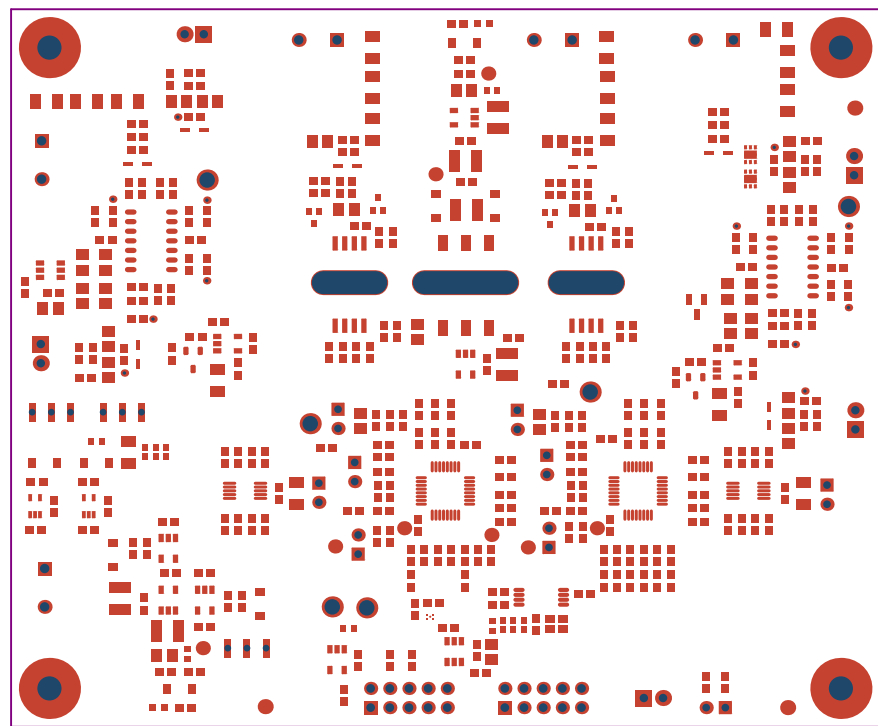
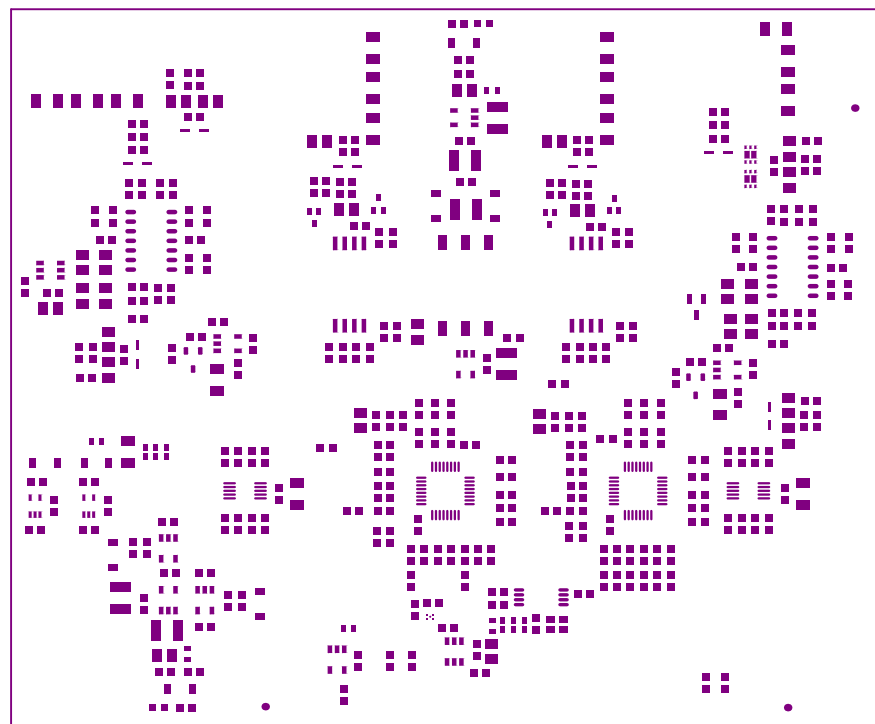


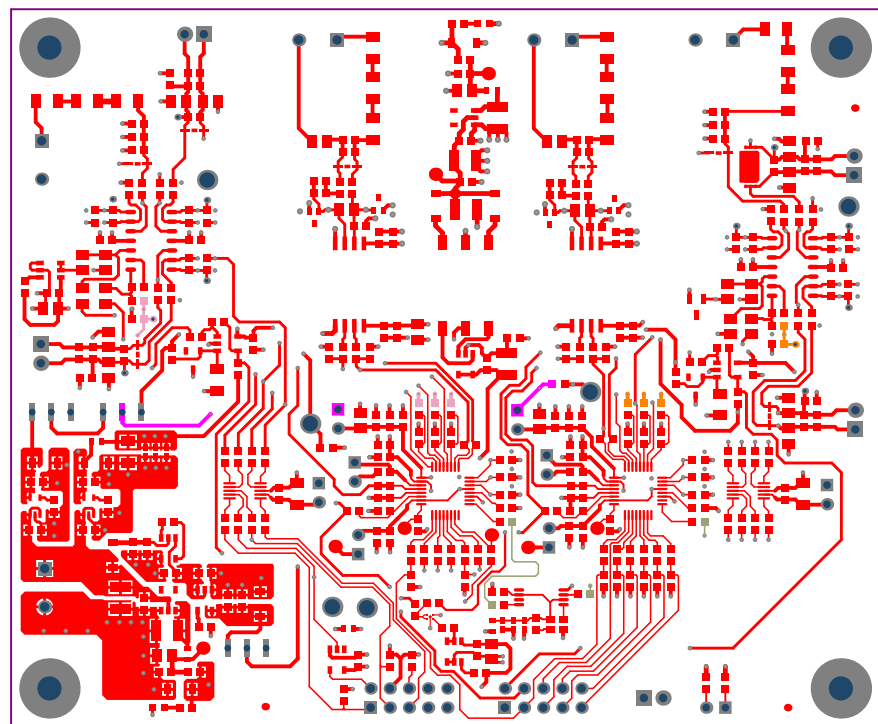
|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: TIDA-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Top Overlay         | TID #: 00835                     |                   |                                |
| PLOT NAME = Top Overlay          | GENERATED : 7/24/2018 3:27:09 PM | TEXAS INSTRUMENTS |                                |



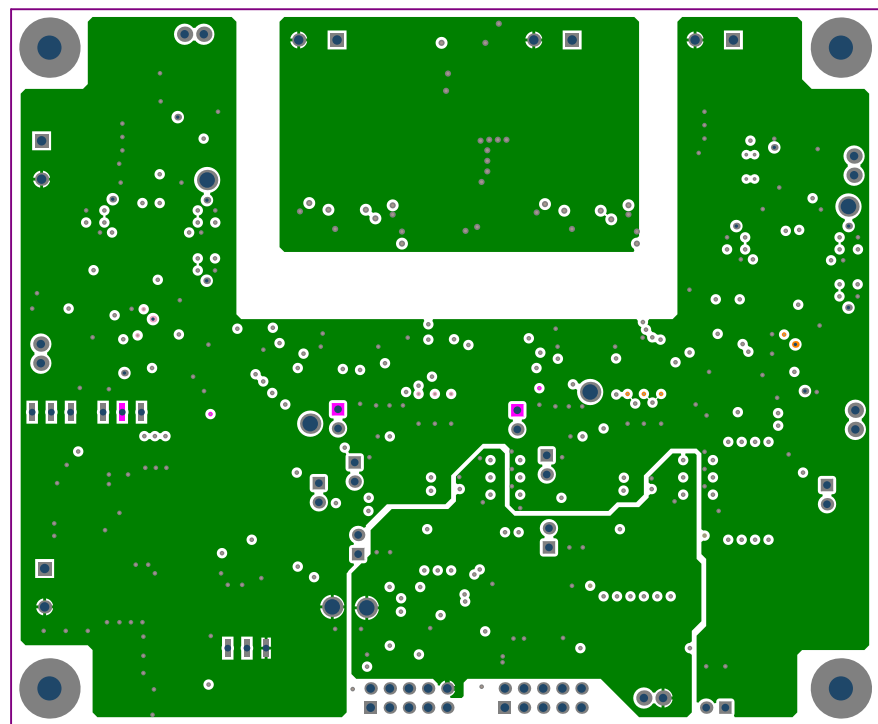
|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Top Solder          | TID #: 00835                     |                   |                                |
| PLOT NAME = Top Solder Mask      | GENERATED : 7/24/2018 3:27:10 PM | TEXAS INSTRUMENTS |                                |



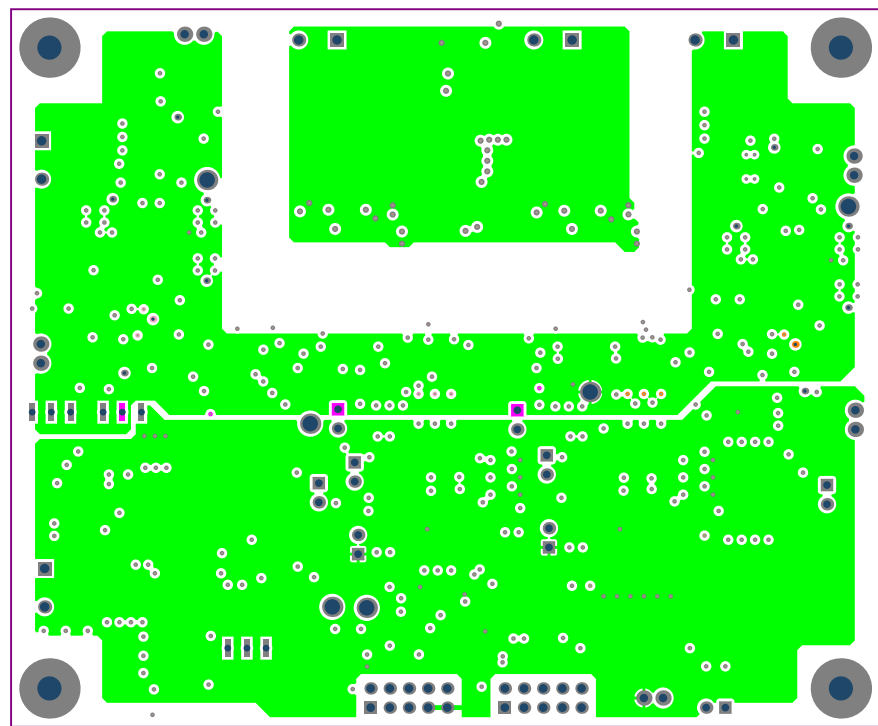
|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Top Paste           | TID #: 00835                     |                   |                                |
| PLOT NAME = Top Paste            | GENERATED : 7/24/2018 3:27:10 PM | TEXAS INSTRUMENTS |                                |



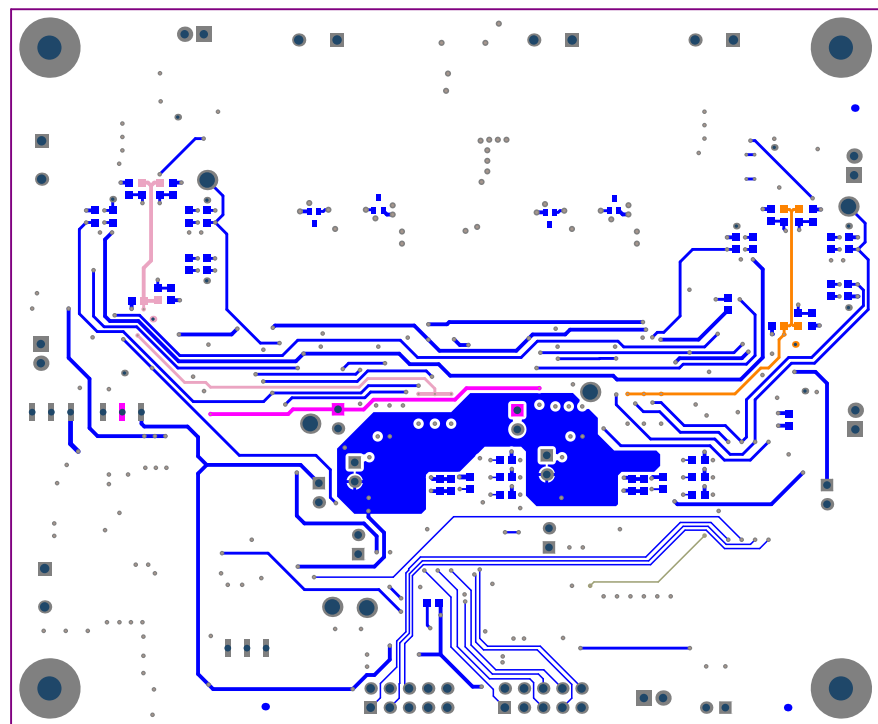
|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Top Layer           | TID #: 00835                     |                   |                                |
| PLOT NAME = Top Layer            | GENERATED : 7/24/2018 3:27:10 PM | TEXAS INSTRUMENTS |                                |



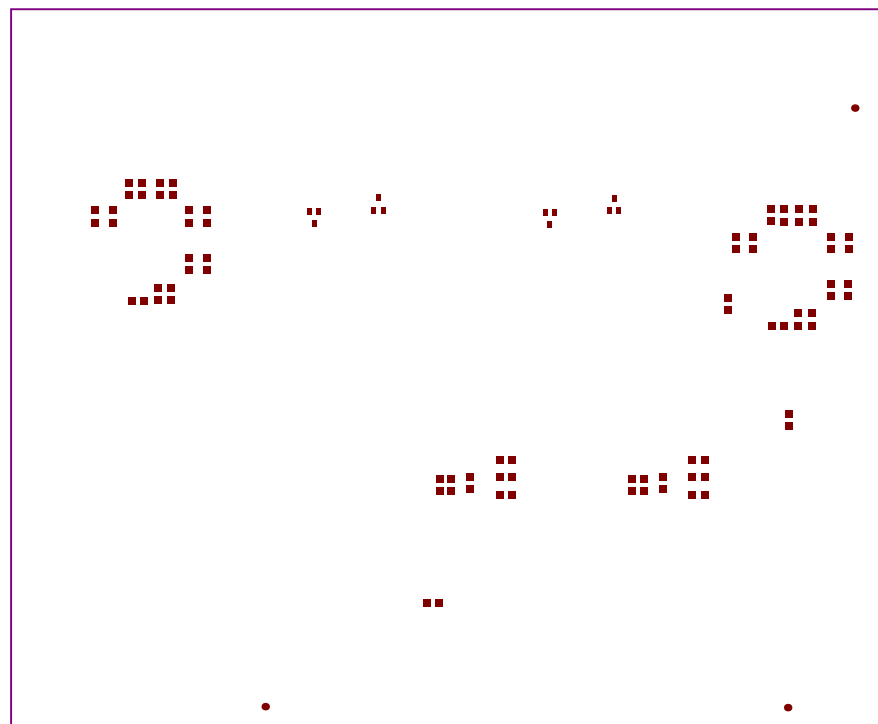
|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = GND                 | TID #: 00835                     |                   |                                |
| PLOT NAME = Signal Layer 1       | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |



|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = PWR                 | TID #: 00835                     |                   |                                |
| PLOT NAME = Signal Layer 2       | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |

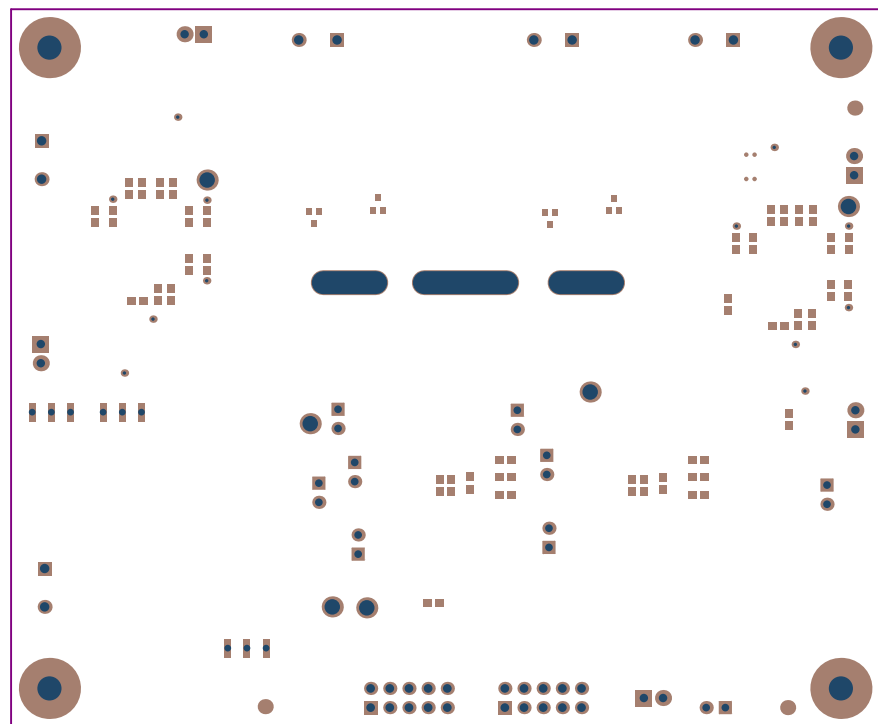


|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Bottom Layer        | TID #: 00835                     |                   |                                |
| PLOT NAME = Bottom Layer         | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |



|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Bottom Paste        | TID #: 00835                     |                   |                                |
| PLOT NAME = Bottom Paste         | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |





|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Bottom Solder       | TID #: 00835                     |                   |                                |
| PLOT NAME = Bottom Solder Mask   | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |



|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Bottom Overlay      | TID #: 00835                     |                   |                                |
| PLOT NAME = Bottom Overlay       | GENERATED : 7/24/2018 3:27:11 PM | TEXAS INSTRUMENTS |                                |

| Layer Name         | Dielectric Material | Copper Thickness | Dielectric Material |
|--------------------|---------------------|------------------|---------------------|
| Top Solder Mask    | (.GTS)              |                  | Solder Resist       |
| Top Layer          | (.GTL)              | 1.4mil           | FR4-High Tg         |
| GND                | (.G1)               | 1.4mil           | FR4-High Tg         |
| PuR                | (.G2)               | 1.4mil           | FR4-High Tg         |
| Bottom Layer       | (.GBL)              | 1.4mil           | FR4-High Tg         |
| Bottom Solder Mask | (.GBS)              |                  | Solder Resist       |

**DESIGN INFORMATION**

BOARD SIZE (REFER ALSO ARRAY/PANEL PROFILING INFORMATION)  
115 MM X 95 MM

Number of Layers : 4  
 MIN. TRACK WIDTH: 6 MIL  
 MIN. CLEARANCE: 6 MIL  
 MIN. VIA DRILL SIZE: 12 MIL

MINIMUM ANNULAR RING 6 MIL ( 0.1524 mm) EXTERNAL  
 PER IPC-D-275 CLASS 2 LEVEL C  
 REGISTRATION TOLERANCES: METAL +/- 5 MIL, HOLES +/- 3 MIL

**MATERIAL:**  
 FR-408  FR-4 High Tg  OTHER \_\_\_\_\_  
 THICKNESS:  63 MIL (1.6mm) +/-10%  OTHER \_\_\_\_\_  
 TOLERANCE:  ANSI IPC-6012 TYPE 3 CLASS 2  
 OTHER +/- \_\_\_\_\_  
 BOW & TWIST:  ANSI IPC-6012 TYPE 3 CLASS 2  
 OTHER +/- \_\_\_\_\_

**COPPER THICKNESS (FINISHED):**  
 OUTER:  1.4MIL (1oz)  2MIL (1.4oz)  2.8MIL (2oz)  
 INNER SIGNAL:  1.4MIL (1oz)  2.8MIL (2oz)  N/A

**DRILLING:**  
 REFERENCE:  AS SHOWN  NC\_DRILL FILES  
 PTH MIN COPPER THICKNESS:  1MIL  OTHER \_\_\_\_\_

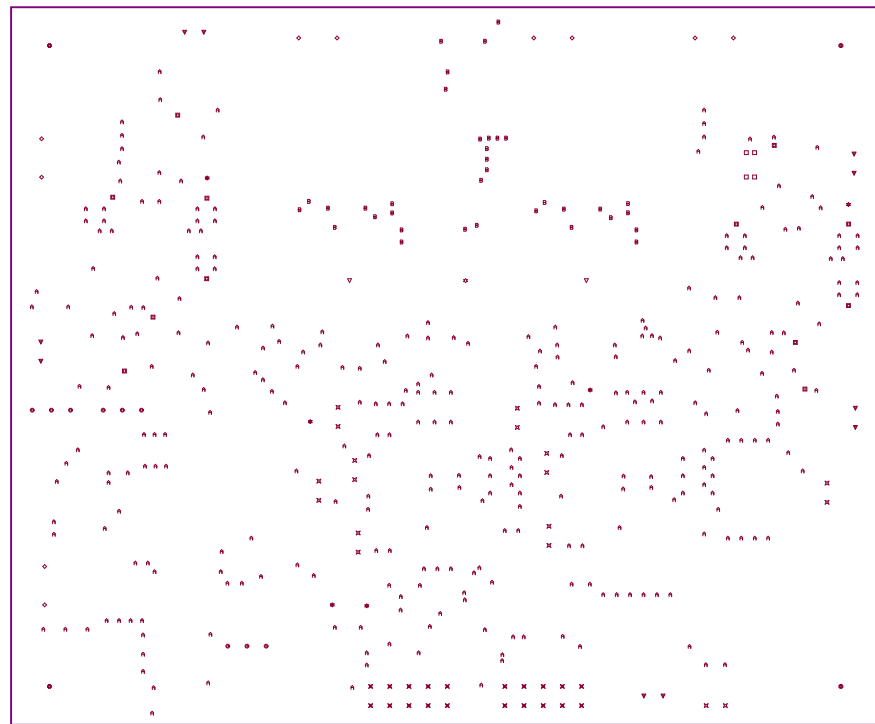
**BOARD FINISH:**  
 SILKSCREEN:  TOP  BOTTOM  
 SILKSCREEN COLOR:  WHITE  OTHER \_\_\_\_\_  
 SOLDER RESIST COLOR:  
 GREEN  BLUE  OTHER \_\_\_\_\_

**SURFACE FINISH:**  IMMERSION GOLD (ENG)  ENIG  
 IMM. TIN/SILVER OR EQUIV  OTHER \_\_\_\_\_

**ARRAY/PANEL:**  CUT AND TRIM PER MECH LAYER 1  
 N.C. ROUTE  V. SCORE

**CERTIFICATION:** MATERIALS AND WORKMANSHIP FOR ALL PCBs TO MEET OR EXCEED THE REQUIREMENTS OF:  
 ANSI IPC-A-600F CLASS ->  1  2  3  
 UL 94V-0  RoHS  OTHER PER ORDER

**ADDITIONAL REQUIREMENTS:** VIA TENTING: YES  NO   
 MICROSECTION:  YES IMPEDANCE CONTROL: YES  NO   
 BARE BOARD ELEC. TEST:  NONE  REQUIRED  PER ORDER  
 MANUFACTURER'S UL:  RAIL  METAL  SILK



**Drill Table**

| Symbol | Quantity         | Finished Hole Size  | Plated | Hole Type | Drill Layer Pair         | Hole Length          | Routed Path Length   |
|--------|------------------|---------------------|--------|-----------|--------------------------|----------------------|----------------------|
| □      | 4                | 7.87mil (0.200mm)   | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| △      | 307              | 12.00mil (0.305mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| □      | 35               | 16.00mil (0.406mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| △      | 12               | 17.72mil (0.450mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ○      | 9                | 35.04mil (0.890mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ×      | 18               | 40.00mil (1.016mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ▽      | 10               | 44.00mil (1.118mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ×      | 20               | 45.28mil (1.150mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ◇      | 10               | 49.21mil (1.250mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ☆      | 6                | 80.71mil (2.050mm)  | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ⊗      | 4                | 125.98mil (3.200mm) | PTH    | Round     | Top Layer - Bottom Layer | -                    | -                    |
| ▽      | 2                | 120.00mil (3.048mm) | NPTH   | Slot      | Top Layer - Bottom Layer | 394.00mil (10.008mm) | 274.00mil (6.960mm)  |
| ☆      | 1                | 120.00mil (3.048mm) | NPTH   | Slot      | Top Layer - Bottom Layer | 550.00mil (13.970mm) | 430.00mil (10.922mm) |
|        | <b>438 Total</b> |                     |        |           |                          |                      |                      |

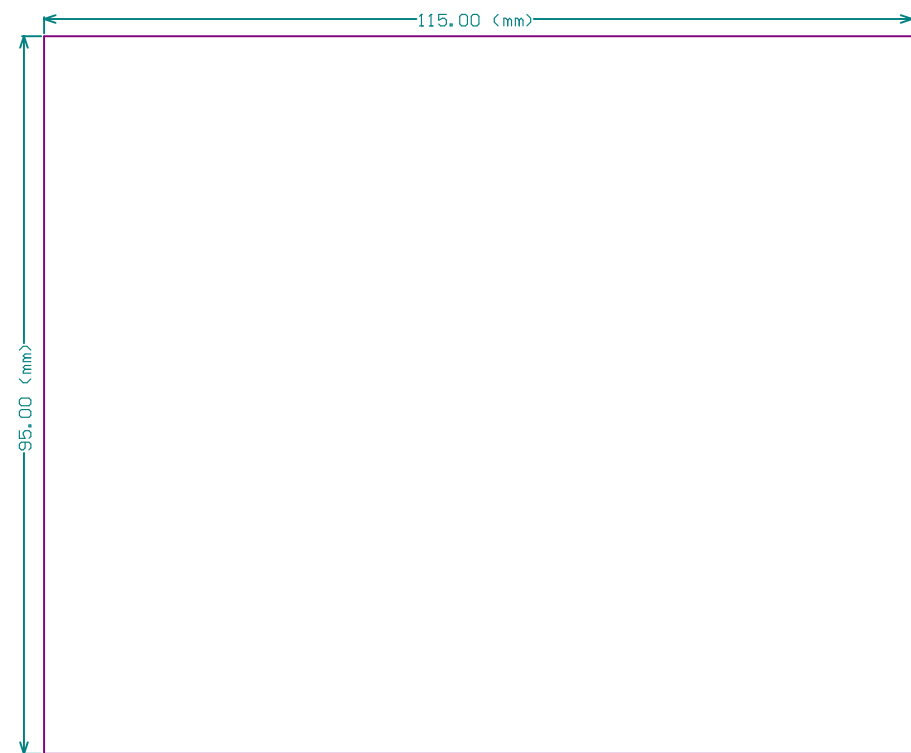
Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.  
 Hole Length = Routed Path Length + Tool Size + Slot length as defined in the PCB layout

FOR 12MIL DRILL +0/-12MIL  
 FOR PTH DRILL +/-3MIL  
 FOR NPTH DRILL +/-2MIL  
 FOR 16MIL DRILL +0/-16MIL

|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: TIDA-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME = Drill Drawing       | TID #: 00835                     |                   |                                |
| PLOT NAME = Drill Drawing        | GENERATED : 7/24/2018 3:27:12 PM | TEXAS INSTRUMENTS |                                |

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|                                    |                                       |
|------------------------------------|---------------------------------------|
| PROJECT TITLE:<br>ADS131 A04_AFE   |                                       |
| DESIGNED FOR:<br>Public Release    |                                       |
| FILE NAME:<br>TIDA-00835-E2.PcbDoc |                                       |
| ENGINEER:<br>Sreenivasa            | LAYOUT BY:<br>Avinash N               |
| SCALE: 1.00                        | ALTIM DESIGNER VERSION:<br>16.1.9.221 |



|                                  |                                  |                   |                                |
|----------------------------------|----------------------------------|-------------------|--------------------------------|
| ALL ARTWORK VIEWED FROM TOP SIDE | BOARD #: T10A-00835              | REV: E2           | SUN REV: Not In VersionControl |
| LAYER NAME =                     | TID #: 00835                     |                   |                                |
| PLOT NAME = Board Dimensions     | GENERATED : 7/24/2018 3:27:13 PM | TEXAS INSTRUMENTS |                                |

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