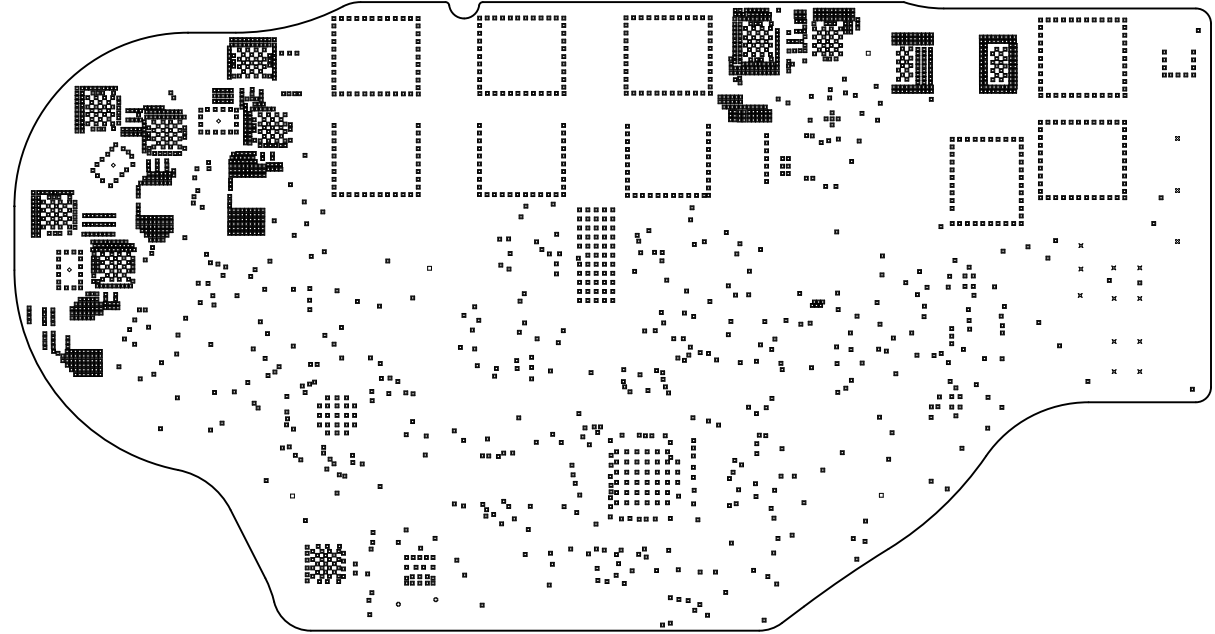



|   | 1   | 2                 | 3                               | 4        | 5 | 6   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|---|---|-------------------|---------------------------------|----------|---|---|-------|------|----------|-----------|----------|--|-------------|--|--|--|--|------------|---------------|---------|-----|---|-----------|--------|---------|--|--|--------------|--------|---------|-----|---|-----|--------|---------|--|--|--------------|--------|---------|-----|---|-------|--------|---------|--|--|-------------|--------------|---------|-----|---|------|--------|---------|--|--|--------------|--------|---------|-----|---|-----|--------|---------|--|--|--------------|--------|---------|-----|---|--------------|--------|---------|--|--|---------------|---------------|---------|-----|--|----------------|--|--|--|--------------------|--|--|--|-------------------|---|-----|--|-----------------|-------|-----|--|--------------------|----|-----|--|---------------------|---------------|----------|--|-----|--------------------------|--|--|--------------------------|-----------------------|-----------|--|---|--|-----------|--|-----------|--|-------------------------------|--|--------------------------------|--|------------|--|---|--------------------------------|------------|--|--|------------------------------------|--------------|--|--|------------------------------------|-----------|--|---|--|--|--------------------------------|---------------|--|---|--|---|--------------------------------|--|--------------------------------|--------------------------------|------------------------------------|-----------------|--|---|----------------------------------|--|--------------------------------|--------------|--|--|--|-------------------------------------|--|----------------|--|---|--|---|---|--|--|--------------------------|--|---------------|------------------------------|------------------------|---|--|--|---|--|--|--|---|--|----------------|--|-------------|--|---------------|--|----------------|--|------------|--|--------------------|--|-----------|--|------------|--|------------|--|------------|--|-------------|--|-----------|--|----------------------------------|----------------------|-----------|---------------------------------|----------------------------------|-------------------|--|--|---------------------------------|-----------------------------------|-------------------|--|---|---|---|---|---|---|---|--|--|--|--|--|---|
| A   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| B   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| C   | <div></div>                |                   |                                 |          |   | <div><table border="1"><thead><tr><th>Layer</th><th>Name</th><th>Material</th><th>Thickness</th><th>Constant</th></tr></thead><tbody><tr><td></td><td>Top Overlay</td><td></td><td></td><td></td></tr><tr><td></td><td>Top Solder</td><td>Solder Resist</td><td>0.010mm</td><td>3.5</td></tr><tr><td>1</td><td>Top Layer</td><td>PP-004</td><td>0.035mm</td><td></td></tr><tr><td></td><td>Dielectric 1</td><td>CF-004</td><td>0.020mm</td><td>4.1</td></tr><tr><td>2</td><td>GND</td><td>CF-004</td><td>0.016mm</td><td></td></tr><tr><td></td><td>Dielectric 3</td><td>PP-004</td><td>0.290mm</td><td>4.1</td></tr><tr><td>3</td><td>Power</td><td>CF-004</td><td>0.016mm</td><td></td></tr><tr><td></td><td>Dielectric1</td><td>FR-4 High Tg</td><td>0.290mm</td><td>4.8</td></tr><tr><td>4</td><td>Sig4</td><td>CF-004</td><td>0.016mm</td><td></td></tr><tr><td></td><td>Dielectric 4</td><td>PP-004</td><td>0.290mm</td><td>4.1</td></tr><tr><td>5</td><td>GND</td><td>CF-004</td><td>0.016mm</td><td></td></tr><tr><td></td><td>Dielectric 2</td><td>PP-004</td><td>0.290mm</td><td>4.1</td></tr><tr><td>6</td><td>Bottom Layer</td><td>PP-004</td><td>0.035mm</td><td></td></tr><tr><td></td><td>Bottom Solder</td><td>Solder Resist</td><td>0.010mm</td><td>3.5</td></tr><tr><td></td><td>Bottom Overlay</td><td></td><td></td><td></td></tr></tbody></table><table><thead><tr><th colspan="4">DESIGN INFORMATION</th></tr></thead><tbody><tr><td>MIN. 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TEST:</td><td><input type="checkbox"/> NONE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> PER ORDER</td></tr><tr><td><input type="checkbox"/> XX MIL VIAS REQUIRE NON-CONDUCTIVE FILL AND PLANARIZE</td><td></td></tr><tr><td><input type="checkbox"/> XX MIL VIAS REQUIRE CONDUCTIVE FLL AND PLANARIZE</td><td></td></tr><tr><td><input type="checkbox"/> OUTER XX MIL TRACES REQUIRE 50 OHM SINGLE-ENDED IMPEDANCE</td><td></td></tr><tr><td><input type="checkbox"/> LAYER 2 &amp; 3 (INNER LAYERS) XX MIL WIDE, XX MIL SPACE TRACES REQUIRE 100 OHM DIFFERENTIAL IMPEDANCE</td><td></td></tr></tbody></table><div><p>TEXAS<br/>INSTRUMENTS</p></div><table><thead><tr><th colspan="2">PROJECT TITLE:</th></tr></thead><tbody><tr><td colspan="2">TIDA-020106</td></tr></tbody><thead><tr><th colspan="2">DESIGNED FOR:</th></tr></thead><tbody><tr><td colspan="2">Public Release</td></tr></tbody><thead><tr><th colspan="2">FILE NAME:</th></tr></thead><tbody><tr><td colspan="2">TIDA-020106.PcbDoc</td></tr></tbody></table><table><thead><tr><th colspan="2">ENGINEER:</th></tr></thead><tbody><tr><td colspan="2">Hely Zhang</td></tr></tbody><thead><tr><th colspan="2">LAYOUT BY:</th></tr></thead><tbody><tr><td colspan="2">Hely Zhang</td></tr></tbody><thead><tr><th colspan="2">SCALE: 1.00</th></tr></thead><tbody><tr><td colspan="2">23.1.1.15</td></tr></tbody></table></div> <div><table><tr><td>ALL artwork VIEWED FROM TOP SIDE</td><td>BOARD #: TIDA-020106</td><td>REV# VerA</td><td>SUN REV# Not in version control</td></tr><tr><td>LAYER NAME = Fabrication Drawing</td><td>TID # TIDA-020106</td><td colspan="2"></td></tr><tr><td>PLOT NAME = Fabrication Drawing</td><td>GENERATED : 5/17/2026 10:02:24 AM</td><td colspan="2">TEXAS INSTRUMENTS</td></tr></table><p>Texas Instruments (TI) and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. TI and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. TI and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.</p></div> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>D</td><td colspan="5"></td><td>D</td></tr> | Layer | Name | Material | Thickness | Constant |  | Top Overlay |  |  |  |  | Top Solder | Solder Resist | 0.010mm | 3.5 | 1 | Top Layer | PP-004 | 0.035mm |  |  | Dielectric 1 | CF-004 | 0.020mm | 4.1 | 2 | GND | CF-004 | 0.016mm |  |  | Dielectric 3 | PP-004 | 0.290mm | 4.1 | 3 | Power | CF-004 | 0.016mm |  |  | Dielectric1 | FR-4 High Tg | 0.290mm | 4.8 | 4 | Sig4 | CF-004 | 0.016mm |  |  | Dielectric 4 | PP-004 | 0.290mm | 4.1 | 5 | GND | CF-004 | 0.016mm |  |  | Dielectric 2 | PP-004 | 0.290mm | 4.1 | 6 | Bottom Layer | PP-004 | 0.035mm |  |  | Bottom Solder | Solder Resist | 0.010mm | 3.5 |  | Bottom Overlay |  |  |  | DESIGN INFORMATION |  |  |  | MIN. TRACK WIDTH: | 8 | MIL |  | MIN. CLEARANCE: | 7.874 | MIL |  | MIN. 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| Layer   | Name  | Material          | Thickness                       | Constant |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Top Overlay   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Top Solder  | Solder Resist     | 0.010mm                         | 3.5      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 1   | Top Layer   | PP-004            | 0.035mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Dielectric 1  | CF-004            | 0.020mm                         | 4.1      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 2   | GND   | CF-004            | 0.016mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Dielectric 3  | PP-004            | 0.290mm                         | 4.1      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 3   | Power   | CF-004            | 0.016mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Dielectric1   | FR-4 High Tg      | 0.290mm                         | 4.8      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 4   | Sig4  | CF-004            | 0.016mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Dielectric 4  | PP-004            | 0.290mm                         | 4.1      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 5   | GND   | CF-004            | 0.016mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Dielectric 2  | PP-004            | 0.290mm                         | 4.1      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 6   | Bottom Layer  | PP-004            | 0.035mm                         |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Bottom Solder   | Solder Resist     | 0.010mm                         | 3.5      |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
|   | Bottom Overlay  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| DESIGN INFORMATION  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MIN. TRACK WIDTH:   | 8   | MIL               |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MIN. CLEARANCE:   | 7.874   | MIL               |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MIN. VIA PAD SIZE:  | 24  | MIL               |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MINIMUM ANNUAL RING   | 0.05mm (2MIL)   | EXTERNAL          |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| PER   | PC-D-275 CLASS 2 LEVEL C  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| REGISTRATION TOLERANCES:  | METAL +/- 5 MIL HOLES   | +/- 3 MIL         |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| HOLE SIZE TOLERANCE (UNLESS OTHERWISE SPECIFIED):   |   | +/- 3 MIL         |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MATERIAL:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> FR-4   | <input checked="" type="checkbox"/> FR-4 High Tg  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> OTHER  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| THICKNESS:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> 62 MIL (1.6mm) +/-10%   | <input type="checkbox"/> OTHER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| TOLERANCE:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> ANSI IPC-6012 TYPE 3 CLASS 2  | <input type="checkbox"/> OTHER +/-  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| BOW & TWIST:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> ANSI IPC-6012 TYPE 3 CLASS 2  | <input type="checkbox"/> OTHER +/-  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| DRILLING:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| REFERENCE: <input checked="" type="checkbox"/> AS SHOWN   | <input checked="" type="checkbox"/> NO DRILL FILES  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| PTH COPPER THICKNESS: <input checked="" type="checkbox"/> 20-30 um  | <input type="checkbox"/> OTHER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| BOARD FINISH:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| SILKSCREEN: <input checked="" type="checkbox"/> TOP   | <input checked="" type="checkbox"/> BOTTOM  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| SILKSCREEN COLOR: <input checked="" type="checkbox"/> WHITE   | <input type="checkbox"/> OTHER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| SOLDER RESIST COLOR: <input checked="" type="checkbox"/> GREEN  | <input type="checkbox"/> OTHER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> MATTE  | <input type="checkbox"/> SEM-GLOSS  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| SURFACE FINISH:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> IMMERSION GOLD (ENIG)   | <input type="checkbox"/> ENERPIC  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> MIN. TH/SILVER OR EQUIV  | <input type="checkbox"/> OTHER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| ARRAY/PANEL:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> CUT AND TRIM PER M1 BOARD OUTLINE  | <input checked="" type="checkbox"/> V. SCORE  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> N.C. ROUTE   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| CERTIFICATION:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MATERIALS AND WORKMANSHIP FOR ALL PCBs TO MEET OR EXCEED THE REQUIREMENTS OF:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> ANSI IPC-A-600F CLASS -->   | <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3                   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input checked="" type="checkbox"/> RoHS  | <input type="checkbox"/> OTHER PER ORDER  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| ADDITIONAL REQUIREMENTS:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| MICROSECTION:   | <input type="checkbox"/> YES  |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| BARE BOARD ELEC. TEST:  | <input type="checkbox"/> NONE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> PER ORDER |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> XX MIL VIAS REQUIRE NON-CONDUCTIVE FILL AND PLANARIZE  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> XX MIL VIAS REQUIRE CONDUCTIVE FLL AND PLANARIZE   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> OUTER XX MIL TRACES REQUIRE 50 OHM SINGLE-ENDED IMPEDANCE  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| <input type="checkbox"/> LAYER 2 & 3 (INNER LAYERS) XX MIL WIDE, XX MIL SPACE TRACES REQUIRE 100 OHM DIFFERENTIAL IMPEDANCE |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| PROJECT TITLE:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| TIDA-020106   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| DESIGNED FOR:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| Public Release  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| FILE NAME:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| TIDA-020106.PcbDoc  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| ENGINEER:   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| Hely Zhang  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| LAYOUT BY:  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| Hely Zhang  |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| SCALE: 1.00   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 23.1.1.15   |   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| ALL artwork VIEWED FROM TOP SIDE  | BOARD #: TIDA-020106  | REV# VerA         | SUN REV# Not in version control |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| LAYER NAME = Fabrication Drawing  | TID # TIDA-020106   |                   |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| PLOT NAME = Fabrication Drawing   | GENERATED : 5/17/2026 10:02:24 AM   | TEXAS INSTRUMENTS |                                 |          |   |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| 1   | 2   | 3                 | 4                               | 5        | 6 |   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |
| D   |   |                   |                                 |          |   | D   |       |      |          |           |          |  |             |  |  |  |  |            |               |         |     |   |           |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |       |        |         |  |  |             |              |         |     |   |      |        |         |  |  |              |        |         |     |   |     |        |         |  |  |              |        |         |     |   |              |        |         |  |  |               |               |         |     |  |                |  |  |  |                    |  |  |  |                   |   |     |  |                 |       |     |  |                    |    |     |  |                     |               |          |  |     |                          |  |  |                          |                       |           |  |   |  |           |  |           |  |                               |  |                                |  |            |  |   |                                |            |  |  |                                    |              |  |  |                                    |           |  |   |  |  |                                |               |  |   |  |   |                                |  |                                |                                |                                    |                 |  |   |                                  |  |                                |              |  |  |  |                                     |  |                |  |   |  |   |   |  |  |                          |  |               |                              |                        |   |  |  |   |  |  |  |   |  |                |  |             |  |               |  |                |  |            |  |                    |  |           |  |            |  |            |  |            |  |             |  |           |  |                                  |                      |           |                                 |                                  |                   |  |  |                                 |                                   |                   |  |   |   |   |   |   |   |   |  |  |  |  |  |   |