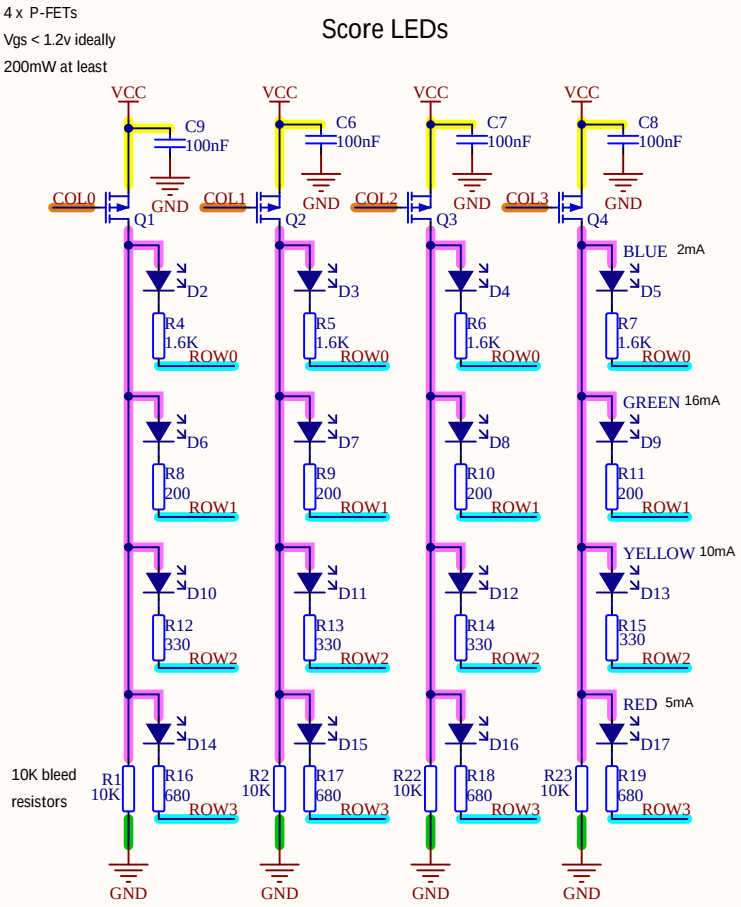
MCU decoupling

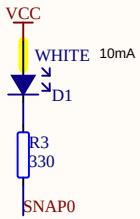


Debug header

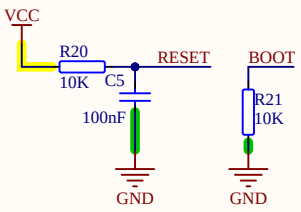


MCU





Snap! LED



Reset / boot

Title		
Size A4	Number	Revision
Date: 4/01/2021		Sheet of
File: C:\dev\react4\pcb\react4\react4.SchDoc		Drawn By:

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=6mil) (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=5mil) (Max=100mil) (Preferred=5mil) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0
Hole Size Constraint (Min=1mil) (Max=300mil) (All)	0
Hole To Hole Clearance (Gap=10mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=5mil) (All),(All)	0
Silk To Solder Mask (Clearance=0mil) (IsPad),(All)	0
Silk to Silk (Clearance=0mil) (All),(All)	0
Net Antennae (Tolerance=0mil) (All)	0
RoomDefinition (Bounding Region = (32259.646mil, 32029.646mil, 36393.505mil, 36163.505mil) (OnLayer('Bottom	0
Height Constraint (Min=0mil) (Max=1000mil) (Prefered=500mil) (All)	0
Total	0

Line #	Name	Description	Designator	Quantity	Value	Footprint
1	CON8	2 x 4 2.54mm IDC board connector	BUTTONS	1		CON8
2	BUZZER	3V 12mm piezo buzzer	BUZZER	1		PIEZO_BUZZER
3	CAPACITOR	Capacitor	C1, C2	2	10uF	CAPC_1206_3216X16L
4	CAPACITOR	Capacitor	C3...C9	7	100nF	CAPC_0603_1608X08L
5	WHITE	5mm through hole LED	D1	1	10mA	LED WHITE
6	YELLOW	5mm through hole LED	D10...D13	4	10mA	LED YELLOW
7	RED	5mm through hole LED	D14...D17	4	5mA	LED RED
8	BLUE	5mm through hole LED	D2...D5	4	2mA	LED BLUE
9	GREEN	5mm through hole LED	D6...D9	4	16mA	LED GREEN
10	INDUCTOR	200mA 1206 SMD inductor	L1	1	6.8uH	Chip2P5HSM127P600-8N
11	MK-12D18	DIP,9.1x3.5x3.5mm Toggle Switch	POWER	1	MK-12D18	MK-12D18
12	NX2301P	P-MOSFET -20V -2A 400mW NX2301P or equivalent	Q1...Q5	5	NX2301P	SOT95P237X110-3L
13	RESISTOR	125mW 0603 SMD resistor	R1, R2, R20...R23	6	10K	RESC_0603_1608X08L
14	RESISTOR	125mW 0603 SMD resistor	R16...R19	4	680	RESC_0603_1608X08L
15	RESISTOR	125mW 0603 SMD resistor	R3, R12...R15	5	330	RESC_0603_1608X08L
16	RESISTOR	125mW 0603 SMD resistor	R4...R7	4	1.6K	RESC_0603_1608X08L
17	RESISTOR	125mW 0603 SMD resistor	R24	1	1K	RESC_0603_1608X08L
18	RESISTOR	125mW 0603 SMD resistor	R8...R11	4	200	RESC_0603_1608X08L
19	QX2304L33E	3.3v boost regulator 1A 0.5W	U1	1	QX2304L33E	SOT89-150P350X160-3L
20	STM32F030K6	STM32F030K6 QFP32 48MHz	U2	1	STM32F030K6	TQFP80P900X900X160-32L
21	POTENTIOMETER	10K audio pot 16x.2mm thumbwheel	VOLUME	1	10K	POTENTIOMETER