# FABRICATION NOTES UNLESS OTHERWISE SPECIFIIED

- 1. WARP AND TWIST OF PCB SHALL NOT EXCEED 0.007" PER INCH USING CURRENT IPC METHOD
- 2. CONDUCTOR WIDTHS AND SPACING SHALL BE WITHIN +/- 10% FOR TRACE WIDTHS EQUAL TO OR LARGER THAN 0.005". CONTROL +/- 0.0005" FOR TRACE WIDTH SMALLER THAN 0.005".
- 3. ALL HOLES SHALL BE LOCATED WITHIN 0.001" OR 0.025 X DIAMETER OF TRUE POSITION
- 4. ALL HOLES ARE PLATED THRU, UNLESS OTHERWISE INDICATED. COPPER PLATING IN PLATED HOLES TO BE 0.001" MINIMUM THICKNESS PER MIL-STD-275.
- 5. DRILL SIZE TOLERANCE: +/-0.005" FOR HOLES > 0.050" DIA,
- +/-0.003 " FOR HOLES < 0.050" DIA,
  6. BOARD FABRICATION SHALL MEET LATEST RELEVANT ANSI
  AND IPC-A-600 CLASS 3 REQUIREMENTS
- 7. MATERIAL AND FINISH SHALL COMPLY WITH EU DIRECTIVE 2011/65/EU (RoHS) AND EU REGULATION (EC) 1907/2006 (REACH).
- 8. DIMENSIONS ARE AFTER ETCHING AND PLATING.
- 9. THIEVING PERMITTED ON INTERNAL LAYERS. NOTIFY OPENWATER
- OF LOCATIONS

  10. PCB MANUFACTURER TO BE UL RECOGNIZED.
- 11. MARKINGS: BOARD FABRICATOR SHALL APPLY DATE CODE (MONTH AND YEAR), FABRICATOR'S ID AND UL FLAMMABILITY RATING MARKINGS ON THE TOP SIDE OF THE BOARD.

#### MATERIAL NOTES

1. MATERIAL MUST BE FLAME RESISTANT (MEETING U.L. 94V-0 OR BETTER), Tg RATING: 175 DEG C MIN. Td RATING: 350 DEG C MIN.

#### **FABRICATION**

1. FINISHED COPPER WEIGHT OUTER LAYERS = 1 oz INNER LAYERS = 1 os

2. PCA PLATING SHALL BE CONSITENT WITH REQUIREMENTS FOR ROHS ASSEMBLY

- 3. CONTROLLED IMPEDANCE TRACE WIDTHS AND/OR DIELECTRIC THICKNESSES MAY MAY BE ALTERED TO MEET IMPEDANCE REQUIREMENTS
- 4. REMOVE ALL BURRS AND BREAK SHARP EDGES
- 5. ALL HOLE DIAMETERS REFERENCED ARE AFTER PLATING
- 6. FINISH SHALL BE FREE OF PITS, DENTS, SCRATCHES AND EXPOSED UNDERPLATE METAL ANDEXPOSED UNDERPLATE METAL.
- 7. FINISH SHALL NOT SHOW EVIDENCE OF BATH CONTAMINATION OR EXCESSIVE EDGE BUILDUP

## FINISH

- 1, APPLY LIQUID PHOTO IMAGEABLE (LPI) SOLDER MASK PER IPC-SM-840 CLASS T REQUIRED COLOR IN FABRICATION SUMMARY TABLE BELOW
- 2. SILKSCREEN SHALL BE WHITE. PERMANENT NONCUNDUCTIVE INK
- 3. ALL COMPONENT PADS SHALL BE FREE OF SOLDER MASK AND SILKSCREEN
- 4. VIAS SHOULD BE TENTED

## TEST REQUIREMENTS

1.

CONTROLLED IMPEDANCE. SEE CONTROLLED IMPEDANCE TABLE FOR FURTHER INFORMATION

2. ALL PCB's MUST PASS NET LIST ELECTRICAL CONTINUITY TESTING WITH SUPPLIED NETLIST

## INSPECTION

1. INSPECT PER IPC-600 (CURRENT REVISION)

## REPAIR

1. PCB REPAIR ACCEPTABLE PER IPC R-700 (CURRENT REVISION) EXCEPT ON LAYERS/TRACES WITH CONTROLLED IMPEDANCE

## FABRICATION NOTES:

8 Layers
FR-4
0.063"
Refer to Layer Stack Table
1.0 oz/ft2 Top & Bottom Layers; 1.0 oz/ft2 Inner Layers;
LPI Red SMOBC
LPI Red SMOBC
ENIG
Non-conductive White

REU	ECO	REVISIONS	DATE	
<b>01</b>				
02				
03				

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.40mil	3.5	
1	Layer 1 - Top Layer		1.40mil		
	Dielectric 1	370HR	12.60mil	4.2	
2	Layer 2 - GND	CF-004	1.38mil		
	Dielectric 2	Dielectric	0.47mil	3.4	
3	Layer 3 - PWR	CF-004	1.38mil		
	Dielectric 3	Dielectric	0.47mil	3.4	
4	Layer 4 - SIG	CF-004	1.38mil		
	Dielectric 4	dielectric	15.82mil	3.4	
5	Layer 5 - SIG	CF-004	1.38mil		
	Dielectric 5	Dielectric	0.47mil	3.4	
6	Layer 6 - PWR	CF-004	1.38mil		
	Dielectric 6	PP-006	7.70mil	4.1	
7	Layer 7- GND	CF-004	1.38mil		
	Dielectric 7	PP-006	12.60mil	4.1	
8	Layer 8 - Bottom Layer		1.40mil		
	Bottom Solder	Solder Resist	O.40mil	3.5	
	Bottom Overlay				
	Stack 1 Bottom Coverlay 1	Polyimide	O.47mil	3.4	

OPENWATER

733 Front Street Suite C1A San Francisco, CA 94111, USA

Symbol	Count	Hole Size	Plated	Via/Pad	Hole Tolerance (+)	Hole Tolerance (-)
O	2	55.12mil (1.400mm)	PTH	Pad	19.69mil (0.500mm)	0.00mil (0.000mm)
<b>©</b>	2	59.06mil (1.500mm)	PTH	Pad		
×	2	118.11mil (3.000mm)	PTH	Pad	1.97mil (0.050mm)	1.97mil (0.050mm)
	2	129.92mil (3.300mm)	PTH	Pad		
*	3	34.25mil (0.870mm)	PTH	Pad		
0	3	157.48mil (4.000mm)	PTH	Pad		
<b>   </b>	8	57.09mil (1.450mm)	PTH	Pad		
×	8	66.93mil (1.700mm)	PTH	Pad		
×	9	41.34mil (1.050mm)	PTH	Pad		
0	12	39.37mil (1.000mm)	PTH	Pad		
*	14	118.11mil (3.000mm)	NPTH	Pad		
abla	70	55.12mil (1.400mm)	PTH	Pad		
	1063	7.00mil (0.178mm)	PTH	Via		
	1198 Total					

Title: Multifunction Laser Driver Interface						
Size: [		Item Number:	7000-0279	Revision:	03	
Date: Oct. 9, 2023		Document Number:7100-0279		Sheet: 1 of	1	