**NOTES:** unless otherwise specified

1.8 Application document

The following items are required:

- **PATTERN FINE:** CMC # MNSN-EL-84-40403
- **DETAIL DRAWING:** CMC # MNSN-EL-84-1003

1.9 BASE MATERIAL:

2.1 Laminate base material shall be natural color, FR-4 or equivalent.

See Detail A-A for layer to layer specification and overall thickness.

2.2 B-steps shall be selected as vendors discretion to meet over all board thickness and end item requirements.

2.8 COPPER PLATING:

3.1 Copper plating shall have a minimum purity of 99.5 percent and a minimum thickness of 0.001 inch. This also applies to the plating in the holes.

4.9 SOLDERMASK:

4.1 Apply LPI Green soldermask over bare copper according to the soldermask pattern file per IPC-S-845B.

5.4 TIN/SULF:

5.1 The printed circuit board shall have HASL finish or equivalent on all exposed metallization. Solder plating shall conform to the usual criteria of IPC-A-600.

8.6 SILK SCREEN:

8.1 Silk screen top (-1) and bottom (-2) side of board using white opaque ink according to the -15 pattern film and the +25 pattern film, ink shall not cover any exposed metal.

8.7 DIMENSIONS:

7.1 All dimensions are in inches.

7.2 Unless otherwise specified all hole sizes apply after plating. Hole sizes are shown in the drill schedule.

8.8 TOLERANCES:

8.1 Hole size tolerance = .003 after plating unless otherwise specified.

8.2 Conductor width and spacing shall be within 20% of the artwork original.

8.3 Layer to layer registration shall be .007 inches of true position.

8.4 Board dimensions shall meet the requirements of the board drawing.

8.5 Warps and twist shall not exceed that defined in IPC-A-600.

8.9 APPEARANCE:

9.1 All inside and outside corners shall have a minimum radius of .005

9.2 Removal of burnt and smooth sharp edges to .010 max.

VENDOR NOTE: NOTIFY US OF ANY CONFLICTING REQUIREMENTS OR IF BOARDS CANNOT BE MANUFACTURED TO MEET THE ABOVE REQUIREMENTS DUE TO VENDORS PROCESS AND/OR TECHNOLOGIES OR BECAUSE PHOTO TOOLING AND/OR SPECIFICATIONS ARE INADEQUATE.