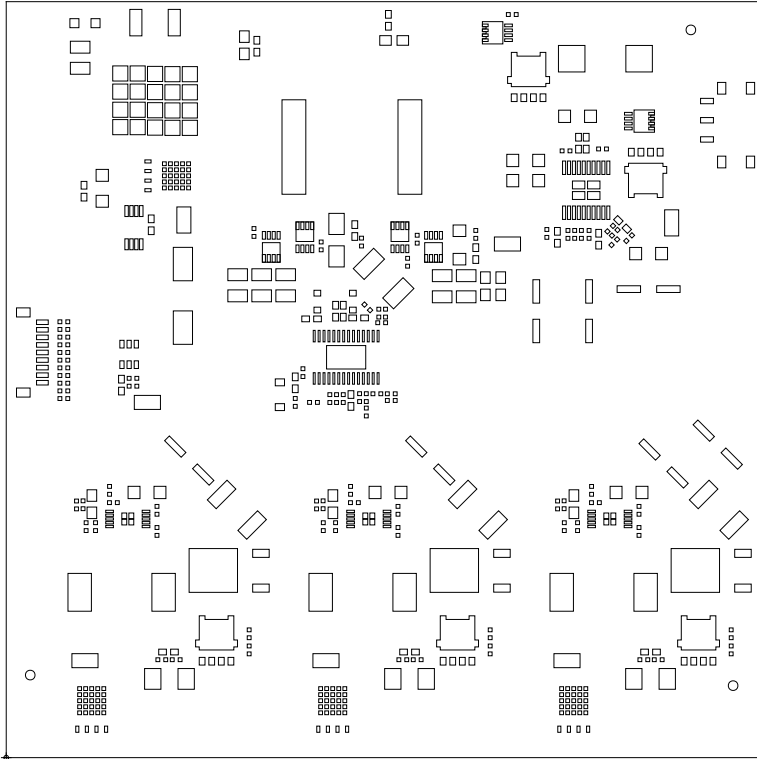
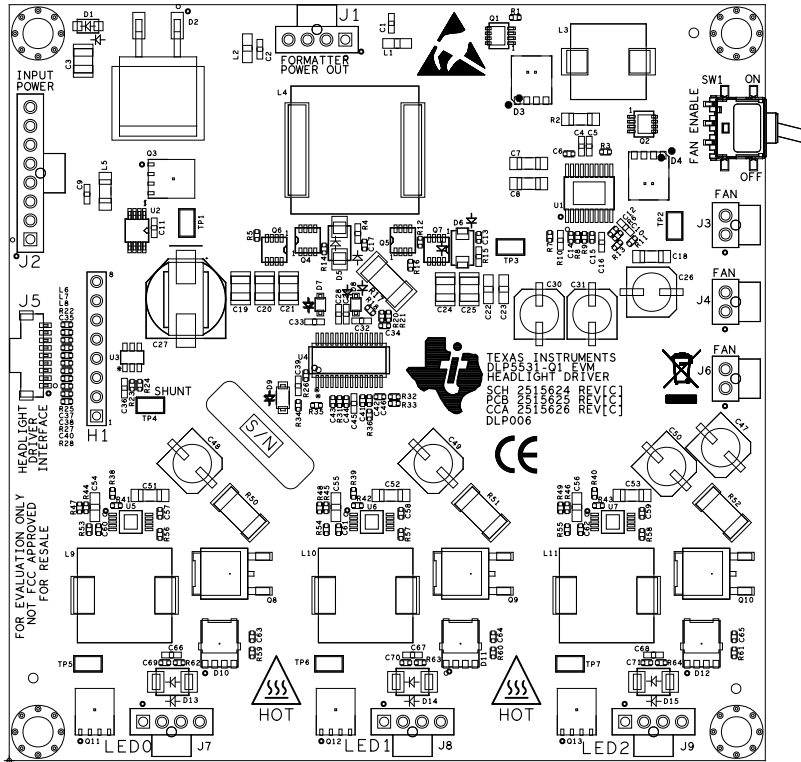


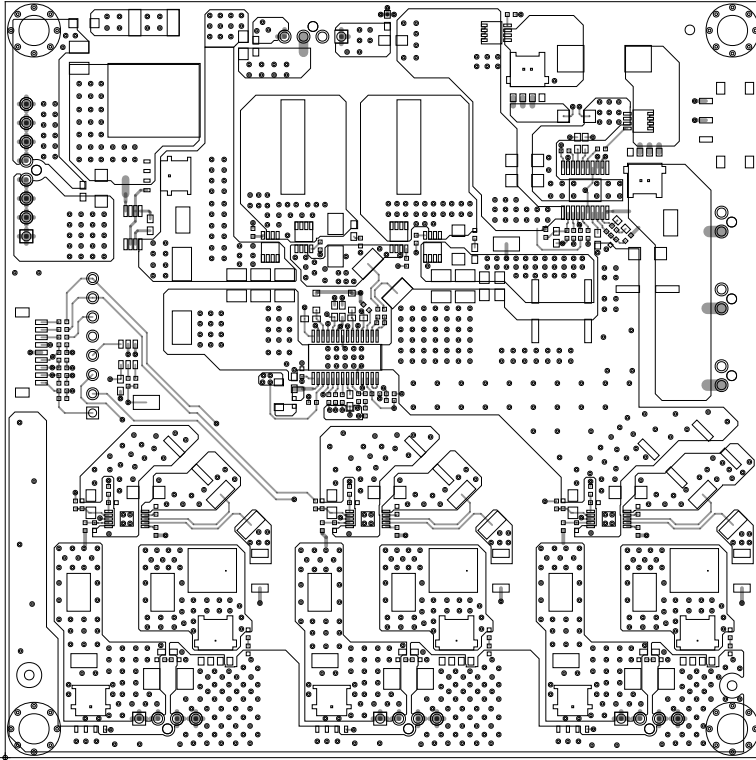
|                                 |             |                           |         |
|---------------------------------|-------------|---------------------------|---------|
| BOARD NAME                      |             | DESCRIPTION               |         |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |             | SOLDERMASK - PRIMARY SIDE |         |
|                                 | DATE        | PRJ#                      |         |
|                                 | 01 MAR 2018 |                           | 5 OF 10 |



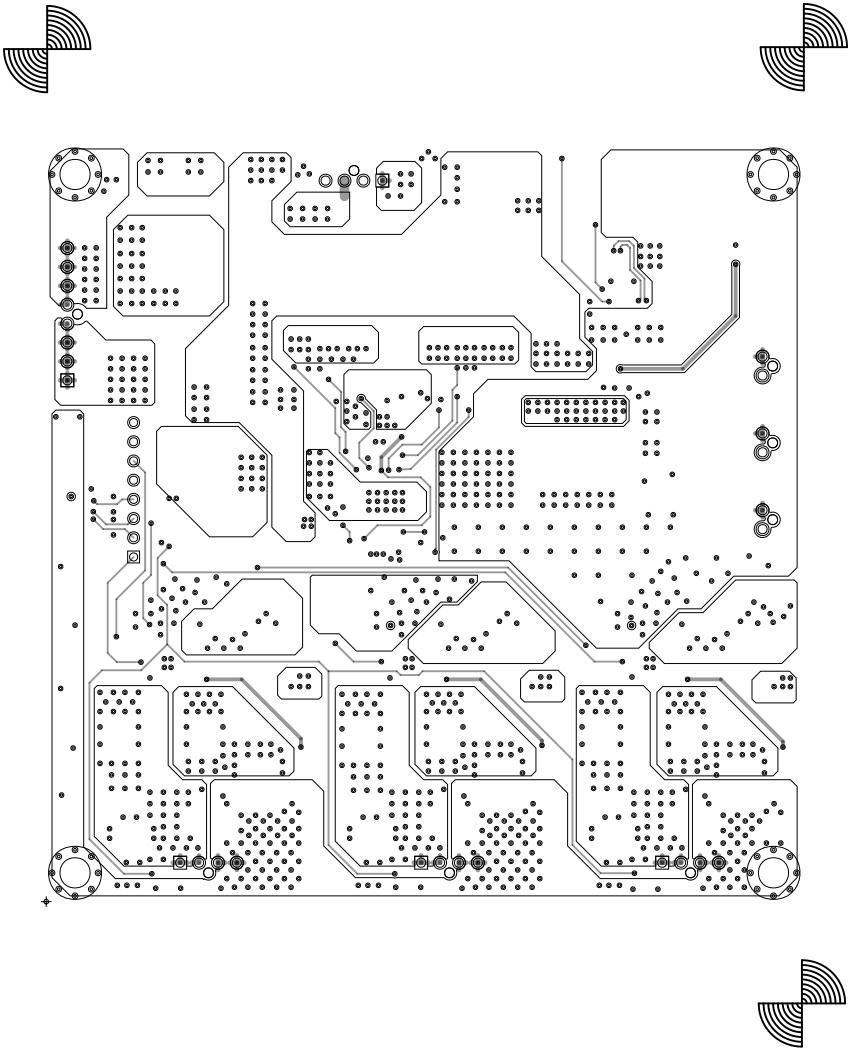
|                                 |  |  |      |                           |         |  |  |
|---------------------------------|--|--|------|---------------------------|---------|--|--|
| BOARD NAME                      |  |  |      | DESCRIPTION PASTEMASK TOP |         |  |  |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |  |  |      |                           |         |  |  |
| DATE                            |  |  | PRJ# |                           | 8 OF 10 |  |  |
| 01 MAR 2018                     |  |  |      |                           |         |  |  |



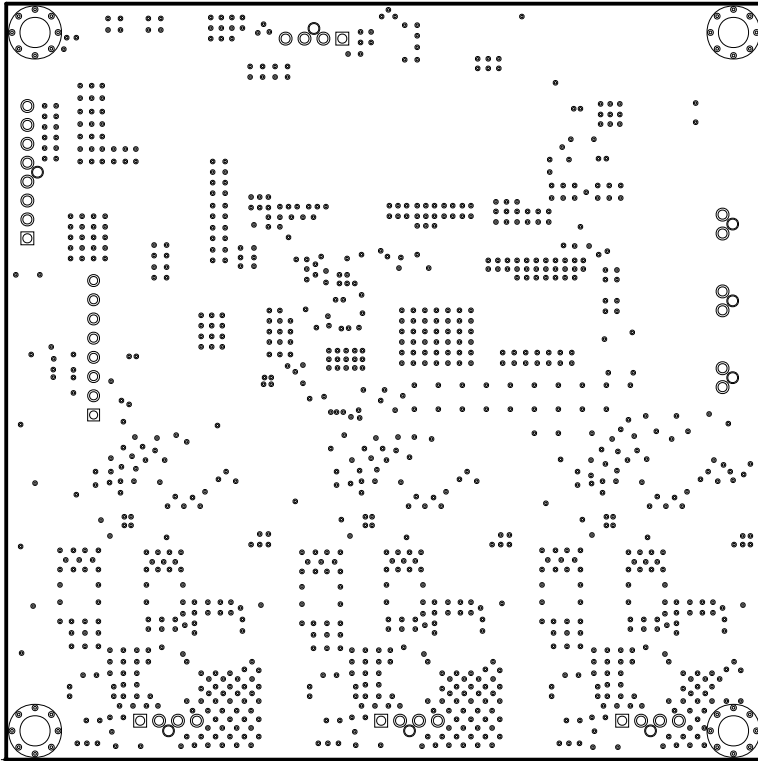
| ASSEMBLY TOP                                  |  |  |         |
|---|--|--|---------|
| BOARD NAME<br>DLP5531-Q1 EVM HEADLIGHT DRIVER |  | DESCRIPTION<br>SILKSCREEN - PRIMARY SIDE |         |
| DATE<br>01 MAR 2018                           |  | PRJ#                                     | 7 OF 10 |



|                                 |             |               |         |
|---------------------------------|-------------|---------------|---------|
| BOARD NAME                      |             | DESCRIPTION   |         |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |             | LAYER 1 - TOP |         |
|                                 | DATE        | PRJ#          |         |
|                                 | 01 MAR 2018 |               | 1 OF 10 |



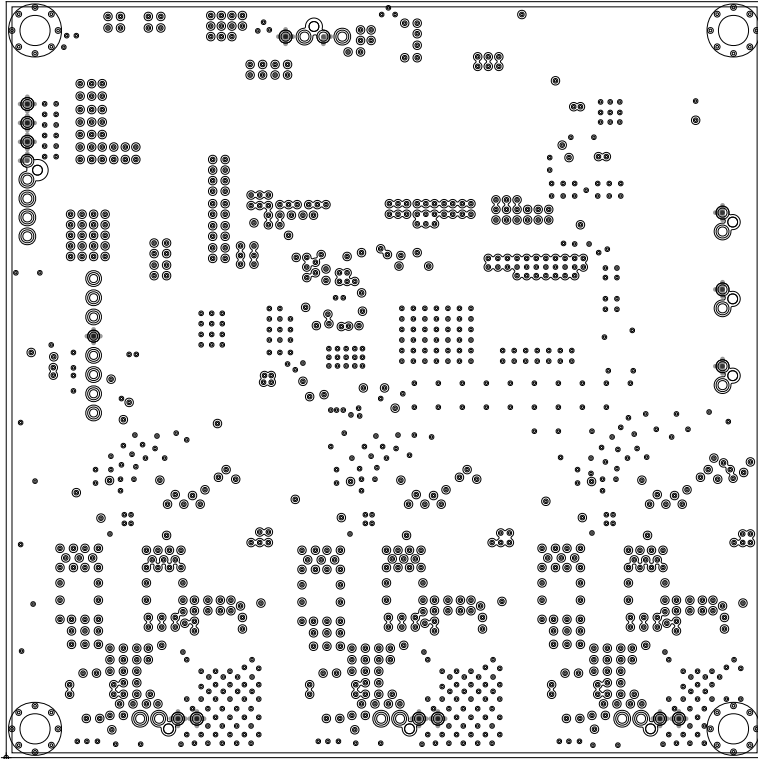
|                                 |             |                  |         |
|---------------------------------|-------------|------------------|---------|
| BOARD NAME                      |             | DESCRIPTION      |         |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |             | LAYER 4 - BOTTOM |         |
|                                 | DATE        | PRJ#             |         |
|                                 | 01 MAR 2018 |                  | 4 OF 10 |



|                                 |      |                             |  |
|---------------------------------|------|-----------------------------|--|
| BOARD NAME                      |      | DESCRIPTION                 |  |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |      | SOLDERMASK - SECONDARY SIDE |  |
| DATE                            | PRJ# | 6 OF 10                     |  |
| 01 MAR 2018                     |      |                             |  |

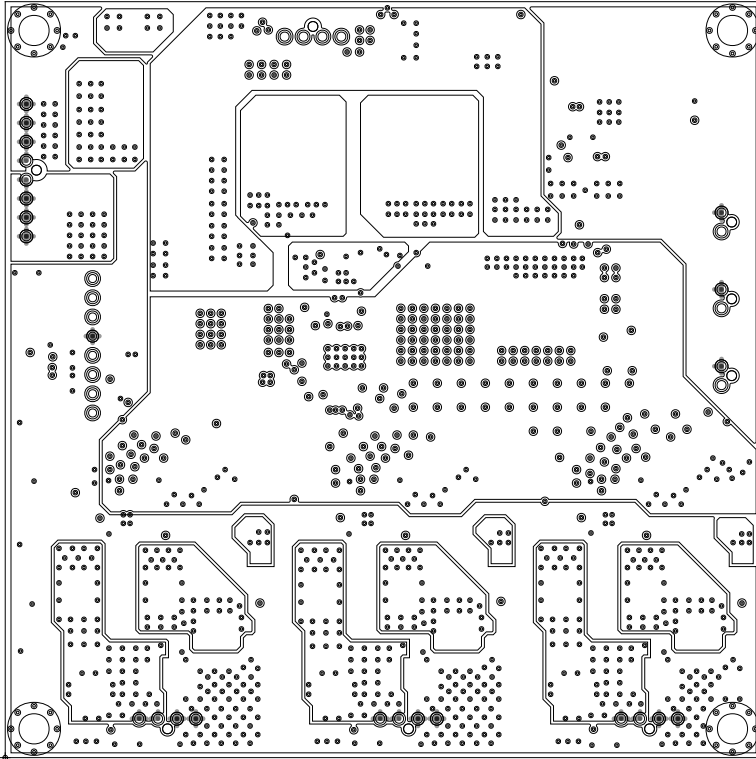


ART FILM - sst



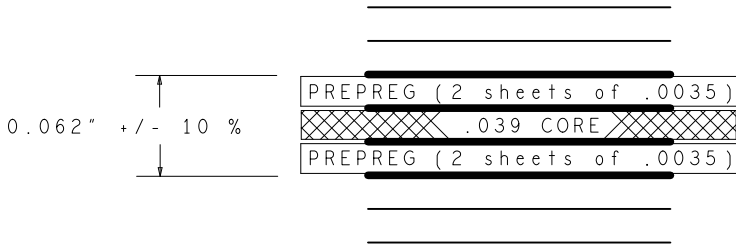
|   |                     |                           |         |
|---|---------------------|---------------------------|---------|
|   |                     |                           |         |
| BOARD NAME<br>DLP5531-Q1 EVM HEADLIGHT DRIVER |                     | DESCRIPTION LAYER 2 - GND |         |
|   | DATE<br>01 MAR 2018 | PRJ#                      | 2 OF 10 |





|                                 |             |                  |         |
|---------------------------------|-------------|------------------|---------|
| BOARD NAME                      |             | DESCRIPTION      |         |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |             | LAYER 3 - SIGNAL |         |
|                                 | DATE        | PRJ#             |         |
|                                 | 01 MAR 2018 |                  | 3 OF 10 |

LAYER STACKUP



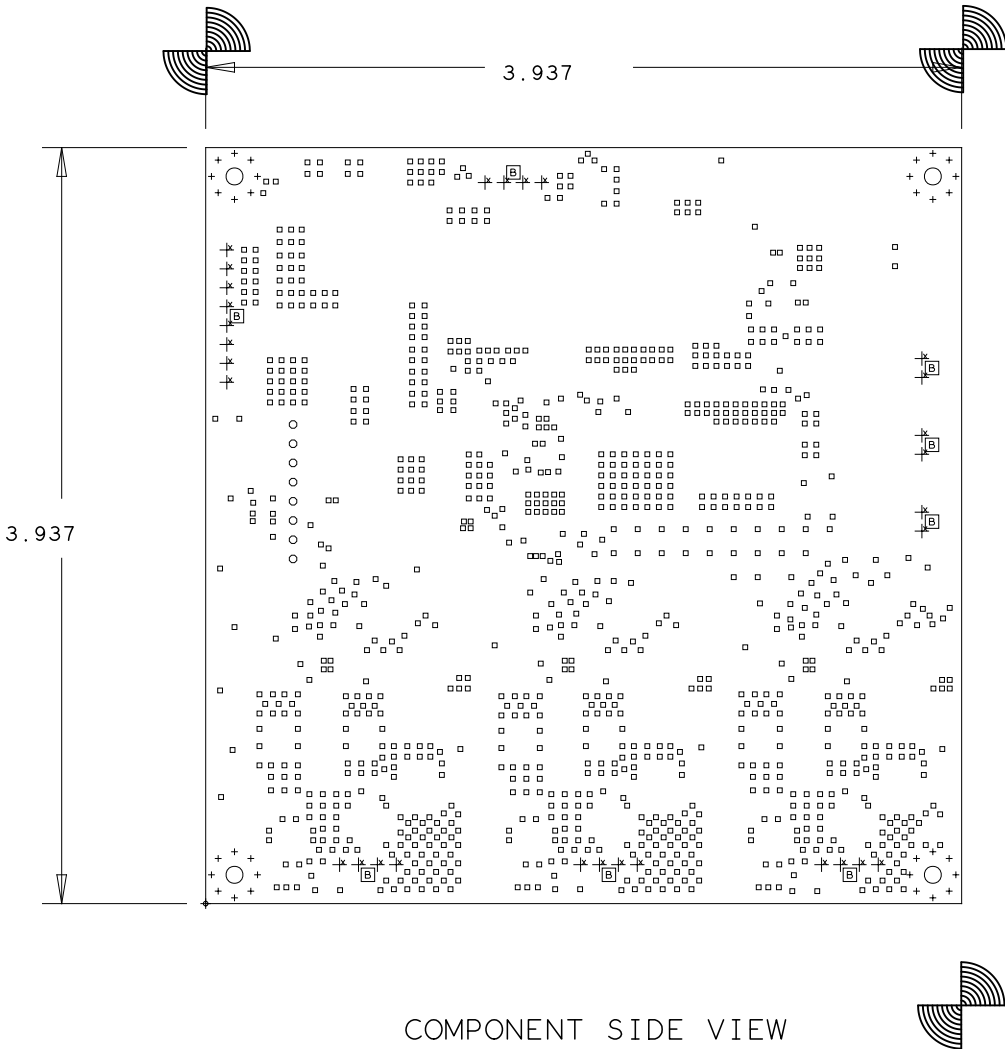
| LAYER DEFINITION          | FINISH<br>Cu WT. |
|---------------------------|------------------|
| SILKSCREEN PRIMARY SIDE   |                  |
| SOLDERMASK PRIMARY SIDE   |                  |
| LAYER 1 PRIMARY SIDE      | 2 oz             |
| LAYER 2 (GND)             | 2 oz             |
| LAYER 3 (PWR)             | 2 oz             |
| LAYER 4 SECONDARY SIDE    | 2 oz             |
| SOLDERMASK SECONDARY SIDE |                  |
| SILKSCREEN SECONDARY SIDE |                  |

FAB NOTES:

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. ALL BOARD OUTLINE DIMENSION TOLERANCES ARE +/- .010".
- THE PWB SHALL BE FABRICATED TO IPC-6012, CLASS 2 AND WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2. CURRENT REVISIONS.
- BOARD MATERIAL SHALL BE 180 Tg/340 Td ISOLA FR-370HR OR EQUIVALENT, RoHS COMPLIANT AND LEAD FREE ASSEMBLY CAPABLE. BOARD MATERIAL SHALL MEET OR EXCEED IPC-4101B. RoHS CERTIFICATE OF CONFORMANCE SHALL BE DELIVERED WITH EACH LOT.
- THE BOARD NEEDS TO BE CONSTRUCTED AND MARKED WITH UL94V-0 FLAME-RETARDANT MATERIAL.
- MINIMUM COPPER WALL THICKNESS OF PLATED-THRU HOLES TO BE .001 INCH, WITH A MINIMUM ANNULAR RING OF .001 INCH.
- OVERALL BOARD THICKNESS TO BE .062 +/- 10% AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
- MAX. WARP & TWIST TO BE .0075 INCHES PER INCH.
- BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-D-356 NETLIST.

PROCESS NOTES:

- PLATE ALL EXPOSED AREAS WITH ELECTROLESS IMMERSION GOLD, NICKEL 100 MIN MICROINCHES THK GOLD 2-6 MICROINCHES THK.
- APPLY LPI SOLDERMASK OVER BARE COPPER (SMOBC), COLOR: RED. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H. CURRENT REV. VIAS ARE TENTED OVER ON TOP SIDE ONLY (DESIGN INTENT).
- FABRICATION VENDOR IS ALLOWED TO INCREASE SOLDERMASK COMPONENT PADS BY A MAXIMUM 1 MIL ON EACH SIDE OVER THE COPPER PAD IN ORDER TO MEET TOOLING REQUIREMENTS WHILE MAINTAINING WEBBING BETWEEN ADJACENT PADS.
- APPLY LPI SILKSCREEN OR EQUIVALENT PER THE ARTWORK. TOP SIDE ONLY, COLOR: WHITE.



DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILS

| FIGURE | SIZE(Finished) | TOLERANCE   | PLATING    | QTY  |
|--------|----------------|-------------|------------|------|
|        | 12.0           | +0.0/-12.0  | PLATED     | 1064 |
|        | 14.0           | +3.0/-3.0   | PLATED     | 32   |
|        | 42.0           | +3.0/-3.0   | PLATED     | 8    |
|        | 47.24          | +1.97/-1.97 | PLATED     | 30   |
|        | 157.0          | +3.0/-3.0   | PLATED     | 4    |
|        | 51.18          | +1.97/-1.97 | NON-PLATED | 8    |

COMPONENT SIDE VIEW

|                                 |  |      |  |                     |  |  |  |
|---------------------------------|--|------|--|---------------------|--|--|--|
| BOARD NAME                      |  |      |  | DESCRIPTION         |  |  |  |
| DLP5531-Q1 EVM HEADLIGHT DRIVER |  |      |  | FABRICATION DRAWING |  |  |  |
| DATE                            |  | PRJ# |  | 10 OF 10            |  |  |  |
| 01 MAR 2018                     |  |      |  |                     |  |  |  |