

## FABRICATION INSTRUCTIONS

NOTE: ALL DIMENSIONS IN BOARD DOCUMENTS ARE IN MILLIMETERS

BOARD DIMENSIONS: 125.776 MM x 175.236 MM

NUMBER OF LAYERS: 6

1. MATERIAL: LAMINATED EPOXY GLASS FR-4, NOMINAL 1.6 MM, COLOR NATURAL  
NOM 2 OZ COPPER WEIGHT. THICKNESS 1.8 MM MAX AFTER PLATING

2. SOLDERMASK OVER BARE COPPER ON TOP AND BOTTOM WITH MATERIAL PER ANSI/  
IPC-SM-840, COLOR SHALL BE GREEN

3. HOLES.

A. PLATING IN HOLES SHALL BE CONTINUOUS ELECTROLYTIC COPPER WITH .025  
MM MINIMUM BARREL THICKNESS

B. MINIMUM HOLE SIZE: 0.2 MM

C. SEE DRILL CHART FOR FINISHED HOLE SIZE AND TOLERANCE

D. HOLE SIZES ARE SPECIFIED AS FINAL DIMENSIONS AFTER PLATING

4. SEE SEPARATE DRILL FILE FOR HOLE LOCATIONS

5. SURFACE FINISH. ENIG PLATING PER CURRENT REVISION OF IPC 4552

6. APPLY SILKSCREEN TO TOP AND BOTTOM SIDE OF BOARD WITH WHITE EPOXY, NON-  
CONDUCTIVE INK

7. DIMENSIONAL TOLERANCES ARE: .XX=+/- .01; .XXX=+/- .005

8. OUTLINE DEFINED IN SEPARATE GERBER FILE "Pi\_Blackbox-Edge\_Cuts.gbr"

9. NO CONTROLLED IMPEDANCE

10. DESIGN GEOMETRY MINIMUM FEATURE SIZES:

TRACE WIDTH; 0.25 MM

TRACE-TO-TRACE; TRACE-TO-PAD 0.19 MM

HOLE-TO-HOLE 0.254 MM

PAD-TO-PAD 0.19 MM

MIN HOLE SIZE 0.2 MM

## LAYER STACKUP

SOLDERMASK	Pi_Blackbox-F_Mask.gbr
SILKSCREEN	Pi_Blackbox-F_SilkS.gbr
TOP COPPER, 2 oz	Pi_Blackbox-F_Cu.gbr
DIELECTRIC	
INNER COPPER LAYER #1, 1 oz	Pi_Blackbox-In1_Cu.gbr
DIELECTRIC	
INNER COPPER LAYER #2 1 oz	Pi_Blackbox-In2_Cu.gbr
DIELECTRIC	
INNER COPPER LAYER #3 1 oz	Pi_Blackbox-In3_Cu.gbr
DIELECTRIC	
INNER COPPER LAYER #4 1 oz	Pi_Blackbox-In4_Cu.gbr
DIELECTRIC	
BOTTOM COPPER 2 oz	Pi_Blackbox-B_Cu.gbr
SOLDER MASK	Pi_Blackbox-B_Mask.gbr
SILKSCREEN	Pi_Blackbox-B_SilkS.gbr