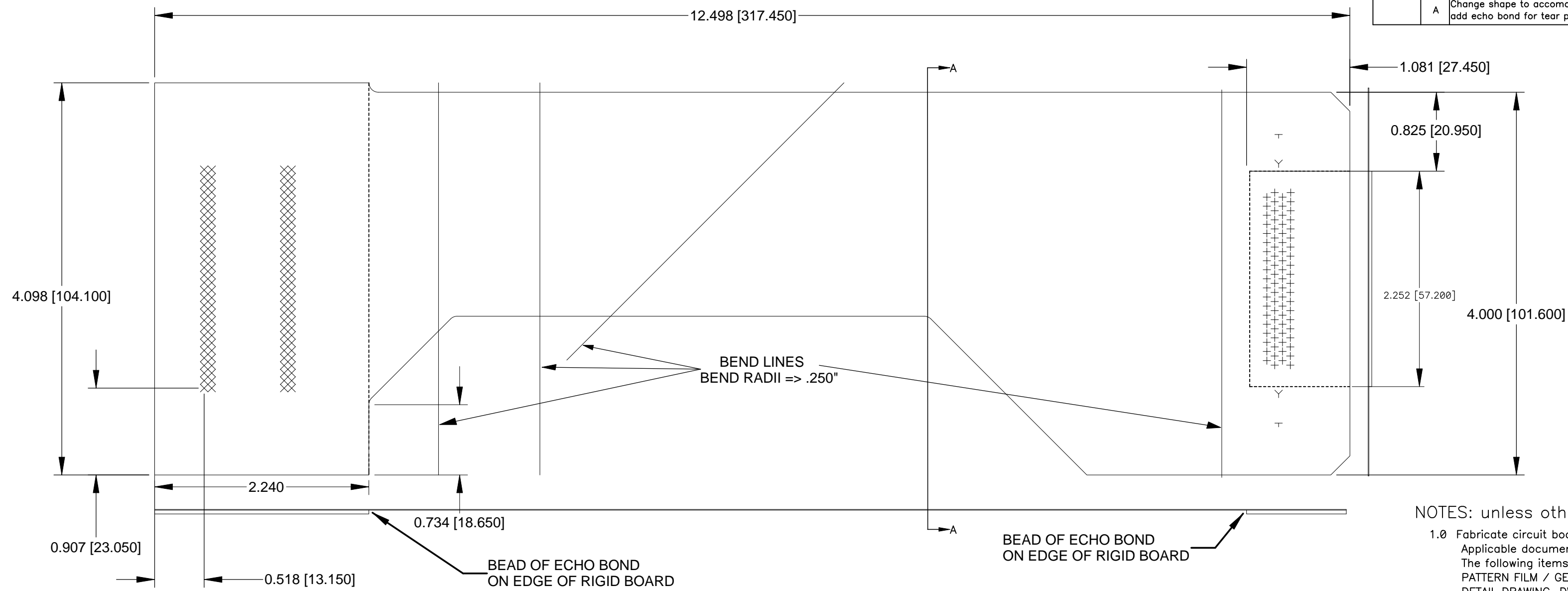


REVISIONS

ZONE	LTR	DESCRIPTION	ECR	DATE	BY	APRV
	A	Change shape to accomodate gigE module hardware add echo bond for tear prevention		13JAN11	DMS	



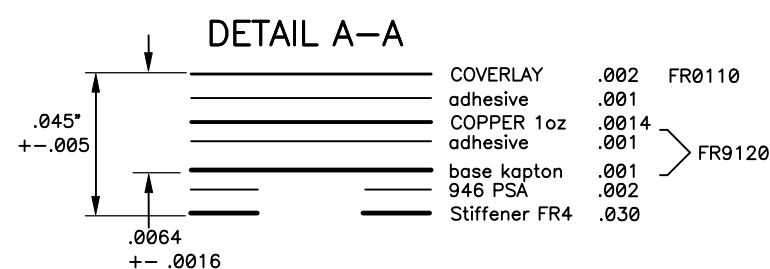
EXPOSED COPPER IS NEAR SIDE
STIFFENER IS FAR SIDE

NOTES: unless otherwise specified

- 1.0 Fabricate circuit board to conform to IPC-6014.
Applicable documents
The following items are required:
PATTERN FILM / GERBER DATA DWG # TRNT-EL-04-3006
DETAIL DRAWING DWG # TRNT-EL-04-1006 THIS DOCUMENT
- 1.1 Artwork may not be modified except for process control.
- 2.0 BASE MATERIAL
 - 2.1 Laminate base material shall be natural color.
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 N/A
 - 4.1
- 5.0 FINISH
 - 5.1 EXPOSED COPPER SHALL BE Ni/Au -- IMMERSION GOLD 3-5u INCH (0.00003-0.00005) OVER ELECTROLESS NICKEL 100-200u INCH (0.00001-0.00002) THICK IAW IPC-2221 AND IPC-4552 (ENIG).
- 6.0 SILK SCREEN N/A
 - 6.1
- 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.

Drill Table						
Hole Dia (inch)	Symbol	Quantity	Plated	Coverlay	Stiffener	
0.030	+	78	Yes	.060	.040	
0.032	X	120	Yes	.055	.040	
0.125	Y	2	No	.125	na	
0.226	T	2	No	.226	na	

APPROVED FOR
CONSTRUCTION
01-25-11 DMS



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.

QTY REQ'D	PART OR IDENTIFYING NO	ITEM DESCRIPTION	ITEM NO
TOLERANCES UNLESS OTHERWISE NOTED		 THIRD ANGLE PROJECTION	NATIONAL OPTICAL ASTRONOMY OBSERVATORIES OPERATED BY THE ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY UNDER COOPERATIVE AGREEMENT WITH NATIONAL SCIENCE FOUNDATION
.XX ± .03 ANGULAR ±.5° .XXX ± .010			
DO NOT SCALE DRAWING		NAME	USED ON
NEXT ASSEMBLY		TORRENT	
REFER TO SCHEMATIC		REF	
TRNT-EL-04-0006		DETAIL	
TRNT-EL-04-2006		FLEX CLOCK AND BIAS	
SCALE: FULL		DESIGNED BY	DATE
DWG PRODUCED USING		DRAWN BY	DATE
PCAD 2006		Dee Stover	15SEP09
CHECKED BY		DATE	DWG NO
APPROVED BY		DATE	TRNT-EL-04-1006
RELEASED		SHEET 1 OF 1	

Modified Date: Tue Jan 25, 2011
Print Date: Tue Jan 25, 2011