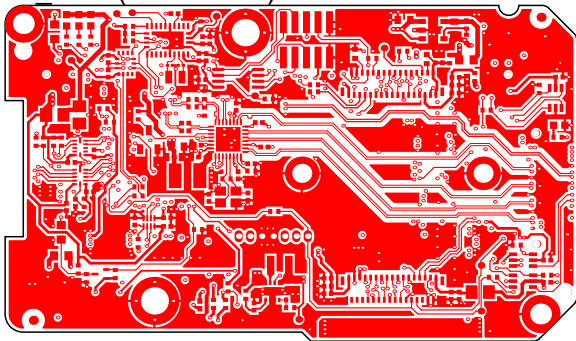
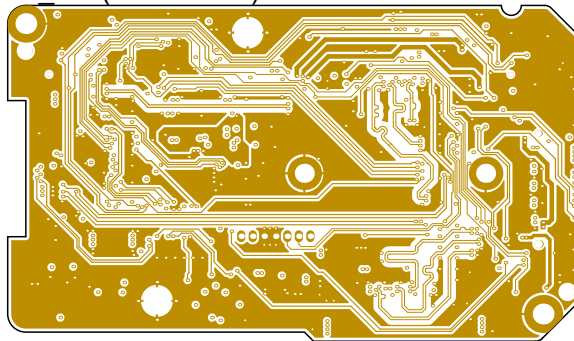


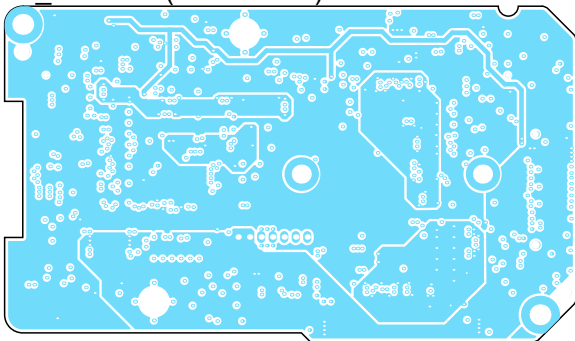
L1 TOP (Scale 1.2:1)



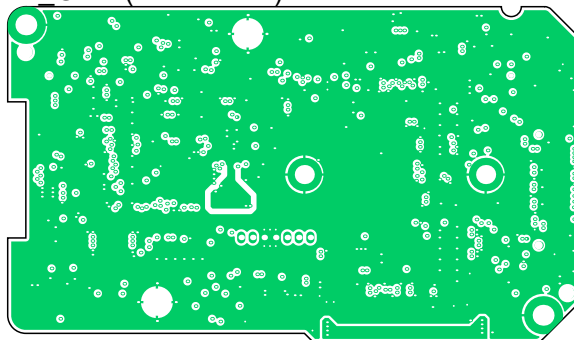
L3 HS (Scale 1.2:1)



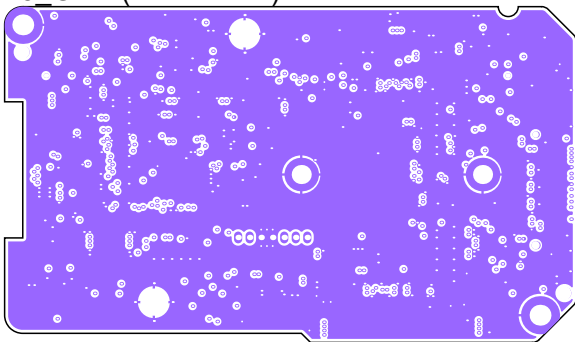
L4 POWER (Scale 1.2:1)



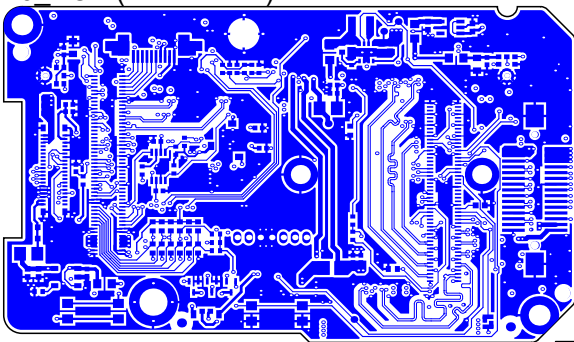
L2 GND (Scale 1.2:1)



L5 GND (Scale 1.2:1)



L6 BOT (Scale 1.2:1)



Main specifications

PCB Layers	6
Min trace width/clearance	4/4 mils
Min hole drill/ring	8/16 mils
Silkscreen colour	White
Solder mask colour	Green
Surface finish	ENIG

FABRICATION NOTES:

Fabricate per IPC-6011 & IPC-6012 CLASS 2

Inspect per IPC-A-600 CLASS 2

Test per IPC-TM-650

* Copper thicknesses are finished and include base foil plus Cu plating on plated layers.

* PCB thickness: Please refer to the Board layer stack legend

* Soldermask gang relief is allowed for pads in same footprint, if footprint is NSMD.

* Silkscreen, non-conductive epoxy ink

* Remove silkscreen as needed to prevent ink on any exposed copper

* 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 a board outline

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 and 4 for transmission line details and location of 90/100ohm differential pairs.

Title: **MD2084**

Number: D2088000 Revision: =rev

Date: 8. 11. 2023 Sheet: 1 of 4

Drawn by: Martin Debev

LUXonjs

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Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Mask	0.02mm(0.591mil)	Solder Resist	Solder Mask	GTS
Copper	L1_TOP	0.04mm(1.378mil)		Signal	GTL
Prepreg		0.10mm(3.937mil)	2313	Dielectric	
Copper	L2_GND	0.02mm(0.709mil)		Signal	G1
Core		0.57mm(22.244mil)	FR-4	Dielectric	
Copper	L3_HS	0.02mm(0.709mil)		Signal	G2
Prepreg		0.13mm(5.000mil)	2116	Dielectric	
Copper	L4_POWER	0.02mm(0.709mil)		Signal	G3
Core		0.57mm(22.244mil)	FR-4	Dielectric	
Copper	L5_GND	0.02mm(0.709mil)		Signal	G4
Prepreg		0.10mm(3.937mil)	2313	Dielectric	
Copper	L6_BOT	0.04mm(1.378mil)		Signal	GBL
Surface Material	Bottom Mask	0.02mm(0.591mil)	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.63mm(64.136mil)

Drill Table


Symbol	Count	Hole Size	Plated
□	558	0.20mm(7.913mil)	Plated
◎	23	0.20mm(7.992mil)	Plated
▼	4	0.25mm(10.000mil)	Plated
□	2	0.50mm(19.685mil)	Non-Plated
⊗	7	0.60mm(23.622mil)	Plated
⊕	1	0.70mm(27.559mil)	Non-Plated
⊗	1	0.90mm(35.433mil)	Non-Plated
⊗	2	1.50mm(59.055mil)	Non-Plated
▽	2	2.10mm(82.677mil)	Plated
☆	2	2.30mm(90.551mil)	Plated
○	2	3.00mm(118.110mil)	Plated
	604 Total		

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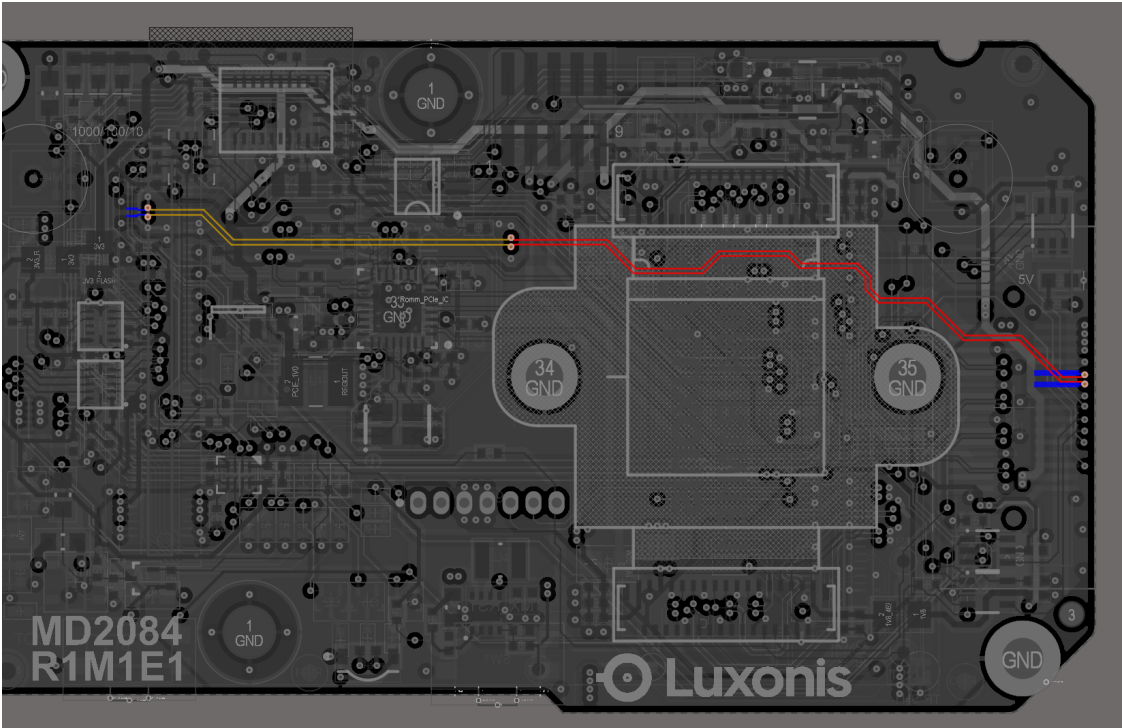
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90 OHM (+/-10%) DIFF PAIRS

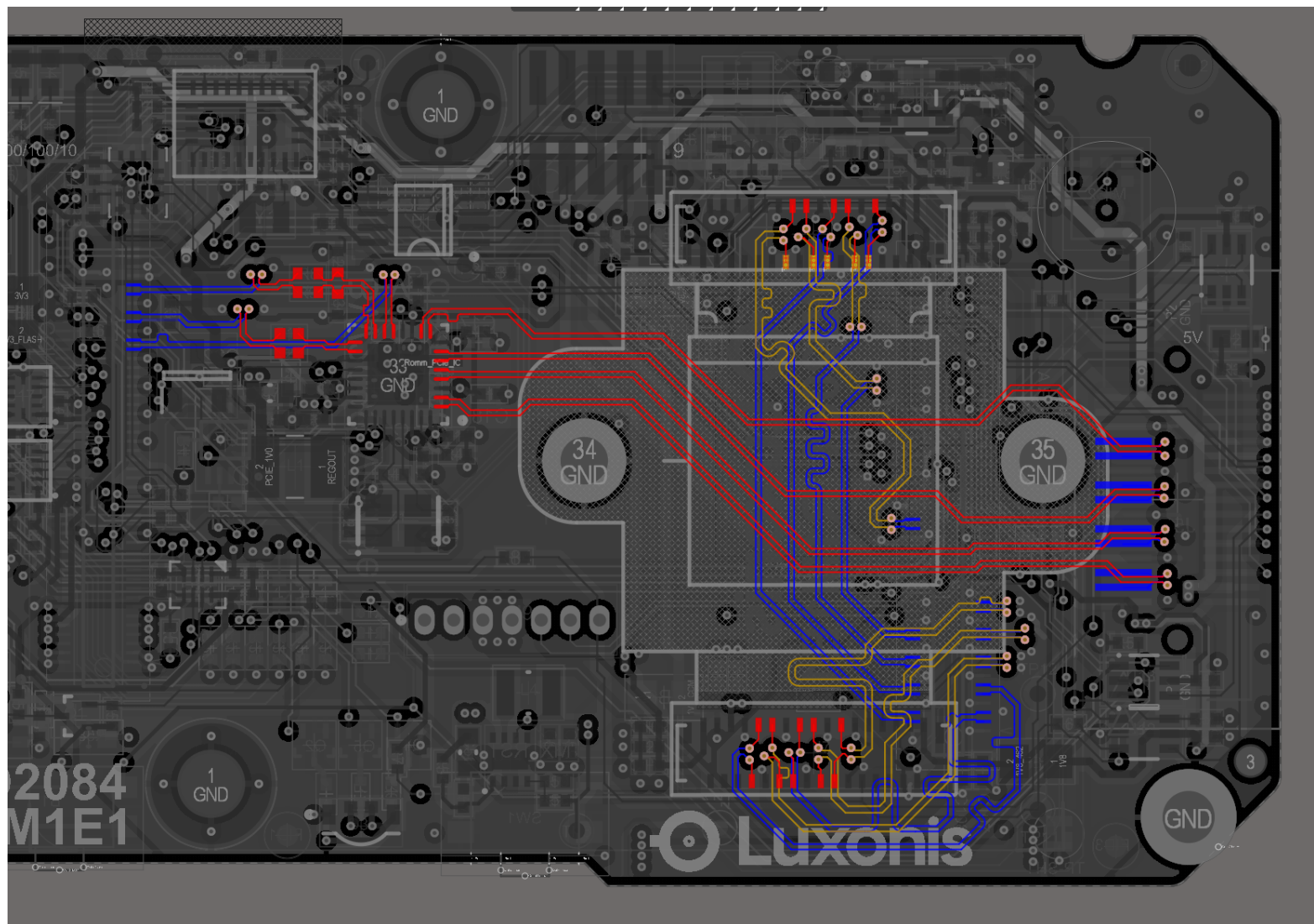



Transmission Line Structure Table

Target Impedance	Calculated Impedance	Trace layer	Lower Trace Width	Upper Trace Width	Gap	Reference layers
100	100.04	L1_TOP	0.11mm(4.20mil)	0.11mm(4.20mil)	0.13mm(5.12mil)	L2_GND
90	89.98	L1_TOP	0.13mm(5.30mil)	0.13mm(5.30mil)	0.12mm(4.72mil)	L2_GND
100	100.00	L3_HS	0.11mm(4.29mil)	0.11mm(4.28mil)	0.18mm(7.09mil)	L2_GND,L4_POWER
90	89.96	L3_HS	0.13mm(5.15mil)	0.13mm(5.15mil)	0.15mm(5.91mil)	L2_GND,L4_POWER
100	100.04	L6_BOT	0.11mm(4.20mil)	0.11mm(4.20mil)	0.13mm(5.12mil)	L5_GND
90	89.98	L6_BOT	0.13mm(5.30mil)	0.13mm(5.30mil)	0.12mm(4.72mil)	L5_GND

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Number: D2088000 Revision: =rev	
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100 OHM (+/-10%) DIFF PAIRS



Title: MD2084	
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