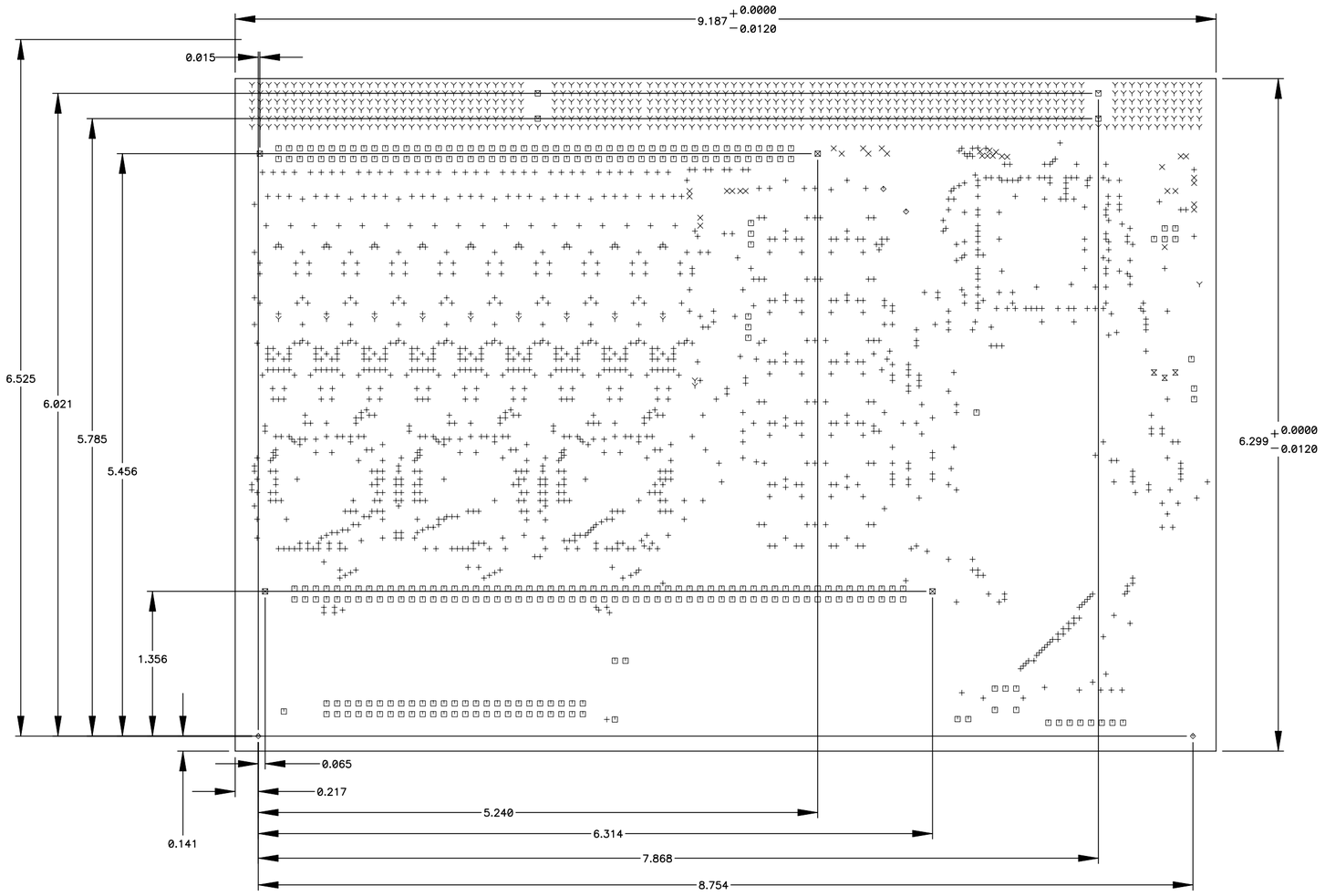
REVISIONS						
ZONE	LTR	REVISIONS	ECR	DATE	BY	APRV
	A	See Sheet 2 for specifics.	devel	09Jan04	dms	p.moore
	B	MAJOR REVISION SEE ECO DOCUMENT	ECO-0106	17may05	dms	jgarcia



Drill Table			
Hole Dia (inch)	Symbol	Quantity	Plated
0.013	+	1326	Yes
0.018	X	32	Yes
0.025	Y	660	Yes
0.037	⧖	3	Yes
0.041	⊡	298	Yes
0.047	◈	2	Yes
0.080	⊠	4	No
0.110	◈	2	No
0.127	⊠	4	Yes

APPROVED FOR CONSTRUCTION 10-26-05

NOTES: unless otherwise specified

1.0 Applicable documents
The following items are required:
PATTERN FILM DWG # MNSN-EL-04-3004
DETAIL DRAWING DWG # MNSN-EL-04-1004 THIS DOCUMENT

2.0 BASE MATERIAL
2.1 Laminate base material shall be natural color, FR-4 or equivalent. See Detail A-A for layer to layer specification and overall thickness.
2.2 B-Stage shall be selected at vendors discretion to meet over all board thickness and end item requirements.

3.0 COPPER PLATING
3.1 Copper plating shall have a minimum purity of 99.5 percent and a minimum thickness of .001 inch. This also applies to the plating in the holes.

4.0 SOLDERMASK
4.1 Apply LPI Green soldermask over bare copper according to the soldermask pattern file per IPC-SM-840 to both primary and secondary side.

5.0 FINISH
5.1 The printed circuit board shall be tin/lead solder plated and reflow solder finished or equivalent on all exposed metalization. Solder plating shall conform to the visual criteria of IPC-A-600.

6.0 SILK SCREEN
6.1 Silk screen top (-1) and bottom (-8) side of board using white epoxy ink according to the -L1S pattern film and the -L8S pattern film. Ink shall not cover any exposed metal.

7.0 DIMENSIONS
7.1 All dimensions are in inches.
7.2 Unless otherwise specified all hole sizes apply after plating. Hole sizes are shown in the drill schedule.

8.0 TOLERANCES
8.1 Hole size tolerance +- .003 after plating unless otherwise specified.
8.2 Conductor widths and spacing shall be within 20% of the artwork originals.
8.3 Layer to layer registration shall be .007 inches of true position
8.4 Board dimensions shall meet the requirements of the board drawing.
8.5 Warp and twist shall not exceed that defined in IPC-A-600.

9.0 APPEARANCE
9.1 All inside and outside corners shall have a maximum radius of .065
9.2 Remove all burrs and smooth sharp edges to .010 max.

VENDOR NOTE: NOTIFY US OF ANY CONFLICTING REQUIREMENTS OR IF BOARDS CANNOT BE MANUFACTURED TO MEET THE ABOVE REQUIREMENTS, DUE TO VENDORS PROCESS AND/OR TECHNIQUES OR BECAUSE PHOTO TOOLS AND/OR SPECIFICATIONS ARE INADEQUATE.

DETAIL A-A

.062"	.007	Layer-1	top sig 1/2oz
	.007	Layer-2	plane 1 oz
	.007	Layer-3	plane 1 oz
	.012	Layer-4	sig 1/2 oz
	.007	Layer-5	sig 1/2 oz
	.007	Layer-6	plane 1 oz
	.007	Layer-7	plane 1 oz
	.007	Layer-8	bottom sig 1/2 oz

Modified Date: Wed Oct 26, 2005
Print Date: Wed Oct 26, 2005

QTY REQ'D	PART OR IDENTIFYING NO	ITEM DESCRIPTION		ITEM NO

TOLERANCES UNLESS OTHERWISE NOTED
.XX ± .03 ANGULAR
.XXX ± .010 ±.5°
THIRD ANGLE PROJECTION

NATIONAL OPTICAL ASTRONOMY OBSERVATORIES
OPERATED BY THE
ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY
UNDER COOPERATIVE AGREEMENT WITH
NATIONAL SCIENCE FOUNDATION

DO NOT SCALE DRAWING

NAME: DETAIL
MONSOON IR ACQ MOTHER BOARD

USED ON: MONSOON
REF:
DWG SIZE: C
REV: B

NEXT ASSEMBLY: MNSN-EL-04-0004
REFER TO SCHEMATIC: MNSN-EL-04-2004

SCALE:	DESIGNED BY	DATE	CHECKED BY	DATE	DWG NO
FULL	B.Starr D.Stover	MAY02			MNSN-EL-04-1004

DWG PRODUCED USING	DRAWN BY	DATE	APPROVED BY	DATE	RELEASED	SHEET
PCAD 2004	Dee Stover	MAY02				1 OF 1