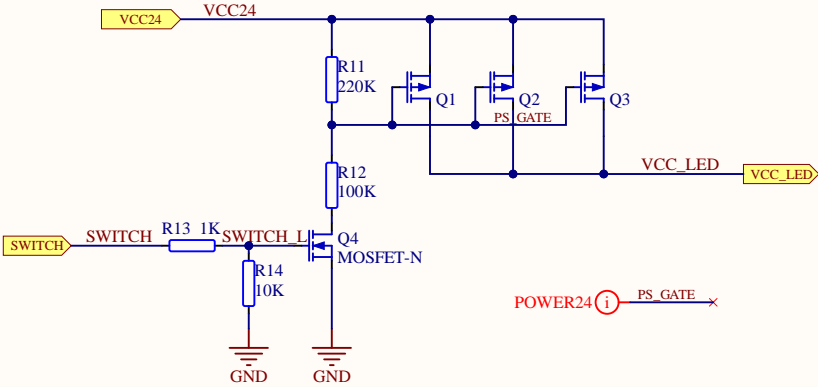
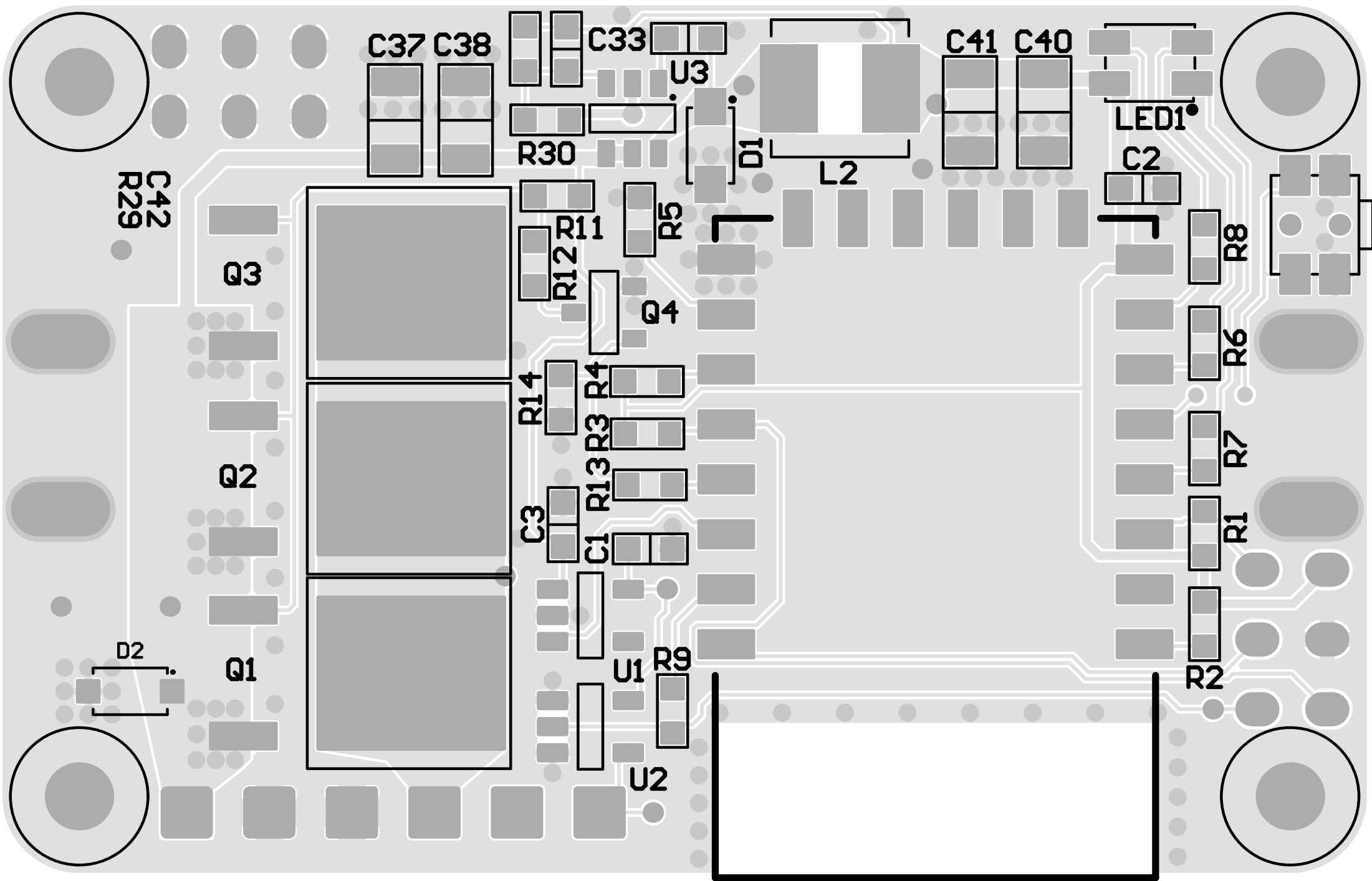


Title			CONTROLLER_ESP8266_PSU	
Size	Number		Revision	
A4				
Date:	12/30/2024		Sheet of	
File:	E:\dev\...\controller_8266_psu.SchDoc		Drawn By:	



Title		
SWITCH_ESP8266		
Size	Number	Revision
A4		
Date:	12/30/2024	Sheet of
File:	E:\dev\...\controller_8266_switch.SchDoc	Drawn By:



Designator	Quantity	Value	Name	Description	Footprint	Model:Footprint	LibRef
C1, C3	2	1uF	Cap	Capacitor	CAPC_0603_1608X08L	Chip Capacitor 0603	Cap
C2, C33	2	100nF	Cap	Capacitor	CAPC_0603_1608X08L	Chip Capacitor 0603	Cap
C37, C38, C40, C41	4	22uF	Cap	Capacitor	CAPC_1206_3216X16L	Chip Capacitor 1206	Cap
C42	1	100pF	Cap	Capacitor	CAPC_0603_1608X08L	Chip Capacitor 0603	Cap
D1	1		Schottky 40V 3A	Schottky Diode	SOD123	SOD123	D Schottky
D2	1		TVS	Schottky Diode	SODFL350X120-2L	SODFL, 2-Leads, Body 1.60x3.50mm, IPC High Density	D Zener
ESP1	1		ESP8266 ESP-12-E	ESP8266 ESP-12-E	ESP8266 ESP-12-E	ESP8266 ESP-12-E	ESP8266 ESP-12-E
L2	1	15uH	Inductor	Inductor	INDP4949X30N	Precision Wire Wound Inductor, 2-Leads, Body 4.90x4.90mm, IPC Medium Density	Inductor
LED1	1		RGB LED Common anode	Dot is _not_ anode!	PLCC-4	LED	RGB_LED
Q1, Q2, Q3	3		MOSFET-P		DPAK229P994X241-3L	D-PAK, 3-Pads, Body 6.21x6.73mm (max), IPC High Density	MOSFET-P
Q4	1		MOSFET-N		SOT23	SOT23, 3-Leads, Body 2.90x2.45mm, Pitch 0.95mm, IPC High Density	MOSFET-N
R1, R2, R3, R4, R5, R14	6	10K	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
R6, R7, R8, R9, R13	5	1K	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
R11	1	220K	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
R12	1	100K	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
R29	1	2.4K	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
R30	1	680R	Res2	Resistor	RESC_0603_1608X08L	Chip Resistor, 2-Leads, Body 1.60x0.80mm, IPC High Density	Res2
S_FUN1	1		4-1437565-1	Tactile switch	EVQP7C01P	Side actuated tactile switch	4-1437565-1
U1	1		M74VHC1GT125	Level shifter non inverting	SOT95P285X130-5N	SOT23, 5-Leads, Body 3.00x2.85mm, Pitch 0.95mm, IPC Medium Density	M74VHC1GT125
U2	1		AP7383-50W5		SOT95P285X130-5N	SOT23, 5-Leads, Body 3.00x2.85mm, Pitch 0.95mm, IPC Medium Density	AP7383-50W5
U3	1		BD9G101G-LB		TSOP95P280X125-6L	TSOP, 6-Leads, Body 2.90x1.65mm, Pitch 0.95mm, IPC High Density	BD9G102G-LB

Design Rules Verification Report

Filename : E:\dev\wifi-christmas-tree-lights\pcbs\controller_8266\controller_8266.PcbDoc

Warnings 4
Rule Violations 0

Warnings	
Unplated multi-layer pad(s) detected	4
Total	4

Rule Violations	
Clearance Constraint (Gap=0.127mm) (All),(IsKeepOut	0
Clearance Constraint (Gap=0.127mm) (All),(All	0
Clearance Constraint (Gap=-0.1mm) (InPadClass('AGND_TIE')),(InNet('GND') And OnBottomLayer	0
Short-Circuit Constraint (Allowed=No) (All),(All	0
Short-Circuit Constraint (Allowed=Yes) (InPadClass('AGND_TIE')),(InNet('GND')	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No	0
Width Constraint (Min=0.127mm) (Max=1.27mm) (Preferred=0.127mm) (All	0
Routing Via (Templates Used To Check Via: gnd_stitch, power_via, signal_routing) (All	0
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.127mm) (Air Gap=0.127mm	0
Minimum Annular Ring (Minimum=0.13mm) (IsPad	0
Minimum Annular Ring (Minimum=0.13mm) (IsVia	0
Acute Angle Constraint [Tracks Only] (Minimum=45.000) (All	0
Hole Size Constraint (Min=0.3mm) (Max=6.3mm) (All	0
Hole To Hole Clearance (Gap=0.2mm) (All),(All	0
Minimum Solder Mask Sliver (Gap=0.2mm) (All),(All	0
Net Antennae (Tolerance=0mm) (All)	0
Board Clearance Constraint (Gap=0mm) (InLayerClass('Electrical Layers')	0
Component Clearance Constraint (Horizontal Gap = 0mm, Vertical Gap = Infinite) (All),(All	0
Component Clearance Constraint (Horizontal Gap = 0mm, Vertical Gap = 0mm) (All),(InComponentClass('TestPoint')	0
Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All	0
Total	0

Unplated multi-layer pad(s) detected	
Pad Free-1(3mm,3mm) on Multi-Layer on Net GNC	
Pad Free-1(47mm,3mm) on Multi-Layer on Net GNC	
Pad Free-1(47mm,29mm) on Multi-Layer on Net GNC	
Pad Free-1(3mm,29mm) on Multi-Layer on Net GNC	