





Name	Designator	Quantity	MPN	Vendor	Footprint	Description	Voltage	Value
MLCC	Cbst	1	1		CAPC1608X08L	Multilayer Ceramic Capacitor	25V	470nF
MLCC	Cbyp	1	1		CAPC2012X12L	Multilayer Ceramic Capacitor	25V	100nF
MLCC	Cff	1	1		CAPC1608X08L	Multilayer Ceramic Capacitor	6.3V	100pF
MLCC	Cin1, Cin2	2	C3216X5R1E476M160AC	TDK	CAPC3225X25L	Multilayer Ceramic Capacitor	25V	47uF
CAPACITOR	Cout1, Cout2, Cout3	3	B EEFCS1A470R	Pansonic	CAPMP7343X11L	Electrolytic Capacitor	6.3V	47uF
MLCC	Cout4	1	1		CAPC3216X12L	Multilayer Ceramic Capacitor	6.3V	22uF
MLCC	Css	1	1		CAPC1608X08L	Multilayer Ceramic Capacitor	25V	68nF
MLCC	Cvcc	1	1		CAPC1608X08L	Multilayer Ceramic Capacitor	16V	2.2uF
744313330	L1	1	744313330	Wurth Elektronik	WE-HCI_1335	Inductor		3.3uH
CSD17579Q5A	M1		CSD17579Q5A	Texas Instruments	TRANS_NexFET_Q5A	N Channel MOSFET		
CSD18537NQ5A	M2		CSD18537NQ5A	Texas Instruments	TRANS_NexFET_Q5A	N Channel MOSFET		
RES0603	Rb1		1		RESC1608X03L	Chip Resistor		10K
RES0603	RiLim		1		RESC1608X03L	Chip Resistor		2.21K
RES0603	Ron	1			RESC1608X03L	Chip Resistor		240k
RES0603	Rt1		1		RESC1608X03L	Chip Resistor		91k
RES0603	Rt2		1		RESC1608X03L	Chip Resistor		3M
LM3150MH/NOPB	U1		LM3150MH/NOPB	Texas Instruments	MXA14A	Buck controller		

Design Rules Verification ReportFilename : C:\Dev\wifi-christmas-tree-lights\pcbs\buck4\buck4.PcbDoc

Warnings 0 Rule Violations 0

Warnings Total 0

Rule Violations					
Clearance Constraint (Gap=5mil) (All),(All)					
Short-Circuit Constraint (Allowed=No) (All),(All)					
Short-Circuit Constraint (Allowed=Yes) (InNet('GND')),(InNet('SGND'))					
Un-Routed Net Constraint ((All))	0				
Width Constraint (Min=5mil) (Max=100mil) (Preferred=5mil) (All)	0				
Routing Via (Templates Used To Check Via: connector, gnd_stitch, signal_routing, v65h40m0mx0) (All)	0				
Power Plane Connect Rule(Direct Connect)(Expansion=20mil) (Conductor Width=10mil) (Air Gap=10mil) (Entries=4)	0				
Hole Size Constraint (Min=1mil) (Max=157.48mil) (All)	0				
Pads and Vias to follow the Drill pairs settings	0				
Hole To Hole Clearance (Gap=10mil) (All),(All)	0				
Minimum Solder Mask Sliver (Gap=7.874mil) (All),(All)	0				
Net Antennae (Tolerance=0mil) (All)	0				
Board Clearance Constraint (Gap=0mil) (Not (OnLayer('Top Overlay') Or OnLayer('Bottom Overlay')))	0				
Component Clearance Constraint (Horizontal Gap = 1.968mil, Vertical Gap = Infinite) (All),(All)					
Height Constraint (Min=0mil) (Max=1000mil) (Prefered=500mil) (All)					
Total	0				

Page 1 of 1 Friday 17 Jul 2020 7:51:43 PN.