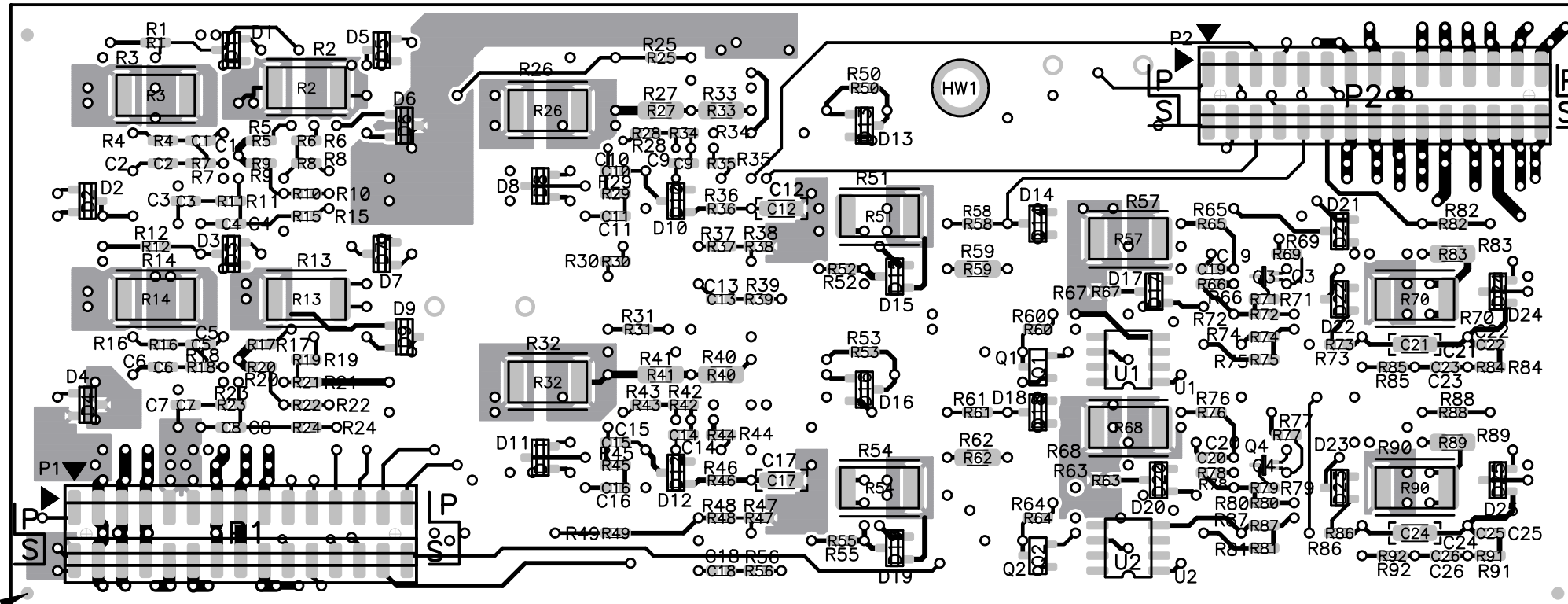


REVISIONS

| ZONE | LTR | REVISIONS | ECR | DATE | BY | APRV |
|------|-----|--|----------|---------|-----|----------|
| | -1 | correct orientation marking of D4 and D5, add letter 'K' to help with installation orientation, add notes & connector detail | | 29may09 | dms | |
| | A | delete note 6, change note 4 | TRNT-004 | 16DEC09 | dms | pmoore |
| | A1 | add text to note 6 and detail of Q3 and Q4 | TRNT-008 | 25jan10 | dms | pmoore |
| | A2 | change note 4 height call out from .250"-.350" to .200"-.250" Add TP1 & TP2 detail | | 06apr11 | dms | r.george |
| | A3 | change note 6 and detail views pertaining to note 6 | TRNT-031 | 21mar12 | dms | p.moore |

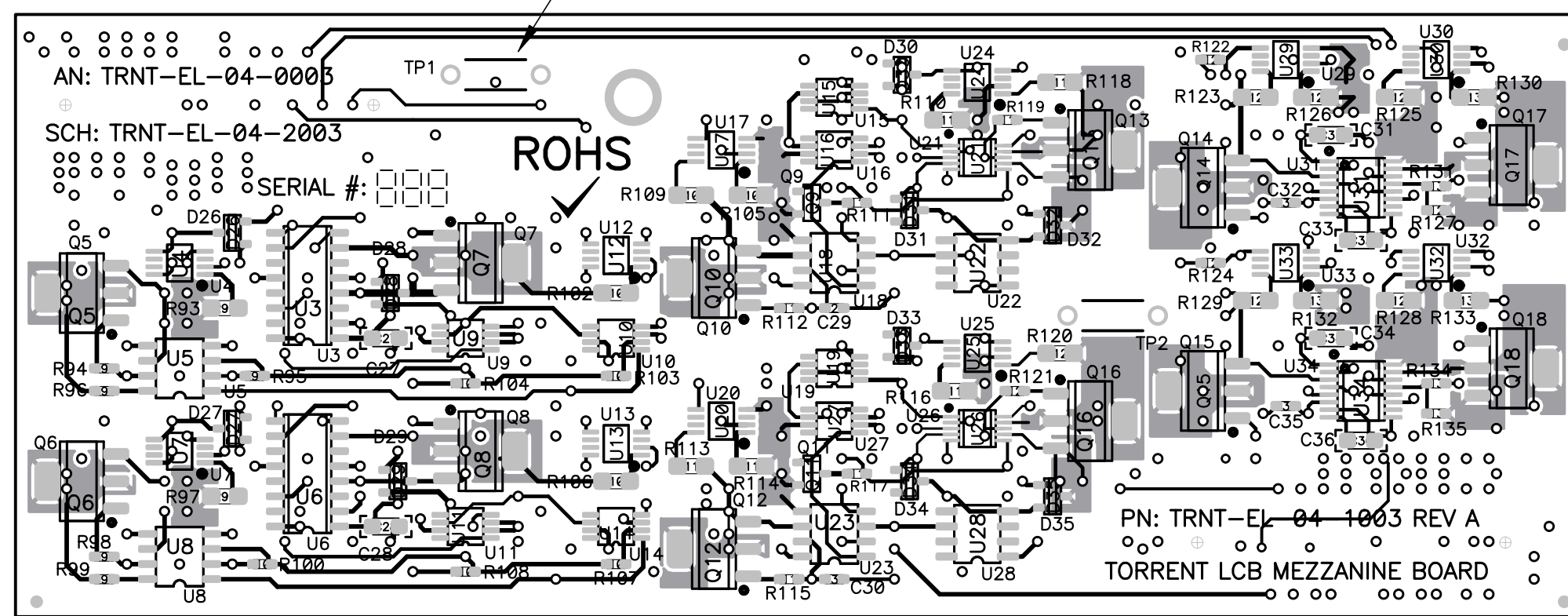


TOP ASSEMBLY

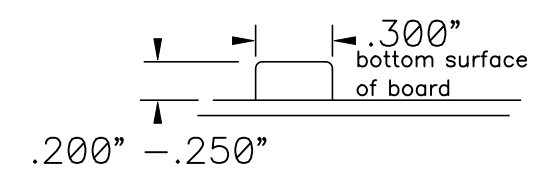
7

NOTES:

- This assembly is ROHS compliant.
- Before installing any components check all boards using an ohm meter for shorts between all power and ground nodes.
- All polarized caps are marked with a plus (+) sign closest to the positive node.
- TP1 & TP2 shall be solid bare wire formed to stand off the board surface a distance between .200" to .250" See Detail TP1 & TP2
- All holes and lands of uninstalled components shall be kept free of solder.
-
- PNP report origin
- If modifications are performed on this board, the cleaning process should be confined to the modified areas. Do not subject the board to any all-over cleaning processes.
- P1 & P2 orientation: triangle marking is pin 1, for this assembly the post is pin 1, see Detail A
- For Parts List use TRNT-EL-04-4003 latest revision.

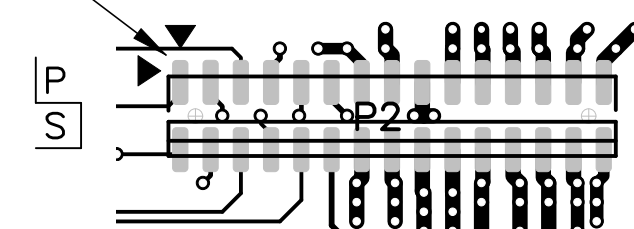


BOTTOM ASSEMBLY



DETAIL TP1 & TP2

shrouded, post (terminal) side to pin 1



DETAIL A CONNECTOR ORIENTATION

APPROVED FOR CONSTRUCTION 01-08-10 dms

APPROVED REFERENCE COPY 03-21-12 dms

Modified Date: Wed Mar 21, 2012
Print Date: Wed Mar 21, 2012

| 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 | | |
| .XXX ± .010 | ±.5° | | |
| DO NOT SCALE DRAWING | | NAME | USED ON |
| NEXT ASSEMBLY TRNT-EL-04-0002 | | ASSEMBLY TORRENT LCB MEZZANINE BOARD | TORRENT |
| REFER TO SCHEMATIC TRNT-EL-04-2003 | | | DWG SIZE C |
| SCALE: FULL | | DESIGNED BY Peter Moore | REV A3 |
| DWG PRODUCED USING PCAD 2006 | | DATE Oct 2008 | |
| DRAWN BY Dee Stover | | CHECKED BY | DWG NO TRNT-EL-04-0003 |
| DATE APR 2009 | | DATE | RELEASED |
| | | APPROVED BY | SHEET 1 OF 1 |