

Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
☆	1	40.35	Plated	
▽	3	40.16	Plated	
○	6	39.37	Plated	
□	20	43.31	Plated	
☆	43	10.00	Plated	


All other hole tolerances are +/-0.003

Fabrication Notes

- IPC Performance Class 2.  
Fabricate in accordance with current IPC-6012.  
Inspection must meet or exceed requirements of current IPC-A-600.
- All materials must be RoHS compliant. (RoHS 3, EU Directive 2015/863)
- FR-4 (170 Tg) laminate materials not otherwise specified must meet specifications for one or more of:  
IPC-4101 /99 /102 /124 /126 /128 /129 /130 /131
- Layer buildup, materials, surface finishes, and coating colors are shown in layer stack table.  
Copper weights listed are finished (after all plating steps).  
Thicknesses shown in stackup table for legend (silkscreen), solder mask, and surface finish layers are suggested FOR REFERENCE ONLY; all requirements specified in IPC-6012 shall prevail.
- Note finished copper thickness of 1.4 mils (1 oz.).
- Finished board thickness: 62.00mils+/- 10%.
- Detailed stackup construction is proposed FOR QUOTATION PURPOSES only.  
Vendor to provide preferred stackup requirements for incorporation into final production drawing.
- Vendor may trim legend marking near solderable areas as necessary.  
Vendor may remove solder mask slivers or open solder mask apertures as necessary.
- Vendor to break all sharp edges and sand any burrs flush with edges.
- Drill according to provided drill file.  
Finished hole sizes not otherwise toleranced may follow IPC-2222.  
Any hole of type "via" not otherwise toleranced may have negative tolerance equal to diameter.
- IPC-9252 electrical test is required.  
Test MUST use supplied IPC-D-356 netlist as master source data.
- FINISH:  
All exposed conductive pattern areas not covered with solder mask or other plating shall be hard GOLD, ENIG or HASL
- Silk screen, top and bottom layer, white.
- Solder mask LPI, top layer and bottom layer, Blue.

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PROPRIETARY AND CONFIDENTIAL

UNLESS OTHERWISE SPECIFIED:		NAME		DATE			
DIMENSIONS ARE METRIC TOLERANCES: FRACTIONAL± ANGULAR: MACH± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±  INTERPRET GEOMETRIC TOLERANCING PER:  MATERIAL  FINISH  DO NOT SCALE DRAWING		DRAWN	HVR	6/2/2025		710 Slater Rd Morrisville Suite 200 NC 27560	
		CHECKED	KK				
		ENG APPR.				TITLE  QCIOT-DA7212EVZ	
		MFG APPR.					
		Q.A.					
		COMMENTS:				SIZE DWG. NO. REVISION  B A	
		SCALE: 1:1				SHEET 1 OF 3	

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
	Surface Material	1.00mil	SM-001	Solder Mask	GTS
Nickel, Gold	Top Surface Finish	0.16mil		Surface Finish	
CF-004	Top Layer	1.38mil		Signal	GTL
Prepreg		2.80mil	PP-006	Dielectric	
CF-004	GND1	1.38mil		Internal Plane	GP1
Prepreg		2.80mil	PP-006	Dielectric	
CF-004	3V3_REG	1.38mil		Internal Plane	GP2
Core		39.00mil	Core-042	Dielectric	
CF-004	1V8_REG	1.38mil		Internal Plane	GP3
Prepreg		2.80mil	PP-006	Dielectric	
CF-004	GND2	1.38mil		Internal Plane	GP4
Prepreg		2.80mil	PP-006	Dielectric	
CF-004	Bottom Layer	1.38mil		Signal	GBL
Nickel, Gold	Bottom Surface Finish	0.16mil		Surface Finish	
Surface Material	Bottom Solder	1.00mil	SM-001	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 60.78mil					

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DIMENSIONS ARE METRIC		DRAWN	HVR	6/2/2025		
TOLERANCES:		CHECKED	KK		710 Slater Rd Morrisville	
FRACTIONAL±		ENG APPR.			Suite 200 NC 27560	
ANGULAR: MACH± BEND ±		MFG APPR.			TITLE	
TWO PLACE DECIMAL ±		Q.A.			QCIOT-DA7212EVZ	
THREE PLACE DECIMAL ±		COMMENTS:			SIZE	
INTERPRET GEOMETRIC					DWG. NO.	
TOLERANCING PER:					REVISION	
MATERIAL					A	
FINISH		DO NOT SCALE DRAWING			SCALE: 1:1	
PROPRIETARY AND CONFIDENTIAL					SHEET 2 OF 3	

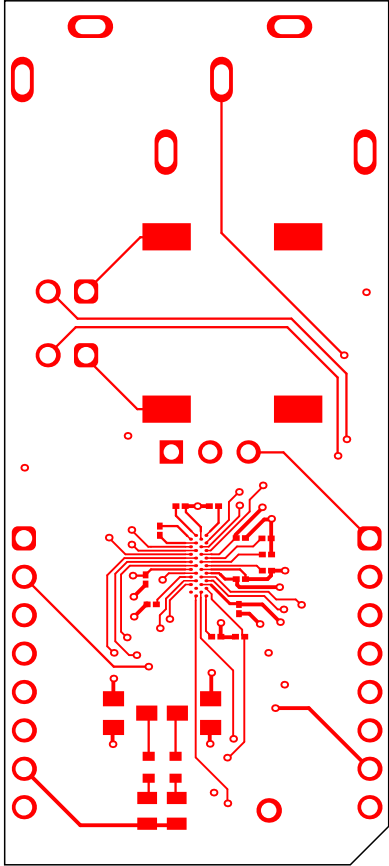
A

B

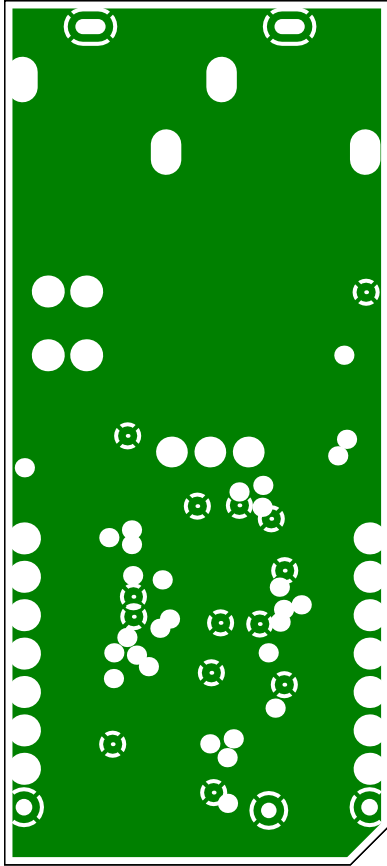
C

D

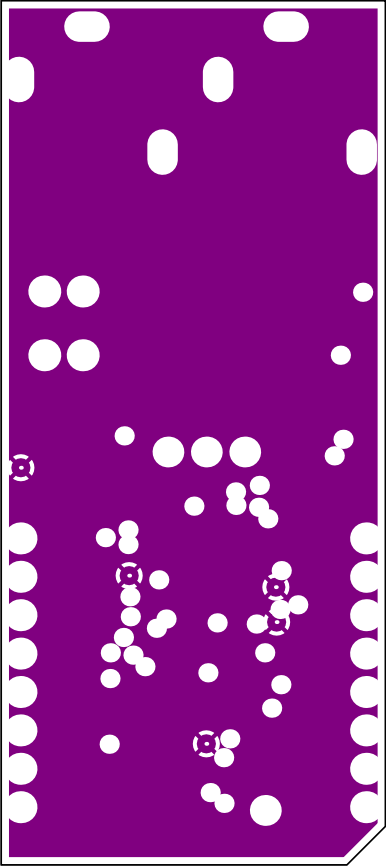
Top Layer (Scale 2:1)



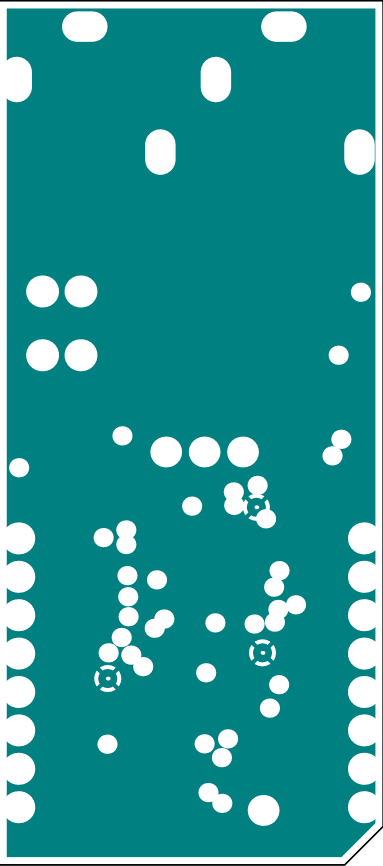
GND1 (Scale 2:1)



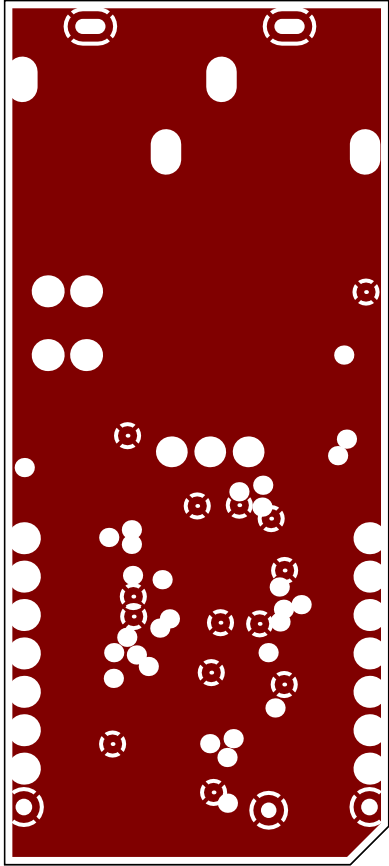
3V3\_REG (Scale 2:1)



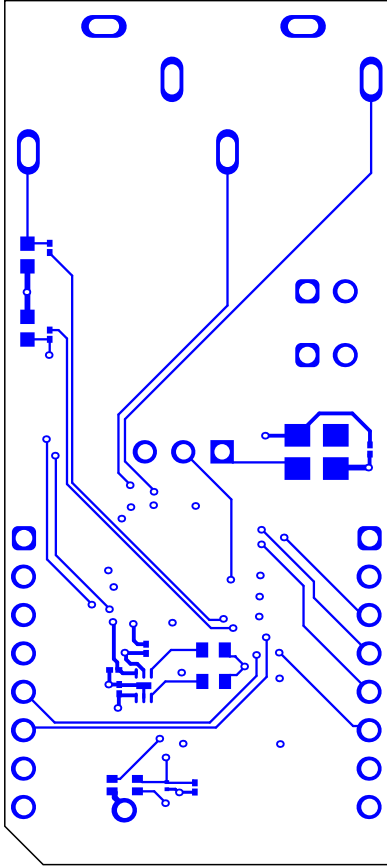
1V8\_REG (Scale 2:1)



GND2 (Scale 2:1)



Bottom Layer (Scale 2:1)



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	DRAWN	HVR	6/2/2025			
	CHECKED	KK				
	ENG APPR.					
	MFG APPR.					
	Q.A.			COMMENTS:		
				SIZE	DWG. NO.	REVISION
				B		A
				SCALE: 1:1		SHEET 3 OF 3

DO NOT SCALE DRAWING

A

B

C

D