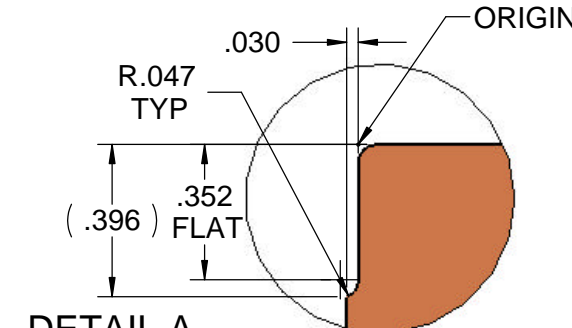
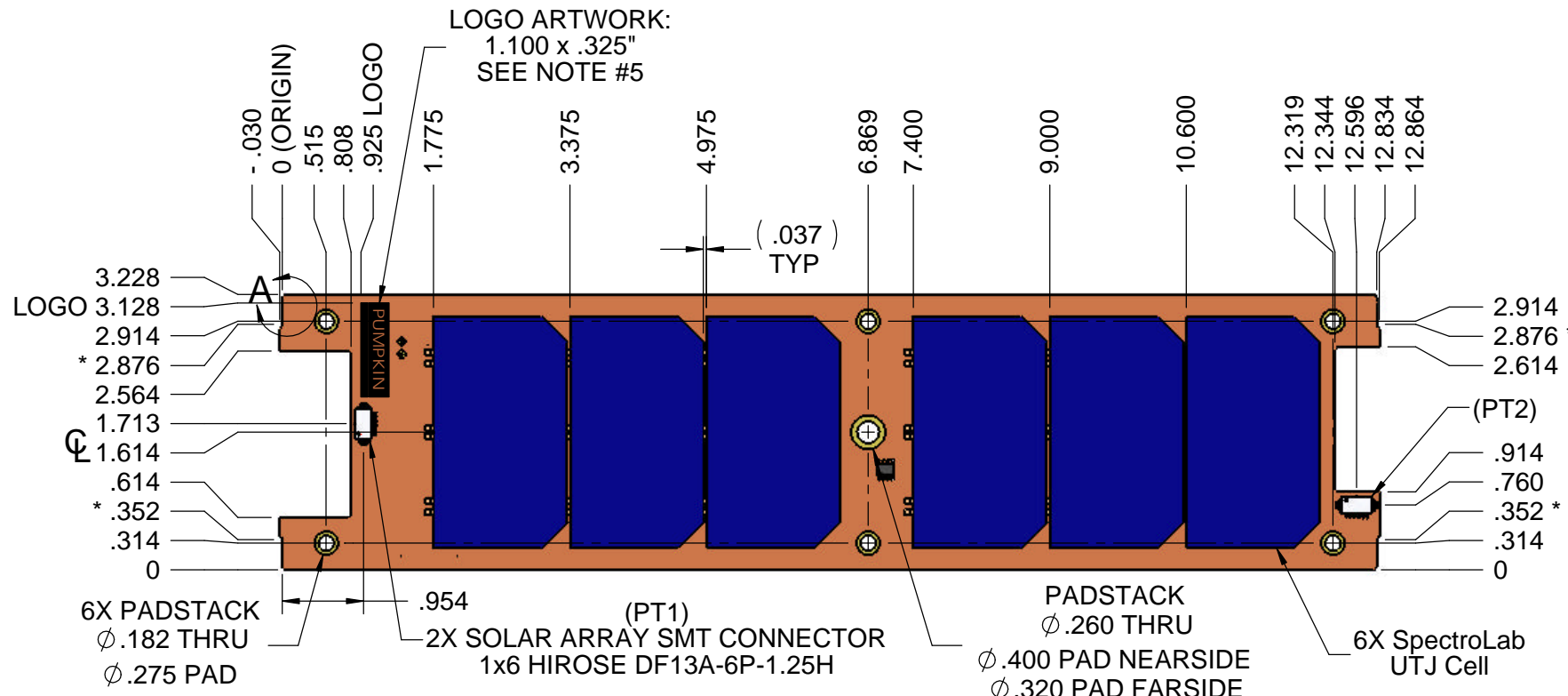


PROPRIETARY NOTICE

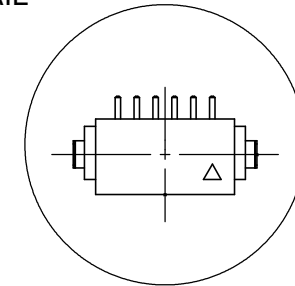
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REVISION HISTORY

| REV | LOC | DESCRIPTION | DATE | APP'VD |
|-----|-----|--|------------|--------|
| B0 | C8 | CHANGED THRU HOLE FROM .172 to .182" | 04/30/2009 | AWR |
| B0 | A7 | MOVED PT3 & SA1 CONNECTORS .025" FROM .221" to .246" | 04/30/2009 | AWR |
| B0 | A7 | MOVED PT4 CONNECTOR .015" FROM 2.588" TO 2.573" | 04/30/2009 | AWR |
| B0 | C7 | ADDED PUMPKIN LOGO CALLOUT | 04/30/2009 | AWR |



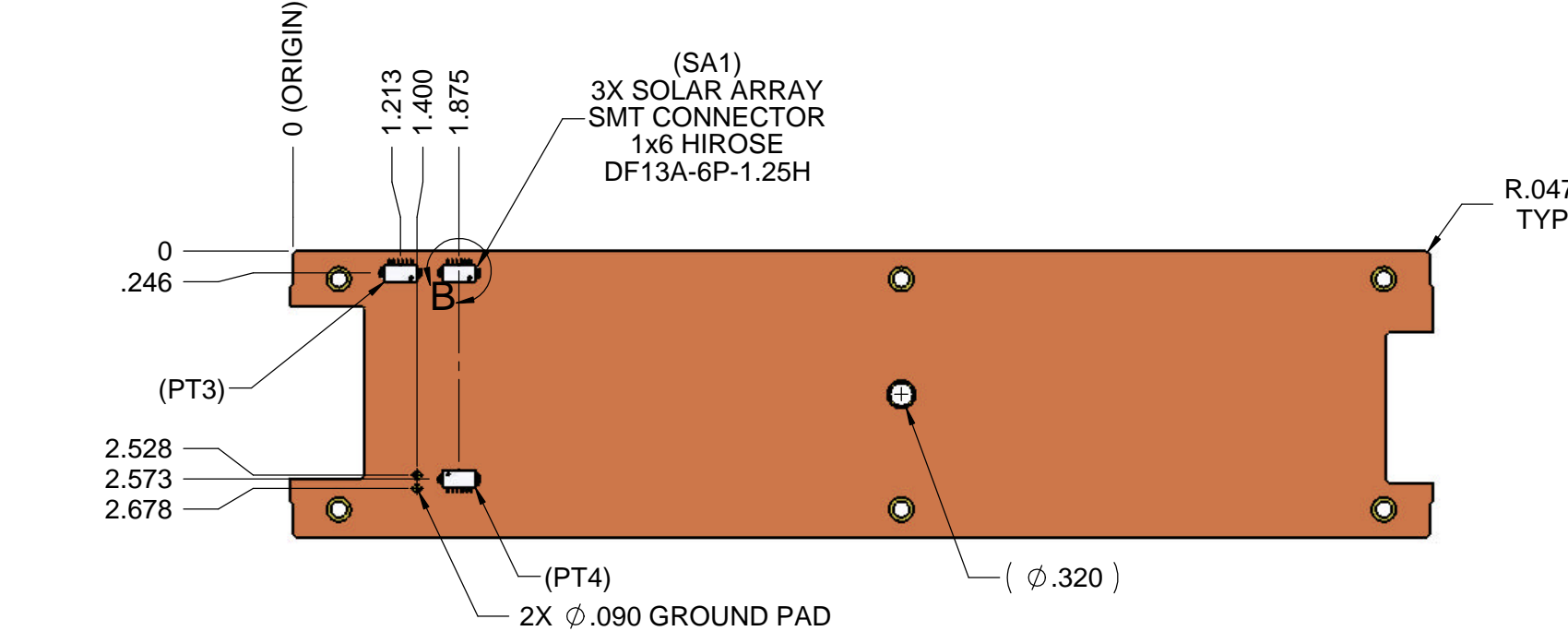
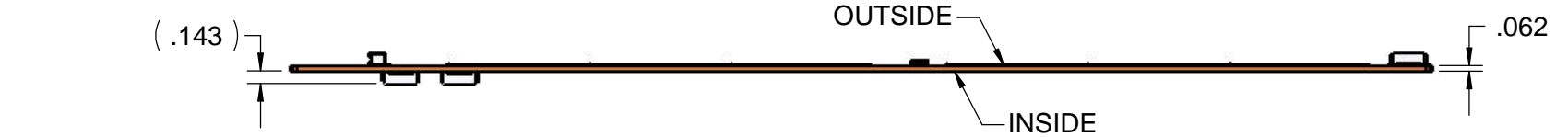
DETAIL A
SCALE 2 : 1
CORNER DETAIL
(2 PLACES)



DETAIL B
SCALE 2 : 1

| SOLAR ARRAY CONNECTOR | |
|-----------------------|-------------|
| PIN # | LABEL |
| 1 | POS_OUTSIDE |
| 2 | RTN_OUTSIDE |
| 3 | TLM_OUTSIDE |
| 4 | POS_INSIDE |
| 5 | RTN_INSIDE |
| 6 | TLM_INSIDE |

- NOTES:**
- 1) ALL PLATED THRU HOLES ARE SPEC'D AFTER PLATING
 - 2) "INSIDE" REFERS TO THE SURFACE THAT FACES THE SATELLITE, AND "OUTSIDE" REFERS TO THE SURFACE THAT FACES AWAY FROM THE SATELLITE, WHEN LOADED IN THE LAUNCH SYSTEM.
 - 3) DIMENSIONS WITH AN ASTERISK (*) ARE MARKING A TANGENCY POINT.
 - 4) REFER TO SHEET #2 FOR KEEP-OUT ZONES ON THE INSIDE.
 - 5) LOGO TO APPEAR ON METAL LAYER; WITH THE TEXT IN METAL. FOR LOGO SPECIFICATIONS AND DXF FILES, CONTACT PUMPKIN.



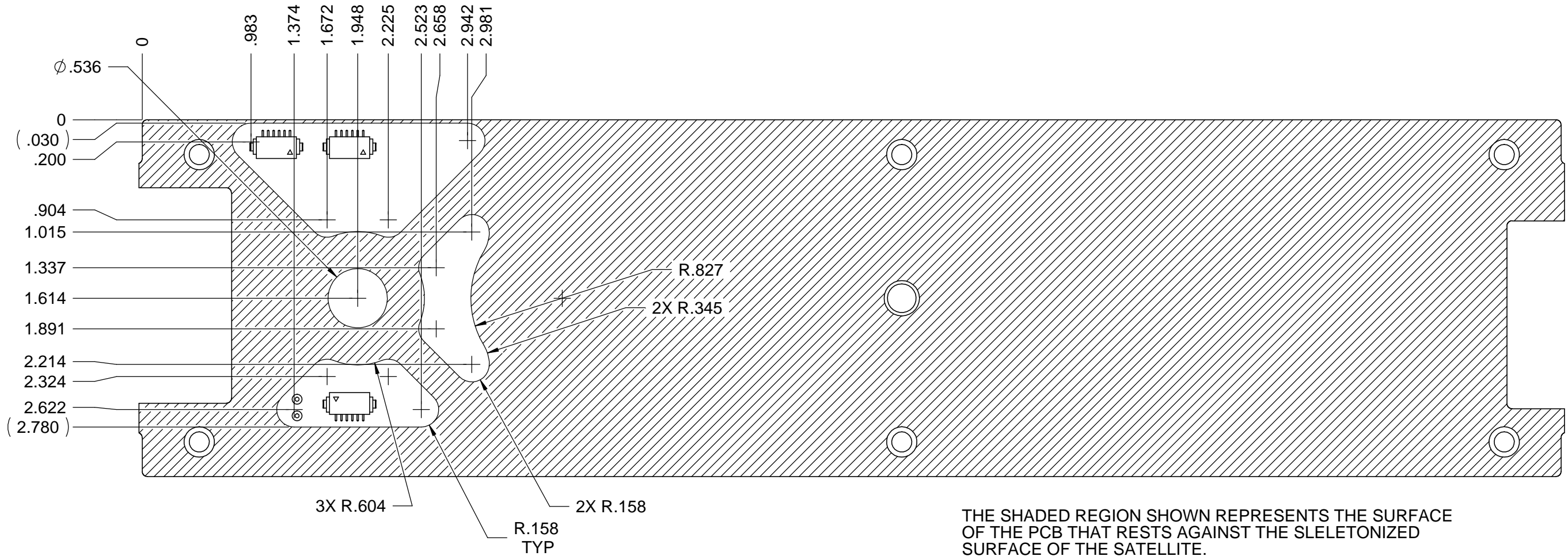
| | | | |
|---|----------------------|--|------------------------------------|
| MATERIAL: SEE NOTES | FINISH: SEE NOTES | HEAT TREAT: NONE | WEIGHT: |
| | | 750 Naples - San Francisco - CA 94112 (415) 584-6360 ph - (415) 585-7948 fax info@pumpkininc.com | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | APPROVALS | DATE | TITLE |
| FRACTIONS DECIMALS ANGLES | DRAWN AWR | 11/07/08 | PCB, Front Panel Module, 3U |
| .X = ± .030 | CHECKED | | |
| .XX = ± .010 ± 0° 30" | QUAL ENG | | |
| .XXX = ± .005 | DO NOT SCALE DRAWING | SCALE 1 : 2 | REV B0 |
| CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE | | | SHEET 1 OF 2 |

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REVISION HISTORY


| REV | LOC | DESCRIPTION | DATE | APP'VD |
|-----|-----|-------------------------|------------|--------|
| B0 | | NO CHANGE TO THIS SHEET | 04/30/2009 | AWR |



THE SHADED REGION SHOWN REPRESENTS THE SURFACE OF THE PCB THAT RESTS AGAINST THE SKELETONIZED SURFACE OF THE SATELLITE.

NOTES:

- 1) THIS IS A REFERENCE DRAWING TO ILLUSTRATE WHERE IT IS SAFE TO MOUNT COMPONENTS AND/OR RUN TRACES AND EXPOSED PADS ON THE BACKSIDE OF THE PCB.
- 2) ANY TRACES THAT EXIST IN THE SHADED AREA WILL NEED TO BE INSULATED WITH KAPTON TAPE, OR A SIMILAR INSULATING MATERIAL.
- 3) ZONES SHOWN ARE THE EXACT OVERLAY OF THE OPEN AREAS ON THE BUS CHASSIS *MINUS* a .030" RECOMMENDED TOLERANCE BUFFER.

| | | | |
|---|---|--|------------------------------------|
| MATERIAL: SEE NOTES | FINISH: SEE NOTES | HEAT TREAT: NONE | WEIGHT: |
|  | | 750 Naples - San Francisco - CA 94112 (415) 584-6360 ph - (415) 585-7948 fax info@pumpkininc.com | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | APPROVALS | DATE | TITLE |
| FRACTIONS DECIMALS ANGLES | DRAWN AWR | 11/07/08 | PCB, Front Panel Module, 3U |
| .X = ± .030 | CHECKED | | |
| .XX = ± .010 ± 0° 30" | QUAL ENG | | |
| .XXX = ± .005 | CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE | DO NOT SCALE DRAWING | SIZE B DWG. 705-00459 REV B0 |
| SCALE 1:1 | | SHEET 2 OF 2 | |