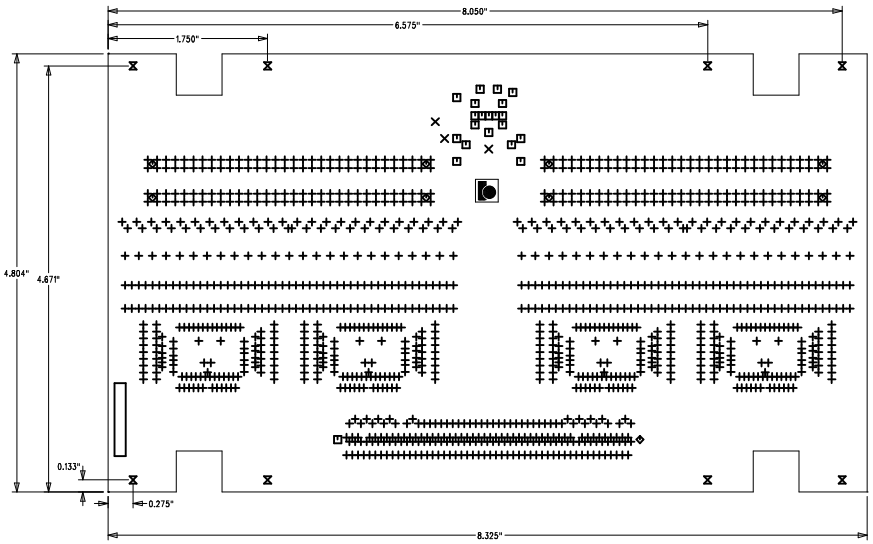
FSCM	DWG NO.	SH	REV

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

BROOKHAVEN NATIONAL LABORATORY
IC71 ATLAS CSC - ASM 1 BOARD
IO-1116-1 REV C
05-25-04 KJW



FABRICATION NOTES (REV 1.0)

1) FINISHED TRACE LINE WIDTHS SHOULD MATCH SUPPLIED GERBER FILES. (.006" FOR SIGNAL TRACES)

2) MATERIAL :
☒ FR4 (GF per MIL-P-13949) ☐ GPY (GI per MIL-P-13949) ☐ OTHER

3) COPPER WEIGHT:
OUTER LAYERS : ☐ 1/4 oz. ☐ 1/2 oz. ☒ 1 oz. ☐ 2 oz.
INNER LAYERS : ☐ 1/4 oz. ☐ 1/2 oz. ☒ 1 oz. ☐ 2 oz. ☐ NONE

4) SOLDER MASK
☒ LIQUID PHOTOIMAGEABLE ☐ DRY FILM ☐ NONE
☒ OVER BARE COPPER ☐ OVER TIN LEAD ☐ OVER FULL BODY GOLD
☒ GREEN ☐ RED ☐ BLUE

5) OVERALL BOARD THICKNESS:
☒ 0.062" ☐ 0.093" ☐ 0.125" ☐ OTHER
☐ +/- 0.005" ☒ +/- 0.007" ☐ +/- 0.010" ☐ OTHER

6) BARE BOARD ELECTRICAL TEST:
☒ TESTED TO GERBER DATA ☐ NO TEST REQUIRED

7) HOLE DIAMETER TOLERANCES ARE:
PLATED HOLES : +/- 0.003".NON PLATED HOLES : +/- 0.002". (except where noted)

8) SILK SCREEN USING EPOXY BASED INK.
☒ BOTH SIDES ☐ PRIMARY SIDE ☐ SECONDARY SIDE ☐ NONE
☒ WHITE ☐ YELLOW ☐ BLACK

9) MINIMUM ANNULAR RING:
☒ .003" FOR EXTERNAL LAYERS
☒ .002" FOR INTERNAL LAYERS

10) PLANE REGISTRATION:
+/- .005" TO TOP PLANE FOR ALL PLANES

11) MINIMUM PLATING THROUGH ALL HOLES IS:
.001" THICK COPPER

12) BOARD TO BE GOLD PLATED WITH 3-10u INCHES GOLD FOR SOLDERING OVER 100u INCHES NICKEL.

13) WARP AND TWIST:
NOT TO EXCEED .007" PER INCH ACROSS THE DIAGONAL

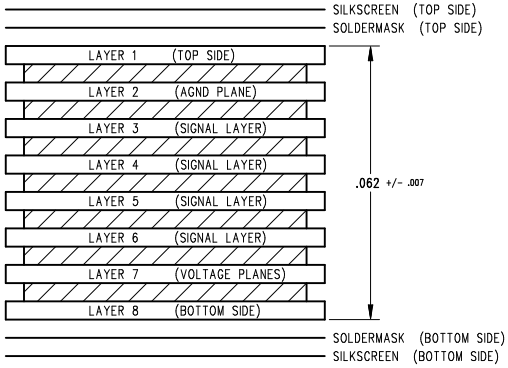
14) ACCEPTABILITY: (PER LATEST REVISION)
☒ IPC-A-600 ☐ IPC-RB-276 ☐ MIL-P-55110

15) MANUFACTURER TO ADD MFR'S LOGO, DATE CODE, UL CODE AND ET STAMP.

16) VENDOR TO SUPPLY CROSS SECTIONS AND TEST COUPONS PER LOT

17) SURFACE MOUNT PADS:
TOP LAYER: 1039
BOTTOM LAYER: 1504
TOTAL: 2543

LAYUP DETAIL
8 LAYER



HOLE SIZE CHART				
SYM	SIZE (AFTER PLATING)	QTY	PLATED	
+	.010 +.003 -.003	1202	YES	
×	.015 +.003 -.003	3	YES	
□	.031 +.002 -.002	21	YES	* SEE NOTE 7.
◇	.048 +.002 -.002	9	YES	* SEE NOTE 7.
⧖	.150 +.003 -.003	8	YES	

QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± DECIMALS .XX= 0.010 .XXX= 0.005 ANGLES ±

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN K WOLNIEWICZ	05-25-04
CHECKED	
ISSUED	

CUSTOMER
BROOKHAVEN NATIONAL LABORATORY

TITLE
IC71 ATLAS CSC - ASM 1 BOARD

SIZE	TICKET	DWG NO.	REV.
C	T-2004-18	IO-1116-1	C

SCALE 1 : 1 SHEET 1 OF 1