1. The finished printed wiring board shall meet the requirements of IPC-A-600-X (latest revision).

2. This is a reduced dimension drawing. Additional dimensions needed to define the true profiles of this part shall be obtained from the master CAD Model Database named 10398570_A.ZIP.

3. This document and related artwork are computer generated. All modifications are to be performed to the original database on file in Section 383.

4. Fabricate and inspect printed wiring board per IPC-6012D, Class 2, Type 2.

5. All dimensions are in mm unless otherwise specified.

   Material: Isola 370HR, 1 oz copper clad, double sided, 1.016 mm thick epoxy/woven glass laminate per IPC-4101/1.156-1016-C1/C1

   Material: 0.185 mm thick epoxy/woven glass prepreg per IPC-4101/1 126-6211a7w2v be vc.

   Material: 1 oz. copper foil per IPC 4562/3 cu e3 1 s x 3

9. Surface finish to be electroless nickel/ammonium gold (EN) plating per IPC-6013. All plated holes and conductive surfaces shall be plated with 0.025 mm copper minimum. All non-plated area should have minimum thickness of 0.025 mm for Ni and 0.051 um for Au.

10. All holes specified in the drill chart are finished hole diameters. Hole tolerance +/- 0.031 mm for non-plated holes and +/- 0.076 mm for plated holes.

11. Fabrication tolerances: End product trace widths and lands shall not vary more than the smaller of 0.051 mm or 10% of the trace width from the Gerber data.

   Soldermask: Photo-imaged liquid polymer, green color, Item 4. On both sides of board in accordance with IPC-SM-840, Type B, Class 2, over bare copper.

   Legend over solder mask on both sides of PWB using white non-conductive epoxy ink, Item 5. Legend marking shall not be nearer than 0.125 mm to any pad. Character height shall be 0.75 mm minimum.

14. Bow and twist: Shall not exceed 0.07 mm / cm.

15. Electrical test: Continuity short and open testing on all available exposed terminal pads using IPC-D-356A netlist data. Continuity test shall be at 5 ohms max. Shorts testing shall be performed at 250V. Minimum isolation of 20m ohms.

Mark in location shown with 1.0 mm minimum high characters the serial number "NXXXX" (where N is a vendor designation letter assigned by JPL and XXXXX is a unique 5 digit serial number for each part. The vendor designation and the starting serial number shall be in accordance with the values provided in the purchase order).

NOTES: UNLESS OTHERWISE SPECIFIED

All text is to be read as printed on the original drawing. Material shall be just as specified. Dimensions are to be read as printed on the drawing unless otherwise specified. All tolerances are to be read as printed on the drawing.

Fabrication tolerances: End product trace widths and lands shall be within 10% of any specified trace width.

Surface finish to be electroless nickel/ammonium gold (EN) plating per IPC-6013. All plated holes and fill areas shall be plated with 0.025 mm copper minimum. All non-plated area should have minimum thickness of 0.025 mm for Ni and 0.051 um for Au.

All holes specified in the drill chart are finished hole diameters. Hole tolerance +/- 0.031 mm for non-plated holes and +/- 0.076 mm for plated holes.

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Electrical test: Continuity short and open testing on all available exposed terminal pads using IPC-D-356A netlist data. Continuity test shall be at 5 ohms max. Shorts testing shall be performed at 250V. Minimum isolation of 20m ohms.

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<table>
<thead>
<tr>
<th>Layer</th>
<th>Thickness (mm)</th>
<th>Material</th>
<th>Type</th>
<th>Gerber</th>
</tr>
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<tbody>
<tr>
<td>Top Overlay</td>
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<td>Surface Material</td>
<td>Solder Resist</td>
<td>GTS</td>
</tr>
<tr>
<td>Top Solder</td>
<td>0.01</td>
<td>Copper</td>
<td>Signal</td>
<td>GTL</td>
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<tr>
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<td>Copper</td>
<td>Dielectric</td>
<td>FR-4</td>
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<td>Internal Plane</td>
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<td>Signal</td>
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<tr>
<td>Bottom Solder</td>
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<td>Surface Material</td>
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<tr>
<td>Bottom Overlay</td>
<td>0.01</td>
<td>Copper</td>
<td>Legend</td>
<td>GBO</td>
</tr>
</tbody>
</table>

Total thickness: 1.55mm