

PCB FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

- PRIMARY SIDE SHOWN.
- TEN LAYER PCB.
- FABRICATE PER IPC-6012, CLASS 2, CURRENT REV.
- DETERMINE ACCEPTABILITY PER IPC-A-600, CURRENT REV.
25% BREAKOUT PERMITTED ON VIAS IF INTERFACE BETWEEN CONDUCTOR AND TERMINAL AREA OF PAD IS 100%. BOARDS TO BE 100% ELECTRICALLY TESTED FOR CONTINUITY (OPENS AND SHORTS).
CERTIFICATION OF THIS TEST REQUIRED WITH EACH SHIPMENT FOR EACH DATE CODE SUPPLIED. CERTIFICATION TO INCLUDE: P.O. #, P/N, AND QUANTITY OF EACH DATE CODE.
- PCBs SHALL BE ROHS COMPLIANT, MATERIAL TO BE 170 Tg FR4 OR FR406. BOARD TO BE 0.093" +/- 10%, MEASURED OUTER METAL-TO-METAL THICKNESS. BOARD FINISH TO BE LEAD FREE HASL OR ENIG. PCB SHALL BE MARKED PER J-STD-609 PARA 7.2 (FINAL FINISH DESIGNATOR), OR PER IPC-1056.
- PLATE TO 1.0 OZ COPPER NOMINAL ON SURFACE LAYERS, 1.0 OZ COPPER NOMINAL IN HOLES AND INTERNAL PLANE LAYERS, 0.5 OZ INTERNAL TRACE LAYERS.
- TOOLING HOLES OF DIAMETER UP TO 0.126" ARE NON-PLATED AND MAY OR MAY NOT BE PRESENT IN DESIGN AS PER SUPPLIED ARTWORK. IF PRESENT IN DESIGN THEY SHALL BE MARKED "T". ALL OTHER HOLES SHALL BE PLATED OR NON-PLATED ACCORDING TO HOLE CHART.
- HOLE SIZES GIVEN ARE FINISHED DIMENSIONS.
- SOLDERMASK BOTH SIDES OVER BARE COPPER PER IPC-SM-840, CLASS 2, CURRENT REV, AND MANUFACTURERS SPECIFICATIONS. NO BARE COPPER ALLOWED. NO SOLDER MASK PERMISSIBLE ON COMPONENT PADS AS PER SUPPLIED ARTWORK.
- DATE CODE, UL RECOGNIZED VENDOR MARK, AND UL94V-0 MARK REQUIRED. DATE CODE SHALL USE FOUR NUMERALS, GIVING WORK WEEK AND YEAR, EG: 2818 STANDS FOR THE 28TH WEEK OF 2018. THESE MARKS SHALL BE MADE IN COPPER AND SHALL BE LOCATED ON THE SECONDARY SIDE OF THE PCB.
- SCREEN COMPONENT ID WITH NON-CONDUCTING WHITE INK. COMPONENT ID REGISTRATION TO BE WITHIN +/- 0.005" OF ITS RESPECTIVE COMPONENT LAYER. NO SILKSCREEN INK PERMISSIBLE ON COMPONENT PADS OR IN PADS AS PER SUPPLIED ARTWORK.
- ETCH TOLERANCE +0.001" - 0.002". TOTAL TRACE REDUCTION CANNOT EXCEED 20%.
- FRONT-TO-BACK REGISTRATION TO BE WITHIN +/-0.003".
- BOARD WARP TO BE NO GREATER THAN 1.2%.
- CONTROLLED IMPEDANCE AT 10% TOLERANCE. TRACE WIDTH MAY BE ADJUSTED TO MEET IMPEDANCE REQUIREMENTS, BUT NOT BELOW 0.0045" IN WIDTH OR CLEARANCE. 0.005" TRACES ON ALL LAYERS ARE 100 OHM DIFFERENTIAL.
- LAYER CONFIGURATION DIAGRAM:
PRIMARY SIDE COMPONENT ID.
PRIMARY SIDE SOLDER MASK.
CIRCUIT LAYER #1 (PRIMARY SIDE)
CIRCUIT LAYER #2 - PLANE LAYER
CIRCUIT LAYER #3 - TRACE LAYER
CIRCUIT LAYER #4 - PLANE LAYER
CIRCUIT LAYER #5 - PLANE LAYER
CIRCUIT LAYER #6 - PLANE LAYER
CIRCUIT LAYER #7 - PLANE LAYER
CIRCUIT LAYER #8 - TRACE LAYER
CIRCUIT LAYER #9 - PLANE LAYER
CIRCUIT LAYER #10 (SECONDARY SIDE)
SECONDARY SIDE SOLDER MASK
SECONDARY SIDE COMPONENT ID.

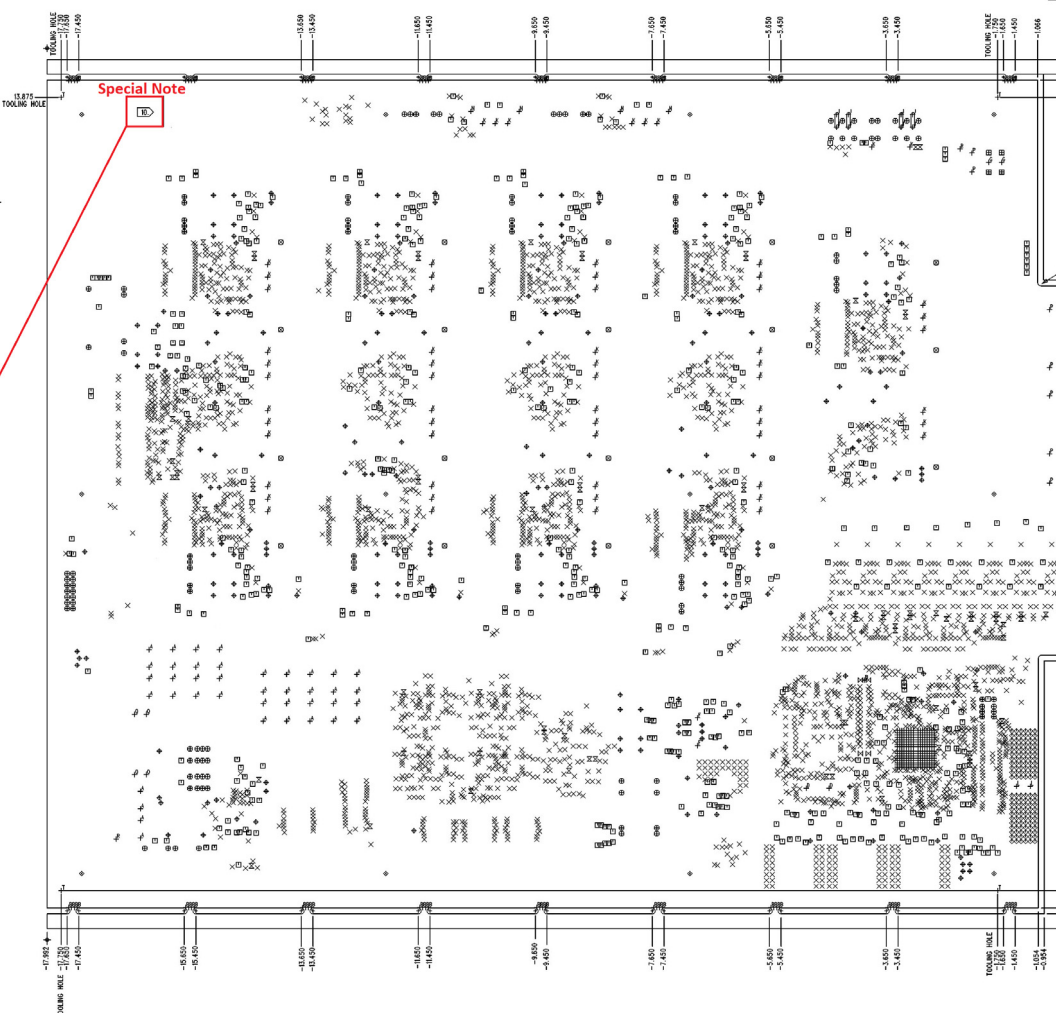
Layer Stack Up

Layer 1	0.008" Dielectric FR4 170 Tg	0.093"
Layer 2	0.008" Dielectric FR4 170 Tg	
Layer 3	0.012" Dielectric FR4 170 Tg	
Layer 4	0.012" Dielectric FR4 170 Tg	
Layer 5	0.012" Dielectric FR4 170 Tg	
Layer 6	0.012" Dielectric FR4 170 Tg	
Layer 7	0.012" Dielectric FR4 170 Tg	
Layer 8	0.012" Dielectric FR4 170 Tg	
Layer 9	0.008" Dielectric FR4 170 Tg	
Layer 10	0.008" Dielectric FR4 170 Tg	

Dielectric spacing may be adjusted to match target impedance.

MINIMUM INNER LAYER SPACING IS 0.005" MEASURED BETWEEN ANY TWO COPPER LAYERS.

Special Note



Drill Chart

SIZE	QTY	SYM	PLATED	TOL
0.010	256	+	YES	+0.001/-0.000
0.012	229	X	YES	+0.001/-0.002
0.021	498	+	YES	+0.001/-0.001
0.034	132	+	YES	+/-0.002
0.025	88	X	YES	+/-0.002
0.028	4	+	YES	+/-0.003
0.023	40	+	YES	+/-0.003
0.033	81	+	NO	+/-0.002
0.038	127	+	YES	+/-0.003
0.039	2	+	NO	+/-0.003
0.04	253	+	YES	+/-0.002
0.08	2	+	NO	+/-0.003
0.032	4	+	YES	+/-0.002
0.06 + 0.025	13	+	NO	+/-0.003
0.095	16	+	NO	+/-0.003
0.093	22	+	YES	+/-0.002
0.07	82	+	YES	+/-0.002
0.078	2	+	NO	+/-0.002
0.1	4	+	YES	+/-0.003
0.108	7	+	NO	+/-0.003
0.023	2	+	NO	+/-0.001
0.028	18	+	YES	+/-0.001
0.026	5	+	NO	+/-0.003
0.0378	12	+	YES	+/-0.001

SOLDER OR PLATING PLUS ACCEPTABLE IN HOLES UP TO 0.021"

Title Block

THIRD ANGLE PROJECTION	ADDITIONAL INFORMATION AND SPECIFICATIONS REQUIRED TO MANUFACTURE THIS PART PROVIDED:	PCB Prime Sample Fabrication Drawing 13900 E Florida Ave, Suite F, Aurora CO 80012 USA	
	UNLESS OTHERWISE SPECIFIED: ALL DRAFTING PRACTICES BASED ON ANSI DRAFTING STANDARDS ALL DIMENSIONS ARE IN INCHES	DATE: 10.15.2018	TOLERANCES UNLESS OTHERWISE NOTED
DATE: 10.15.2018	BY: JH	REV: A	TITLE: Really Big Board With Tab Routing
SIZE: D	SCALE: 1:1	PART NO: 123456	SHEET: 1 OF 1
M/P: NEXT ASSY	USED ON: APVD	SCALE: 1:1	SHEET: 1 OF 1



PCB Prime Sample Fabrication Drawing