Manufacturing and Assembly Instructions

Please ask for clarification if any instructions are unclear.

Assembly Instructions:

1. The .POS file contains centroid X—Y data and orientation. Orientation is such that 0 degrees indicates placement as if the reel sprocket holes are NORTH of the component. Refer to Figure 1.
Do not place any items labeled as DNU.

2. BOM.csv contains BOM, quantities, and part numbers. Please advise before making any substitutions. Do not buy or place any parts marked as DNU, FIDUCIAL, or otherwise with a quantity of 0.

3. The _F.Fab (Front Face) and _B.Fab (Back Face) PDF/GBR files contain reference designators, borders, and orientation markings, such as: Pin1 markings or markings for unidirectional devices such as diodes.
Refer to the .Fab files for placement guidance and visual inspection.
Please let us know if any placement is unclear.
If .POS and .Fab files disagree, the .Fab files should be considered MASTER. Please let us know of any discrepancies you encounter.

4. PDF plots of gerber information are for reference only.

5. P25 is an assembled riser board. Refer to "Connector Pushup" files and documents.

PCB Manufacturing Requirements:

Copper Layers: 6
Soldermask Layers: 2
Silkscreen Layers: 1

All Layers: Trace Width / Trace Spacing : 4.5/4.5 mil
Outer Layers: 1 oz copper
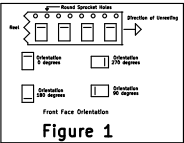Inner Layers: .5 oz copper

Minimum Via Annular Ring / Drill Diameter: 13mil / 8mil

Conductive Fill all 8mil and 15mil drill diameter vias. Do not conductive fill any other holes.

Dielectric: FR—4

Finished board thickness: 1.6mm +— .1mm

ROHS Compliant Finish

Figure 1

FILE DESCRIPTIONS

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--------------------------------------------------------------------
Manufacturing Gerber Files.Zip   --   Files needed for PCB Manufacturing
--------------------------------------------------------------------
.drl              :       Drill File

—Edge.Cuts.gm1    :       Board Outline

—F.Cu.gtl         :       Top—Side Copper      [Layer 1]
—In1.Cu.G2        :       Inner—Layer 1 Copper [Layer 2]
—In2.Cu.G3        :       Inner—Layer 2 Copper [Layer 3]
—In3.Cu.G4        :       Inner—Layer 3 Copper [Layer 4]
—In4.Cu.G5        :       Inner—Layer 4 Copper [Layer 5]
—B.Cu.gbl         :       Bottom—Side Copper   [Layer 6]

—F.Mask.gts       :       Top—Side Soldermask
—B.Mask.gbs       :       Bottom—Side Soldermask

—F.Silk.gto       :       Top—Side Silkscreen
—B.Silk.bto       :       Bottom—Side Silkscreen

--------------------------------------------------------------------
Assembly Files.Zip   --   Files needed for Part Assembly
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—F.Fab.gbr        :       Top—Side Placement — Visual Inspection (MASTER)
—B.Fab.gbr        :       Bottom—Side Placement — Visual Inspection (MASTER)

—all.pos          :       Centroid XY data

BOM.csv           :       BOM data
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