

A

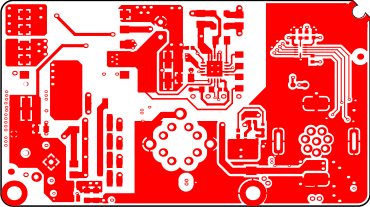
B

C

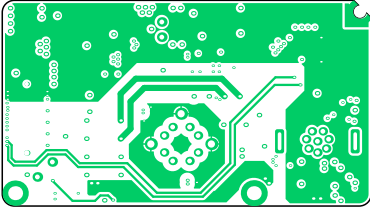
D

E

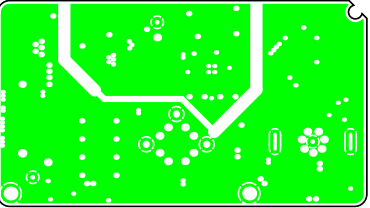
L1 TOP (Scale 1:1.25)



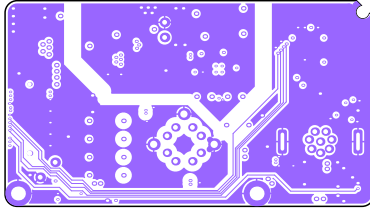
L4 POWER (Scale 1:1.25)



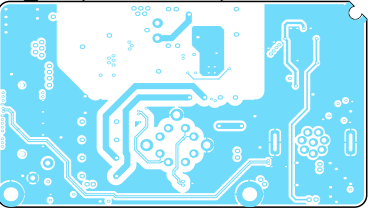
L2 GND (Scale 1:1.25)



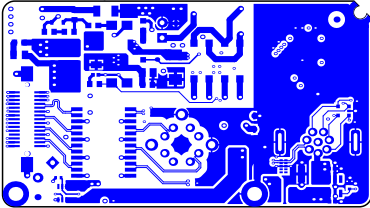
L5 GND (Scale 1:1.25)



L3 HS (Scale 1:1.25)



L6 BOT (Scale 1:1.25)



**FABRICATION NOTES:**

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

- \* PCB has 6 copper layers
- \* Copper thicknesses are finished and include base foil plus Cu plating on plated layers.
- \* PCB thickness: please refer to the Layer Stack Legend
- \* Min. trace width/clearance: 4/4mil
- \* Min. hole drill/ring: 8mil/16mil
- \* All vias-in-pad shall be plugged and plated over (VIPPO)
- \* Soldermask gang relief is allowed for pads in same footprint, if footprint is NSMD.
- \* Silkscreen, non-conductive epoxy ink, color: white
- \* Remove silkscreen 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.
- \* GM1 shall be used as PCB outline GKO can be ignored.

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

Controlled impedance differential pairs shall be within +/-10% of target impedance. See sheets below for more detail.

Title: **EL6905**

Number: D2088000

Revision: R1M1  
E2

Date: 04/07/2023

Sheet: 1 of 4

Drawn by: Eason Lin

**LUXon**js

PROPRIETARY AND CONFIDENTIAL

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.

A

B

C

D

E

Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
◇	46	8.00mil(0.203mm)	Plated	
◎	39	10.00mil(0.254mm)	Plated	
☆	76	16.00mil(0.406mm)	Plated	
✱	2	23.62mil(0.600mm)	Plated	
A	1	27.56mil(0.700mm)	Non-Plated	
◇	20	31.50mil(0.800mm)	Plated	
□	1	35.43mil(0.900mm)	Non-Plated	
⊞	3	47.24mil(1.200mm)	Plated	
B	3	90.55mil(2.300mm)	Plated	
191 Total				

Layer Stack Legend

Layer	Thickness	Type	Gerber	Df	Dk
Top Overlay		Legend	GTO		
Top Mask	0.70mil(0.018mm)	Solder Mask	GTS		3,8
L1_TOP	1.40mil(0.036mm)	Signal	GTL		
	3.00mil(0.076mm)	Dielectric			4,05
L2_GND	1.30mil(0.033mm)	Internal Plane	GP1		
	4.00mil(0.102mm)	Dielectric			4,5
L3_HS	1.30mil(0.033mm)	Signal	G1		
	39.60mil(1.006mm)	Dielectric			4,25
L4_POWER	1.30mil(0.033mm)	Signal	G2		
	4.00mil(0.102mm)	Dielectric			4,5
L5_GND	1.30mil(0.033mm)	Signal	G3		
	3.00mil(0.076mm)	Dielectric			4,05
L6_BOT	1.40mil(0.036mm)	Signal	GBL		
Bottom Mask	0.70mil(0.018mm)	Solder Mask	GBS		3,8
Bottom Overlay		Legend	GBO		
Total thickness: 63.00mil(1.600mm)					

Title: **EL6905**

Number: D2088000

Revision: R1M1  
E2

Date: 04/07/2023

Sheet: 2 of 4

Drawn by: Eason Lin

**LUXonjs**

PROPRIETARY AND CONFIDENTIAL

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.

A

B

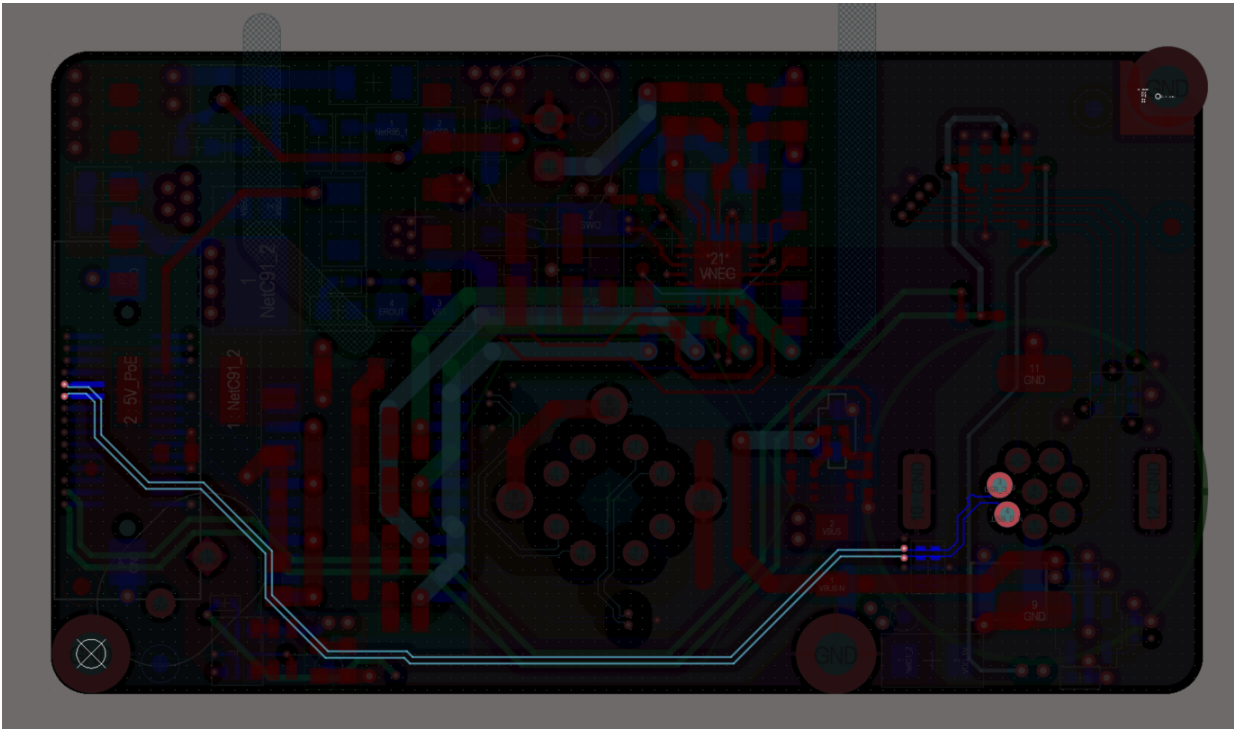
C

D

E

90 OHM (+/-10%) DIFF PAIRS

USB differential pairs



Transmission Line Structure Table

Impedance Id	Target Impedance	Calculated Impedance	Trace layer	Wide Trace Width	Gap	Reference layers	Clearance	Target Tolerance
2	90	90.02	L1_TOP	5.00mil	8.00mil	L2_GND	5.00mil	10%
5	90	90.00	L3_HS	4.19mil	8.00mil	L2_GND,L4_POWER	0.00mil	10%
9	90	90.02	L6_BOT	5.00mil	8.00mil	L5_GND	5.00mil	10%

Title: <b>EL6905</b>	
Number: D2088000	Revision: R1M1 E2
Date: 04/07/2023	Sheet: 3 of 4
Drawn by: Eason Lin	

**LUXonjs**

PROPRIETARY AND CONFIDENTIAL  
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.

A

B

C

D

E

A

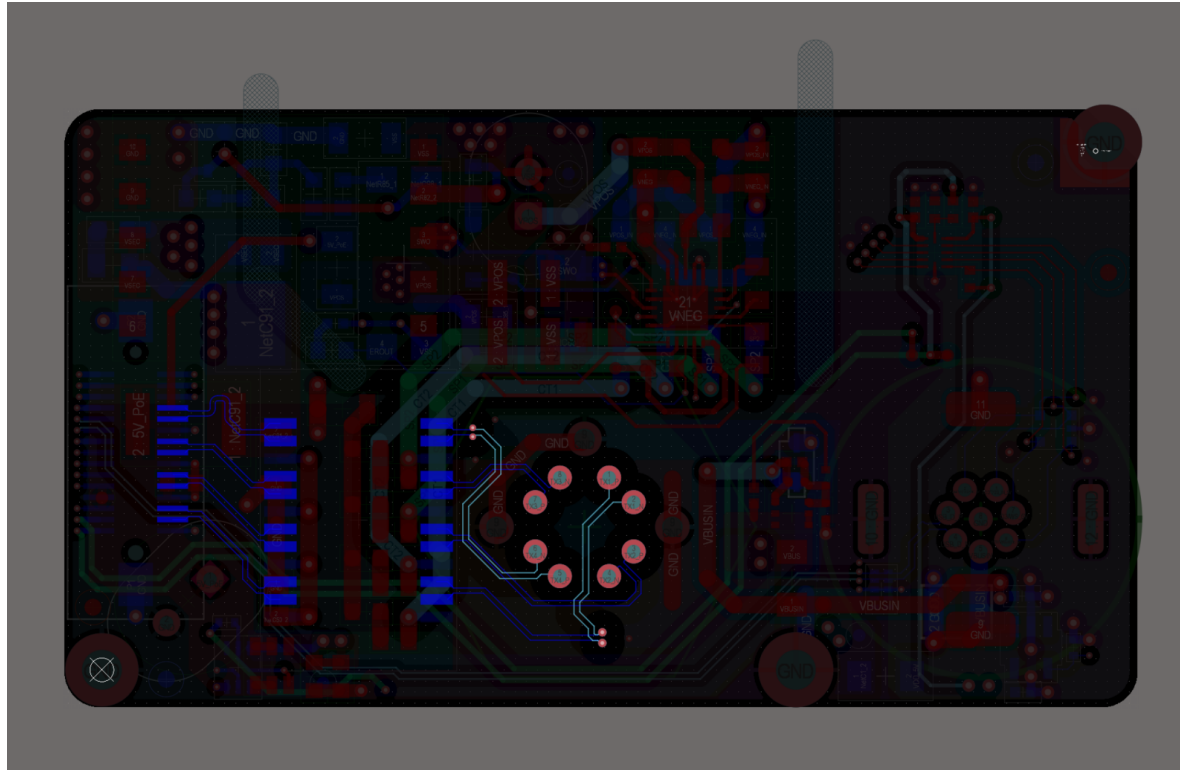
B

C

D

E

### 100 OHM (+/-10%) DIFF PAIRS



### Transmission Line Structure Table

Impedance Id	Target Impedance	Calculated Impedance	Trace layer	Wide Trace Width	Gap	Reference layers	Clearance	Target Tolerance
1	100	104.76	L1_TOP	3.50mil	8.00mil	L2_GND	5.00mil	10%
4	100	93.48	L3_HS	4.00mil	9.00mil	L2_GND,L4_POWER	0.00mil	10%
8	100	104.76	L6_BOT	3.50mil	8.00mil	L5_GND	5.00mil	10%

Title: **EL6905**

Number: D2088000	Revision: R1M1 E2
------------------	----------------------

Date: 04/07/2023      Sheet: 4 of 4

Drawn by: Eason Lin

LUXonjs

PROPRIETARY AND CONFIDENTIAL

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.

A

B

C

D

E