

NOTES (UNLESS OTHERWISE SPECIFIED):

1. CONTROLLING DIMENSIONS ARE IN MM FOR DRAWINGS AND SUPPLIED DATA. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M. DIMENSIONS APPLY AFTER ETCHING AND PLATING.
2. FABRICATE PER IPC-6011/6012 (CURRENT REVISION) CLASS 2 USING SUPPLIED MASTER GERBER FILES IN 505-11577-Z1-REV-C-ASY.ZIP.
3. MATERIALS:

A. 180 Tg/ 340 Td ISOLA FR-370HR OR GREATER IS RECOMMENDED MUST MEET OR EXCEED UL FLAMMABILITY RATING 94V-0. ALL MATERIALS SHALL BE ROHS AND ENVIRONMENTALLY COMPLIANT PER ROHS DIRECTIVE 2002/95/EC.

B. COPPER FOIL TO BE IN ACCORDANCE WITH IPC-MF-150. UNLESS OTHERWISE SPECIFIED, COPPER WEIGHT LISTED IN LAYER SCHEDULE IS CONSIDERED "FINISHED".
4. FINISH:

A. ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDERMASK OR OTHER PLATING SHALL BE PLATED AS OPTION [1].

[1] ENIG, PER IPC-4552.

[2] LEAD FREE HOT AIR SOLDER LEVELED (HASL) SN100C (Sn+Cu+Ni+Ge) OR EQUIVALENT.

[3] HARD GOLD - 1.27 µM GOLD OVER 5.08 µM NICKEL.

[4] ENEPiG, PER IPC-4556

B. APPLY SOLDER MASK COLOR BLUE PER OPTION [2] PER IPC-SM-840 (CURRENT VERSION) OVER BARE COPPER. ONLY SOLDER MASK IMAGES THAT ARE A 1:1 FILM IMAGE WHEN COMPARED TO THE COMPONENT PADS MAY BE ENLARGED. IMAGES SHALL NOT BE ENLARGED BEYOND 0.075mm PER SIDE OR 0.150mm OVERALL. ALL OTHER SOLDER MASK IMAGES SHALL NOT BE ENLARGED.

[1] LIQUID PHOTO IMAGEABLE SOLDER MASK (LPI) SEMI-GLOSS FINISH.

[2] LASER DIRECT IMAGING SOLDER MASK (LDI) MATTE FINISH.

C. SILKSCREEN SHALL BE WHITE, PERMANENT, ORGANIC, NON-CONDUCTIVE INK. THERE SHALL BE NO SILKSCREEN ON ANY SOLDERABLE COMPONENT PAD. CLIPPING IS PERMITTED USING SOLDERMASK IMAGES.
5. DRILLS:

A. PLATED: NO ANNULAR RING BREAKOUT IS ALLOWED. ANNULAR RING TANGENCY IS PERMITTED. SUPPLIER MAY ADD FILLETS OR EQUIVALENT TO ALL DRILLED PADS. SUPPLIER MAY DELETE ALL UNUSED INNER LAYER PADS.

B. NON-PLATED: POSITIONAL TOLERANCE +/-0.075mm SUPPLIER MAY DELETE UNUSED COPPER PADS.

C. NO BLIND VIAS ON THIS BOARD.

D. NO VIA FILL REQUIRED.
6. IMPEDANCE CONTROL REQUIREMENTS:

A. SEE IMPEDANCE CHART(S) FOR SIGNAL CONTROL.

B. IMPEDANCE TOLERANCE MUST FALL WITHIN 10% OHMS.

C. THE DIELECTRIC THICKNESS OF EACH LAYER MAY BE ADJUSTED AS NEEDED TO ACHIEVE THE REQUIRED IMPEDANCE UNLESS OTHERWISE NOTED.

D. TRACE WIDTHS MAY NOT BE ADJUSTED UNLESS THE REQUIRED IMPEDANCE (INCLUDING TOLERANCE) IS NOT PHYSICALLY ACHIEVABLE BY ONLY ADJUSTING THE DIELECTRIC THICKNESS. IF THAT CONDITION IS MET THEN TRACE WIDTHS MAY BE ADJUSTED BY +/-0.025mm FROM SUPPLIED DATA WITHOUT NOTIFICATION. IF FURTHER TRACE WIDTH ADJUSTMENT IS NEEDED THEN APPROVAL FROM CIRRUS LOGIC IS REQUIRED.
7. MARKING:

BOARD SUPPLIER SHALL APPLY UL RECOGNIZED VENDOR ID, DATE CODE, AND UL MATERIAL FLAMMABILITY RATING IN SILKSCREEN ON THE SECONDARY SIDE, CLEAR OF OTHER FEATURES OR LABELED AREAS.
8. TEST REQUIREMENTS:

A. 100% NETLIST ELECTRICAL VERIFICATION USING SUPPLIED IPC-D-356 NETLIST FOR OPENS AND SHORTS, SEE README.TXT FILE FOR LIST OF FILES.

B. FINISHED BOARD SHALL MEET UL FLAMMABILITY RATING OF 94V-0.
9. TOLERANCES:

A. WARP OR TWIST OF BOARD SHALL NOT EXCEED 0.75%.

B. CONDUCTOR WIDTHS AND SPACING SHALL BE WITHIN 0.025mm OF SUPPLIED GERBER DATA.

C. REMOVE ALL BURRS AND BREAK SHARP EDGES 0.381mm MAXIMUM.

D. CONTROLLED IMPEDANCE: SEE NOTE [6] IF APPLICABLE.

E. ALL DIMENSIONAL DATA TOLERANCE TO BE +/- 0.1mm.
10. THIEVING:

A. FABRICATOR MAY ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN.

B. IF THIEVING IS ALLOWED THEN THE FOLLOWING GUIDELINES MUST BE ADHERED TO IN ORDER TO MAINTAIN ELECTRICAL AND MECHANICAL INTEGRITY OF THE DESIGN:

a. THIEVING TO CARD EDGE SPACING 0.100" MIN.

b. THIEVING TO FIDUCIAL SPACING 0.200" MIN.

c. THIEVING TO NON PLATED HOLE SPACING 0.200" MIN.

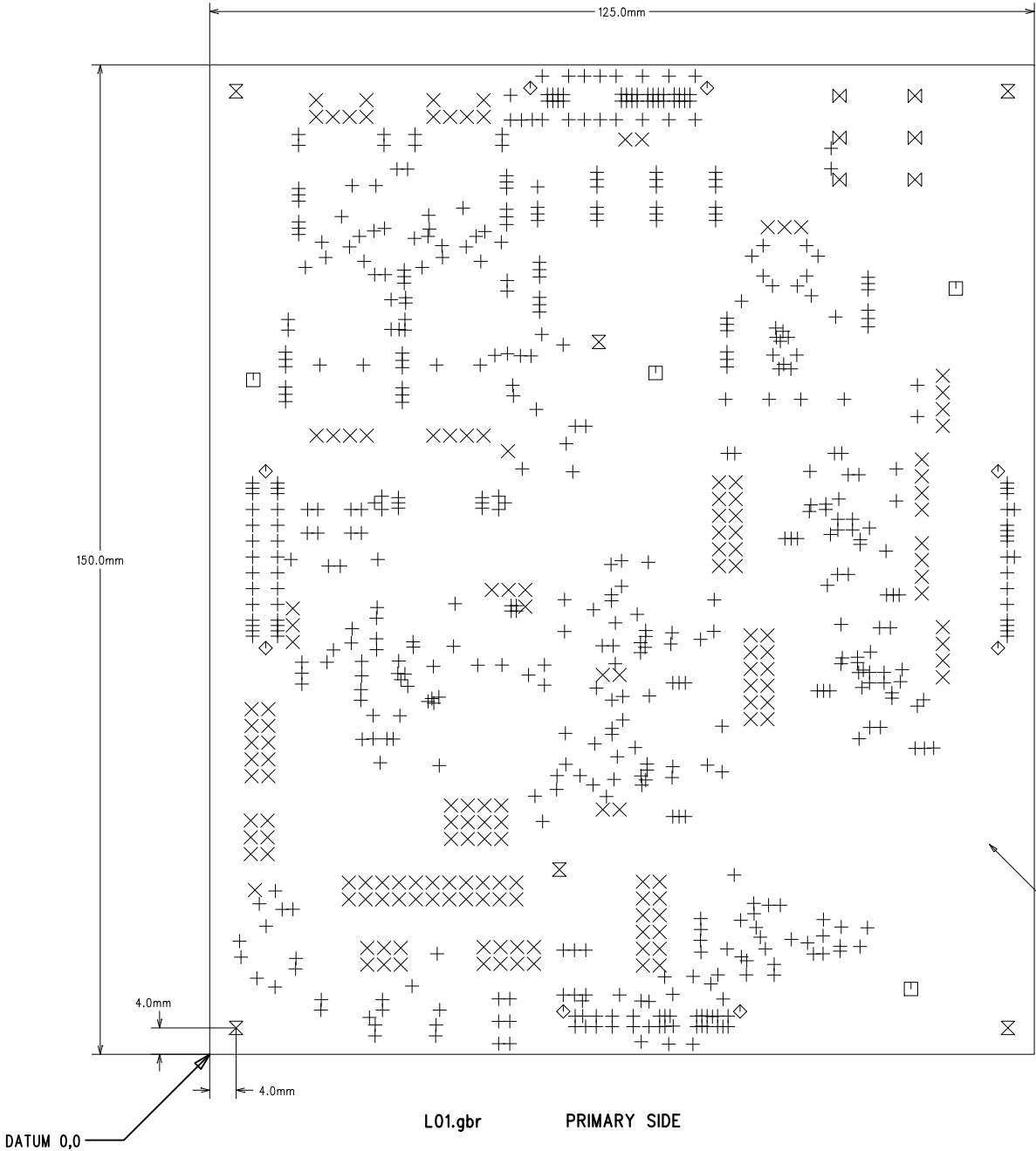
d. THIEVING TO ALL OTHER FEATERS SPACING 0.100" MIN.

e. THERE SHALL BE NO EXPOSED THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANE.
11. PACKAGING:

SUPPLIER SHALL FURNISH A CERTIFICATE OF COMPLIANCE (C OF C) WITH EACH SHIPMENT STATING THAT THE ARTICLES SHIPPED HAVE BEEN MANUFACTURED IN ACCORDANCE WITH APPLICABLE DRAWING REQUIREMENTS AND ALL REFERENCED SPECIFICATIONS AND STANDARDS. THE C OF C SHALL INCLUDE, AS A MINIMUM, THE CIRRUS LOGIC PART NUMBER AND WHEN APPLICABLE, THE CONTRACT MANUFACTURER'S PART NUMBER, REVISION, PO NUMBER, AND THE SUPPLIERS LOT ID AND DATE CODE FOR EACH SHIPMENT.

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SINGLE ENDED IMPEDANCE CHART				
GERBER FILE	LAYER	IMPEDANCE (OHMS)	TRACE WIDTH (MM)	REFERENCE LAYER(S)
240-11577-Z1.L01.GBR	L01	50	0.140	L02
240-11577-Z1.L03.GBR	L03	50	0.150	L02/L04
240-11577-Z1.L08.GBR	L08	50	0.140	L07



ECO#	REV	DESCRIPTION	INC BY/DATE	CHK BY/DATE
	A	INITIAL RELEASE	A. BRYDEN-REID 09/SEP/2024	C.MCADAM 09/SEP/2024
	B			
2024-8172	C		C.JENNINGS 19/DEC/2024	C.MCADAM 19/DEC/2024

LAYER SCHEDULE

GERBER FILE NAME	ID	LAYER DESCRIPTION	FINISHED Cu WT	THICKNESS (MM)
240-11577-Z1.SSA.GBR		SILKSCREEN, PRIMARY (A) SIDE		
240-11577-Z1.SMA.GBR		SOLDER MASK, PRIMARY (A) SIDE		
240-11577-Z1.L01.GBR	L01	PRIMARY (A) SIDE	1 OZ.	
		DIELECTRIC		
240-11577-Z1.L02.GBR	L02	PLANE GND	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L03.GBR	L03	PLANE/SIGNAL	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L04.GBR	L04	PLANE GND	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L05.GBR	L05	PLANE PWR	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L06.GBR	L06	PLANE PWR	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L07.GBR	L07	PLANE GND	0.5 OZ.	
		DIELECTRIC		
240-11577-Z1.L08.GBR	L08	SECONDARY (B) SIDE	1 OZ.	
240-11577-Z1.SMB.GBR		SOLDER MASK, SECONDARY (B) SIDE		
240-11577-Z1.SSB.GBR		SILKSCREEN, SECONDARY (B) SIDE		

SIZE	QTY	SYM	PLATED	THR/PRTL	TOL
0.25	558	+	YES	THR	+/-0.075
1.016	154	×	YES	THR	+/-0.075
1.0668	4	□	YES	THR	+/-0.075
1.5	8	◇	NO	THR	+/-0.05
3.7	6	⊠	NO	THR	+/-0.05
1.45	6	⊞	YES	THR	+/-0.0075



PART #		240-11577-Z1	REV C
DESCRIPTION: DC4282P-CODEC			
DRAWN BY: C.JENNINGS		ENGINEER: C. MCADAM	
DATE: 19/DEC/2024		SIZE B SHEET 1 OF 1	