


12 LAYER CONSTRUCTION DETAIL
SCALE : NONE



1. BOARD TO BE FABRICATED PER IPC-6012A, CLASS 2.
2. MATERIAL: POLYCLAD FR-370HR OR EQUIVALENT. OUTER LAYERS 1/2 OZ/SQFT CU
INNER LAYERS 1/2 OZ/SQFT CU FINISHED .062 (.055 MIN .070 MAX SEE DETAIL).
VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
3. PLATING: ADDITIONAL CU PLATING 1/2 OZ/SQFT
ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND.
MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE
PER IPC-6012A WITH AMENDMENT 1, CLASS 2 REQUIREMENTS.
WITH NO SINGLE MEASUREMENT LESS THAN 0.00071 IN THE PLATED HOLES.
4. FINISH: SURFACES TO BE COATED BY ENIG OF 2 TO 10 MICROINCHES OVER
A MINIMUM OF 60-200 MICROINCHES OF LOW STRESS NICKEL.
5. SOLDERMASK: SOLDER MASK TO BE TRANSPARENT GREEN LPI BOTH SIDES PER GERBER FILES.
PHOTOPLOT FILES HAVE PAD SIZE SAME SIZE AS ETCHED PAD (1/1).
VENDOR MAY ADJUST SOLDERMASK PAD SIZE AS NEEDED.
6. SILKSCREEN: WHITE EPOXY INK, APPLY TO BOTH SIDES PER GERBER FILES.
7. ARTWORK: MINIMUM FEATURE SIZE = 0.005
MINIMUM AIR GAP = 0.0049
8. ALL DIMENSIONS ARE IN INCHES.
9. CONTROLLED IMPEDANCE: BOARD TO BE BUILT TO YIELD CONTROLLED IMPEDANCE
OF 60 OHMS +/- 10% ON ALL .005" LINE WIDTHS
10. THIEVING IS ALLOWED, UNLESS OTHERWISE SPECIFIED.
11. VIAS SHOULD BE COVERED ACCORDING TO ONE OF THE FOLLOWING METHODS.
METHOD 1 IS PREFERRED.
METHOD 1: VIAS MUST BE FILLED WITH SOLDERMASK MATERIAL AFTER
ELECTROLESS NICKEL/IMMERSION GOLD AND BEFORE PRIMARY LPI MASK. AFTER THE
FILL IS CURED, THE PRIMARY MASK IS THEN APPLIED WITH NO VIA APERTURES BOTH SIDES.
METHOD 2: AFTER APPLICATION OF FULL BODY ELECTROLESS NICKEL/IMMERSION
GOLD, APPLY PRIMARY MASK WITH REDUCED VIA APERTURES THAT ARE 6 MILS
LARGER THAN DRILLED HOLE DIAMETER BOTH SIDES. THEN APPLY SOLDER MASK PLUG ON COMPONENT SIDE.
12. VIA HOLES (.006, .010, .012) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
13. TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
14. USE IPC-D-356 NETLIST AS SUPPLIED FOR CHECKING.
THERE IS 1 INTENTIONAL SHORTS ON LAYER 1
GND AND PGND AT W1
PLEASE IGNORE THESE WHEN COMPARING THE IPC-356 NETLIST AND GERBERS.
CONTACT ANALOG DEVICES IF ANY OTHER DISCREPANCIES ARE FOUND.
15. V SCORE 1 LINE ON BOTH SIDES OF THE BOARD. SEE DETAIL.
16. BUILD AS 1-UP PCB.

SIZE	QTY	SYM	PLATED	TOL
10	87	✕	YES	+0.003/-0.010
12	950	□	YES	+0.003/-0.012
28	8	◇	YES	+/-0.003
32	12	⊗	YES	+/-0.003
32 x 78	4	⊥ ^B	YES	+/-0.003
32 x 60	1	⊥ ^C	YES	+/-0.003
37	53	⊗	YES	+/-0.003
47	9	⊥ ^D	YES	+/-0.003
125	2	⊥ ^E	YES	+/-0.005
33	2	⊥ ^F	NO	+/-0.003
40	1	⊥ ^G	NO	+/-0.003
44	1	⊥ ^H	NO	+/-0.003
63	3	⊥ ^I	NO	+/-0.003
70	6	⊥ ^K	NO	+/-0.003
125	6	⊥ ^L	NO	+/-0.005
156	4	⊥ ^M	NO	+/-0.005

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		 ANALOG DEVICES 20 Cotton Road Nashua, New Hampshire 03063 (603) 883-2430 FAX (603) 882-2655			
	APPROVALS	DATE				
MATERIAL	DRAWN	11/18/09	FABRICATION DRAWING ADSP-BF506F EZ-KIT LITE BOARD			
SEE NOTES	CHECKED					
FINISH	ENGINEERING		SIZE B	DWG. NO.	A0226-2009-REF.	REV. 1.0
SEE NOTES	QUALITY					
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1		SHEET 1 OF 18	