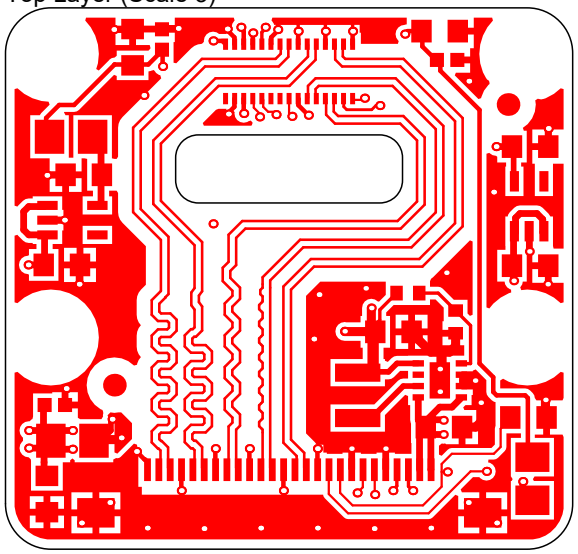
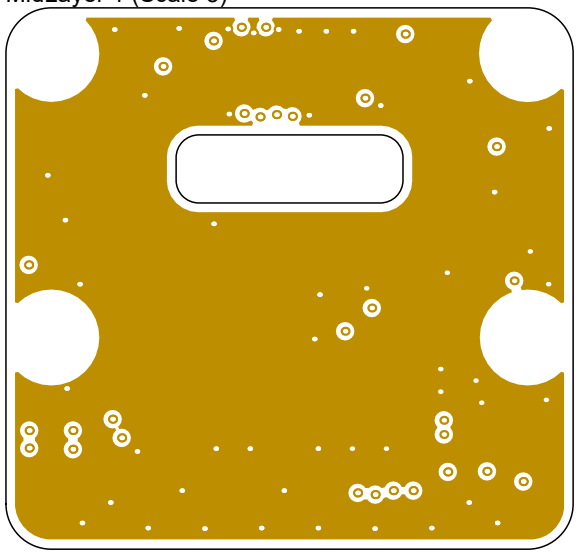
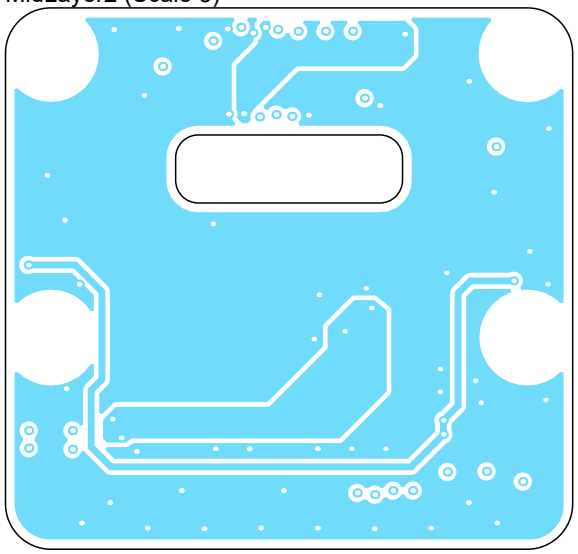
Top Layer (Scale 3)



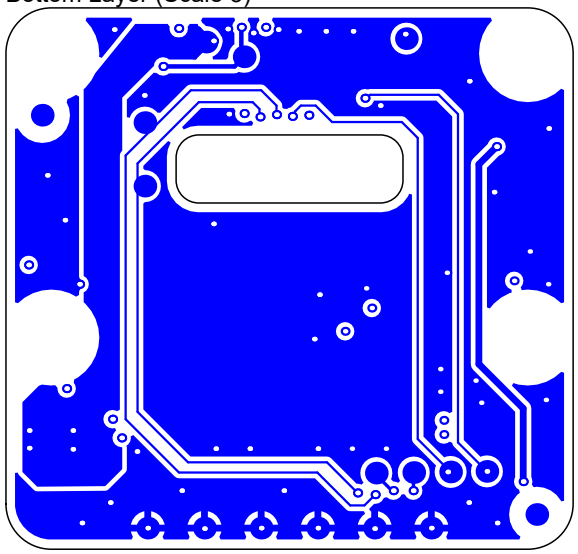
MidLayer 1 (Scale 3)



MidLayer2 (Scale 3)



Bottom Layer (Scale 3)



FABRICATION NOTES:

Fabricate per IPC-6011 & IPC-6012 CLASS 2
Inspect per IPC-A-600 CLASS 2
Test per IPC-TM-650

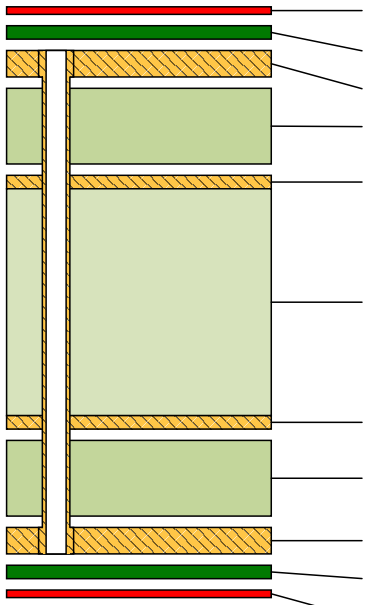
*** PCB has 4 copper layers**
*** Copper thicknesses are finished and include base foil plus Cu plating on plated layers.**
*** PCB thickness: 63mil +/- 3mil**
*** Min. trace width/clearance: 0.1/0.1mm**
*** Min. hole drill/ring: 0.2mm/0.4mm**
*** Soldermask gang relief is allowed for pads in same footprint, if footprint is NSMD.**
*** Silkscreen, non-conductive epoxy ink, color: white**
*** Remove slikscreen as needed to prevent ink on any exposed copper**
*** Surface finish: ENIG**
*** Hole dimensions are finished size, +/-3mil**
*** Linear board dimension tolerance: +/-10mil**
*** Bow, twist, warp not to exceed 0.75% of greatest diagonal span**
*** PCB shall be UL Recognized printed wiring board (ZPMV2), minimum flammability rating 94V-0**
*** PCB shall be marked with fabricator company or trade name, UL mark, and date code using legend ink on secondary side**
*** All PCBs shall be electrically tested for opens and shorts per gerber. Test marking shall be marked on secondard side.**

Fabricator shall panelize the PCB using mouse bites and tab routing. V-scoring not allowed.

Controlled impedance differential pairs shall be within +/-10% for 100ohm targets, and +/-10% for 90ohm targets. See Sheet 3 for transmission line details and location of 90ohm differential pairs.

Title: ***BG0249***	LUXonis
Number: D000103 Revision: R1M1 E1	
Date: 12/4/2019 Sheet: 1 of 3	PROPRIETARY AND CONFIDENTIAL
Drawn by: Brian Weinstein	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LUXONIS HOLDING CORPORATION. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION IS PROHIBITED.

Layer Stack Legend



Layer	Thickness	Type	Gerber	Df	Dk
Top Overlay		Legend	GTO		
Top Solder	0.7mil(0.018mm)	Solder Mask	GTS		3.5
Top Layer	1.4mil(0.035mm)	Signal	GTL		
	3.9mil(0.100mm)	*Dielectric*		*0.02*	*4.05*
MidLayer 1	0.7mil(0.018mm)	Signal	G1		
	50.0mil(1.270mm)	*Dielectric*			*4.3*
MidLayer2	0.7mil(0.018mm)	Signal	G2		
	3.9mil(0.100mm)	*Dielectric*		*0.02*	*4.05*
Bottom Layer	1.4mil(0.035mm)	Signal	GBL		
Bottom Solder	0.7mil(0.018mm)	Solder Mask	GBS		3.5
Bottom Overlay		Legend	GBO		

Total thickness: 63.4mil(1.611mm)

Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
◇	77	7.9mil(0.200mm)	Plated	None
○	2	8.0mil(0.203mm)	Plated	None
□	4	86.6mil(2.200mm)	Non-Plated	None
	83 Total			

Title: ***BG0249***	LUXonjs
Number: D000103 Revision: R1M1 E1	
Date: 12/4/2019 Sheet: 2 of 3	PROPRIETARY AND CONFIDENTIAL
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ALL DIFFERENTIAL PAIRS ARE 100 OHM (+/-10%)

Transmission Line Structure Table

Transmission Line	Target Impedance	Calculated Impedance	Trace layer	Lower Trace Width	Upper Trace Width	Gap	Reference layers	Substack
Edge-Coupled Coated Microstrip	100	106.54	Top Layer	4.5mil(0.114mm)	4.5mil(0.114mm)	8.7mil(0.220mm)	MidLayer 1	Board Layer Stack
Edge-Coupled Coated Microstrip	100	106.54	Bottom Layer	4.5mil(0.114mm)	4.5mil(0.114mm)	8.7mil(0.220mm)	MidLayer2	Board Layer Stack

Title: ***BG0249***	LUXonjs
Number: D000103 Revision: R1M1 E1	
Date: 12/4/2019 Sheet: 3 of 3	PROPRIETARY AND CONFIDENTIAL
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