



CROSS SECTION DETAIL

NOT DRAWN TO SCALE  
(FOR REFERENCE ONLY)

### CONTROLLED IMPEDANCE TABLE

[illegible]

### PANEL'S HOLE SCHEDULE

DRILL SYMBOL	FINISHED HOLE SIZE	COUNT	TYPE	Min/Max
+A	0.006	51	VIA	+0.002 -0.006
+B	0.008	246	VIA	+0.002 -0.008
+C	0.015	55	NPTH	+/-0.003
+D	0.040	90	PTH	+/-0.003
+E	0.042	9	PTH	+/-0.003
+F	0.047	4	PTH	+/-0.003
+G	0.062	4	PTH	+/-0.003
+H	0.067	16	PTH	+/-0.003
+J	0.094	22	NPTH	+/-0.003
+K	0.158	4	NPTH	+/-0.003
+M	0.159	4	NPTH	+/-0.001
+N	0.320	2	NPTH	+/-0.003

DWG. NO. 1395-409-84A		SH 1	REV A	1	
REVISIONS					
ZONE	REV.	DESCRIPTION		DATE	APPROVED
	A	INITIAL RELEASE		5/08/09	DGC

NOTES:

1. REFERENCE TO SPECIFICATION # 1343A703, "PRINTED CIRCUIT BOARD MATERIAL SPECIFICATION, VERSION 2.4" FOR FABRICATION AND INSPECTION REQUIREMENTS.
2. MATERIAL: USE LAMINATE AND PREPREG PER IPC-4101:  
☐ FR4 ( /21 ), ☐ POLYIMIDE ( /40 ), ☐ BT EPOXY ( /30 );  
☒ HIGH TEMP FR4 ( /24 ), ☐ \_\_\_\_\_;  
☐ SINGLE SIDED, ☐ DOUBLE SIDED, ☒ MULTILAYER 4 LAYERS;  
☐ DIELECTRIC CONSTANT \_\_\_\_\_  
☐ HDI:        CONSTRUCTION.
3. FINISHED COPPER THICKNESS SHALL BE:  
☒ 0.0005-0.0010 (APPROX. 1/2 OZ) ☒ INTERNAL;  
☒ 0.0012-0.0019 (APPROX. 1 OZ) ☒ EXTERNAL, ☐ INTERNAL;  
☐ 0.0023-0.0033 (APPROX. 2 OZ) ☐ EXTERNAL, ☐ INTERNAL  
COPPER PLATING IN PLATED HOLES TO BE PER IPC-6012, CLASS 3.  
☐ COPLANAR COPPER THICKNESS ON THE OUTER LAYERS.
4. BOARD THICKNESS SHALL BE 0.062 +/-0.005  
☒ FINISHED BOARD, ☐ LAMINATE.  
SEE CROSS SECTION DETAIL FOR MULTILAYER BOARDS.
5. TECHNOLOGY:  
MINIMUM LINE/SPACE USED: 0.005 / 0.005;  
MINIMUM COMPONENT PITCH: 0.020  
☒ CONTROLLED IMPEDANCE.
6. ☒ SOLDER MASK: APPLY PHOTO-IMAGEABLE: ☒ WET FILM (LPI),  
☐ DRY FILM SOLDER MASK OVER BARE COPPER, UNLESS GOLD IS USED AS AN ETCH MASK, TO: ☐ FRONT, ☐ BACK, ☒ BOTH SIDE(S) USING ARTWORK SUPPLIED.  
COLOR TO BE: ☐ GREEN, ☐ RED, ☒ MAGENTA  
☐ VIAS TO BE PLUGGED WITH SOLDER MASK FROM: ☐ FRONT, ☐ BACK  
SIDE FOR THE: ☐ ENTIRE BOARD, ☐ AREA INDICATED.
7. FINISH/PLATING:  
☐ HASL - AREAS EXPOSED BY SOLDER MASK TO BE HOT AIR SOLDER LEVELED 0.000300 - 0.003000 THICK.  
☒ ENIG - AREAS EXPOSED BY SOLDER MASK TO BE IMMERSION GOLD PLATED 0.00000118 - 0.00000394 THICK OVER ELECTROLESS NICKEL 0.000118 - 0.000300 THICK.  
☐ ALL CONDUCTIVE PATTERNS TO BE PLATED 0.000118 - 0.000300 THICK OF NICKEL. GOLD PLATE WITH SOFT/WIREBONDABLE GOLD 0.000040 - 0.000060 THICK.  
☐ CONDUCTORS TO BE PLATED 0.000118 - 0.000300 THICK OF NICKEL. HARD GOLD PLATE 0.000060 THICK MINIMUM ☐ WHERE SPECIFIED, USING ARTWORKS SUPPLIED, ☐ ALL CONDUCTORS.  
☐ ENEG - AREAS EXPOSED BY SOLDER MASK TO BE ELECTROLESS GOLD PLATED 0.000020 - 0.000040 THICK OVER ELECTROLESS NICKEL 0.000118 - 0.000300 THICK.  
☐ OSP - CLEAR ORGANIC BASED COATING (ENTEK CU-106A).  
☐ PTF RESISTORS ON LAYER       , USING INK(S) \_\_\_\_\_  
☐ \_\_\_\_\_
8. ☒ LEGEND/SILKSCREEN ON THE ☒ FRONT, ☐ BACK, ☐ BOTH SIDE(S).  
USE NON-CONDUCTIVE, EPOXY INK, COLOR WHITE.
9. ☒ PANELIZED: 1 BOARDS PER PANEL.
10. CERTIFICATIONS/REPORTS:  
☒ IPC-6012, CLASS 3 CERTIFICATION  
☒ CROSS-SECTION REPORT  
☒ NETLIST ELECTRICAL TEST TO BE PERFORMED AS THE FINAL STEP. TEST 100% FOR OPENS AND SHORTS PER THE FOLLOWING:  
☐ SINGLE SIDE ACCESS  
☒ DUAL SIDE ACCESS  
☐ PLATING COMPOSITION AND THICKNESS CERTIFICATION  
☐ WIREBOND TEST COUPON REQUIRED FOR EACH PANEL.
11. ☐ BOARD CONSTRUCTION TO BE THE SAME AS: ☐ THE LAST REVISION OF THIS PART, ☐ \_\_\_\_\_. PLEASE REFER TO PREVIOUS BUILD INFORMATION.
12. ☐ CRITICAL FEATURES: 100% INSPECTION REQUIRED OF FEATURES INDICATED IN TABLE.

[illegible]

QTY REQD.		FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION		MATERIAL SPECIFICATION			
PARTS LIST									
<div>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS    DECIMALS    ANGLES ±                    .XX ± 0.01 ±                       .XXX ± 0.005</div>		CONTRACT NO.		PCB - SIREN A & B  DRILL DRAWING					
		APPROVALS						DATE	
		DRAWN						DGC	5/08/09
		CHECKED							
		ISSUED							
MATERIAL		SEE NOTE 2							
FINISH		SEE NOTE 7							
1395-309A		RFIC		SIZE	FSCM NO.	DWG. NO.	REV.		
NEXT ASSY		USED ON		D		1395-409-84A	A		
APPLICATION		DO NOT SCALE DRAWING		MENTOR		SCALE 1:1	SHEET 1 OF 1		