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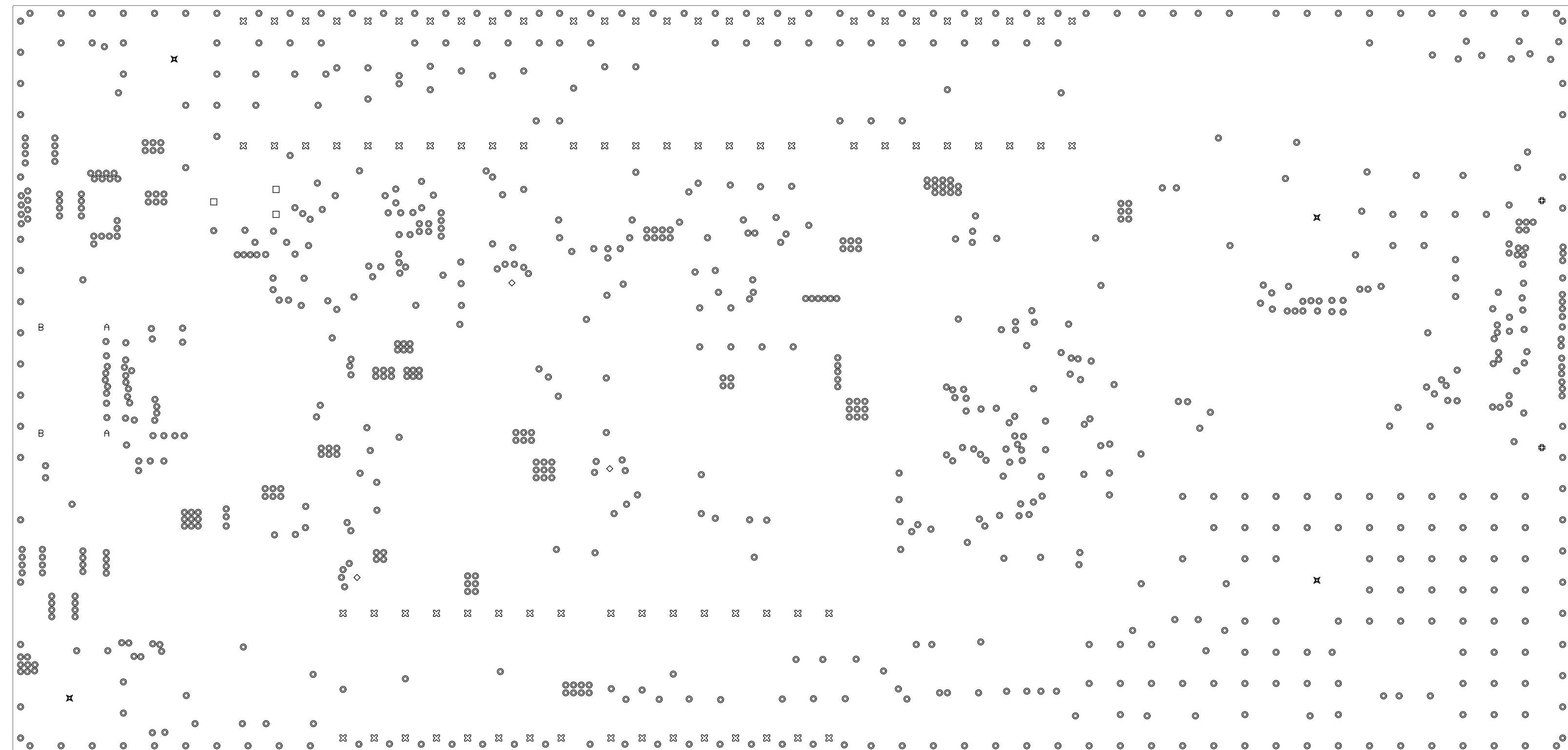
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
1.0	AMAP4LEVB v1.0 - Apollo4 Lite EVB	3/8/2023	DLANZONE

Layer	Name	Material	Thickness	Constant	Gerber
	Top Overlay				GTO
	Top Solder	Solder Resist	1.70mil	3.5	GTS
1	TOP		1.00mil		GTL
	Dielectric 1	FR-4	2.96mil	4.5	
2	LY2 - GND		1.00mil		G1
	Dielectric2	FR-4	2.85mil	4.5	
3	LY3 - SIG		1.10mil		G2
	Dielectric3	FR-4	3.42mil	4.5	
4	LY4 - GND		1.00mil		G3
	Dielectric4	FR-4	2.65mil	4.5	
5	LY5 - SIG		1.40mil		G4
	Dielectric5	FR-4	23.20mil	4.5	
6	LY6 - PWR		1.40mil		G5
	Dielectric6	FR-4	2.84mil	4.5	
7	LY7 - GND		1.00mil		G6
	Dielectric7	FR-4	3.42mil	4.5	
8	LY8 - SIG		1.10mil		G7
	Dielectric8	FR-4	2.83mil	4.5	
9	LY9 - GND		1.00mil		G8
	Dielectric9	FR-4	3.00mil	4.5	
10	BOTTOM		1.00mil		GBL
	Bottom Solder	Solder Resist	1.70mil	3.5	GBS
	Bottom Overlay				GBO

Total board thickness: 61.57mil

NOTES (UNLESS OTHERWISE SPECIFIED):

- THE FINISHED PRINTED CIRCUIT BOARD SHALL MEET THE REQUIREMENTS OF IPC-A-6012.
- CONFIGURATION OF THE PRINTED CIRCUIT BOARD NOT SPECIFICALLY DIMENSIONED ON THE DRAWING SHALL BE CONTROLLED BY THE GERBER DATA.
- MATERIAL: GLASS EPOXY, NATURAL COLOR. LAMINATED NEMA GRADE FR4. SEE LAYER STACKUP FOR COPPER WEIGHT AND LAYER ORIENTATION. CORE AND PREPREG COMBINATIONS ARE OPTIONAL TO THE MANUFACTURER UNLESS OTHERWISE SPECIFIED IN THE LAYER STACKUP.
- FINISHED PRINTED CIRCUIT BOARD SHALL MEET UL 94V-0 FLAMMABILITY RATING AND BE MARKED WITH THE REQUIRED UL CODE NUMBER.
- PLATING: ALL HOLES AND CONDUCTIVE SURFACES SHALL BE PLATED WITH .001" COPPER MINIMUM.
- ALL HOLE DIAMETERS ARE STATED AS FINISHED HOLE SIZES.
- FABRICATION TOLERANCES: END PRODUCT TRACE WIDTHS AND LANDS SHALL NOT VARY MORE THAN THE SMALLER OF .002" OR 20% OF THE TRACE WIDTH FROM THE GERBER DATA.
- SOLDER MASK. PHOTO-IMAGED LIQUID POLYMER IN ACCORDANCE WITH IPC-SM-840, TYPE B, CLASS 2, OVER BARE COPPER
- COMPONENT MARKING: SILKSCREEN WITH NON-CONDUCTIVE EPOXY INK. LANDS AND EXPOSED PLATED AREAS TO BE FREE OF INK.
- BOW AND TWIST: SHALL NOT EXCEED .007" PER INCH.
- FINISHED BOARD SHALL MATCH SUPPLIED IPC-356 NET LIST.
- 4-MIL AND 8-MIL VIAS ARE ALLOWED TO BE PLATED SHUT OR FILLED WITH SOLDER MASK.
- THIS IS A CONTROLLED-IMPEDANCE BOARD. 50 OHM CONTROLLED IMPEDANCE ON 4 MIL TRACES ON EXTERNAL LAYERS,3.5 MIL TRACES ON INTERNAL LAYERS.VENDOR MAY ADJUST DIELECTRIC THICKNESS AND/OR CONDUCTOR WIDTHS AS REQUIRED.
- ~~4 MILS TRACES REQUIRE 50 OHM SINGLE ENDED IMPEDANCE CONTROL~~
- DIFF PAIR NETS MUST BE FABRICATED WITH 90 OHM DIFF IMPEDANCE: EXTERNAL 4.0 MIL TRACES WITH 6 MIL AIRGAP
- ~~DIFF PAIR NETS MUST BE FABRICATED WITH 100 OHM DIFF IMPEDANCE. EXTERNAL 3.0 MIL TRACES WITH 6 MIL AIRGAP~~
- BOARD THICKNESS = 62 MILS
- FINISHED PRINTED CIRCUIT BOARD SHALL MEET ROHS 3 COMPLIANCE SPECIFICATIONS.

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Description	Hole Tolerance (+)	Hole Tolerance (-)
⌘	2	23.62mil (0.600mm)	PTH	Slot	TOP - BOTTOM	Pad	Rounded	r210_110h60_160r100m215_115(Tol5-5)		1.97mil (0.050mm)	1.97mil (0.050mm)
B	2	23.62mil (0.600mm)	PTH	Slot	TOP - BOTTOM	Pad	Rounded	r260_110h60_210r100m265_115(Tol5-5)		1.97mil (0.050mm)	1.97mil (0.050mm)
⊕	2	40.16mil (1.020mm)	NPTH	Round	TOP - BOTTOM	Pad	Rounded	c102hn102			
□	3	39.02mil (0.991mm)	NPTH	Round	TOP - BOTTOM	Pad	Rounded	c99hn99m99p-1			
◇	3	40.16mil (1.020mm)	PTH	Round	TOP - BOTTOM	Pad	Rounded	(Mixed)		3.94mil (0.100mm)	
✕	4	125.98mil (3.200mm)	PTH	Round	TOP - BOTTOM	Pad	Rounded	c650h320(Tol20)		7.87mil (0.200mm)	
⊗	84	35.00mil (0.889mm)	PTH	Round	TOP - BOTTOM	Pad	Rounded	c150h89			
○	137	4.00mil (0.102mm)	PTH	Round	(Mixed)	Via	Rounded	(Mixed)			
◎	945	8.00mil (0.203mm)	PTH	Round	(Mixed)	Via	Rounded	(Mixed)			
	1182 Total										

Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.
Hole Length = Routed Path Length + Tool Size = Slot length as defined in the PCB layout

BOARD PARAMETERS					
LAYER COUNT:	10	X DIMENSION:	5.00"	Y DIMENSION:	2.40"
ARRAY:	NO	TAB-ROUT:	NO	SCORING:	NO
MATERIAL TYPE:	FR4	FINISH THICKNESS:	0.062"	FINISH PLATING:	ENIG
GOLD FINGERS:	NO	COPPER WT (OUTER):	1.0 OZ	COPPER WEIGHT (INNER):	0.5 OZ
MIN TRACE/SPACE:	0.003"	SOLDERMASK:	BOTH	SOLDERMASK COLOR:	GREEN
SMALLEST HOLE SIZE:	0.004"	SILKSCREEN:	BOTH	SILKSCREEN COLOR:	WHITE
TOP SMD PADS:	YES	BOTTOM SMD PADS:	YES	MIN PITCH:	0.01378"
PLATED SLOTS:	YES	PLATED EDGES:	NO	CONTROLLED DIELECTRIC:	NO
COUNTER BORE:	NO	COUNTERSINK:	NO	CONTROLLED IMPEDANCE:	YES, DIFF EXTERNAL
ITAR:	NO	VIA IN PAD:	YES	NON-PLATED HOLES:	YES

		APPROVAL	DATE	Ambiq	
		DRAWN			
		C.CROSBY	3/8/2023		
		CHECKED			
		DLANZONE	3/8/2023	FABRICATION DRAWING, PWB,Apollo4 Lite EVBv1.0	
		RELEASED			
		DLANZONE	3/8/2023		
XXXXXX				SIZE	
NEXT ASSY	USED ON			A	DWG NO
APPLICATION				AMAP4LEVB-FAB	
				SCALE	REV
				1:1	1.0
				CUST:	SHEET
					1 OF 1

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