

NOTES (UNLESS OTHERWISE SPECIFIED):

GENERAL

- 1) PCB IS 4-LAYER, .062" THICK.
- 2) CONSTRUCTION IS SOLDER-MASK-OVER-BARE-COPPER (SMOBC).
- 3) ACCEPTABILITY SHALL BE BASED ON IPC-A-600, CLASS 2.
- 4) THE FOLLOWING GERBER RS274X PHOTO TOOL FILES SHALL BE USED TO DEFINE ALL CIRCUIT FEATURES:

*GTL – TOP LAYER GERBER DATA

*G1 – MID LAYER 1 GERBER DATA

*GP1 – INTERNAL PLANE LAYER 1 GERBER DATA

- *GBL – BOTTOM LAYER GERBER DATA

*GTO – TOP OVERLAY GERBER DATA

*GTS – TOP SOLDER MASK GERBER DATA

*GTP – TOP-SIDE SOLDER PASTE MASK

*GBO – BOTTOM OVERLAY GERBER DATA

*GBS – BOTTOM SOLDER MASK GERBER DATA

*GBP – BOTTOM-SIDE SOLDER PASTE MASK

- 5) THE PHOTO TOOL SHALL NOT BE COMPENSATED WITHOUT PRIOR ENGINEERING APPROVAL.
- PCB DESIGNER: RICH LOBDILL PH (805) 880-1621 FAX (805) 961-1792.

FABRICATION TOLERANCES

- 6) END PRODUCT CONDUCTOR WIDTHS AND PAD DIAMETERS SHALL NOT VARY MORE THAN 0.002" FROM THE 1:1 DIMENSIONS OF THE MASTER ARTWORK.
- 7) THE CONDUCTIVE PATTERN SHALL BE POSITIONED SO THAT THE LOCATION OF ANY PAD OR LAND SHALL BE WITHIN 0.005" DIAMETER TO THE TRUE POSITION OF THE HOLE IT CIRCUMSCRIBES.
- 8) ALL DRILL HOLE SIZES AND TOLERANCES APPLY AFTER PLATING.
- 9) THE MINIMUM ANNULAR RING SHALL BE 0.005".
- 10) BOW AND TWIST SHALL NOT EXCEED 0.010" PER INCH.
- 11) FOR PCB ROUTING DIMENSIONS: .XXX = +/- .005" .XX = +/- .020"

MATERIAL

- 12) BASE MATERIAL IS FR4 EPOXY FIBERGLASS
- 13) SEE STACK-UP LEGEND FOR COPPER CLADDING CALL OUTS

PLATING

- 14) ALL HOLES AND CONDUCTIVE SURFACES SHALL BE PLATED WITH A MINIMUM OF 0.001" COPPER.
- 15) AFTER SOLDERMASK, ALL EXPOSED HOLES AND CONDUCTIVE SURFACES SHALL BE COATED WITH A GOLD IMMERSION PLATING TO PRESERVE SOLDERABILITY.

COATINGS

- 16) THE SOLDERMASK SHALL BE BLACK LIQUID PHOTO-IMAGEABLE PER IPC-SM-840, TYPE-B, CLASS 2.
- 17) THE SOLDERMASK REGISTRATION ALLOWANCE IS 0.003". THERE SHALL BE NO SOLDERMASK ON ANY SOLDER PAD OR LAND.

MARKING

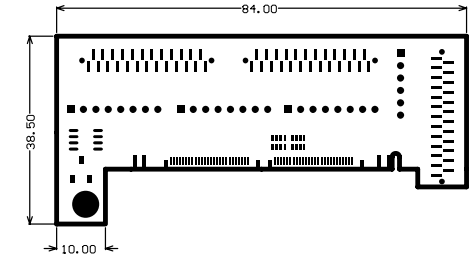
- 18) THE LEGEND SHALL BE SCREEN-PRINTED USING PERMANENT YELLOW EPOXY INK.
- 19) THE SCREEN PRINTING REGISTRATION ALLOWANCE IS 0.007". THERE SHALL BE NO INK ON ANY SOLDER PAD OR LAND.
- 20) THE VENDOR CODE AND UL FLAMMABILITY RATING MAY BE ETCHED IN THE FOIL OR MARKED IN PERMANENT EPOXY INK (VENDOR'S OPTION).

ELECTRICAL TESTING

- 21) ALL BOARDS SHALL BE ELECTRICALLY TESTED TO THE SUPPLIED IPC-D-356A NET LIST FOR CONTINUITY, OPENS AND SHORTS.

Layer Stack Up Detail for: 175-00021_rev1, 1m FWS Apps Brd, SuperFin.PcbDoc

Layer Name	COPPER THICKNESS		
Top Layer GTL	1/2 oz,	1 oz	Finished
Mid-Layer 1 G1	2 oz		
Internal Plane 3 GP1	2 oz		
Bottom Layer GBL	1/2 oz,	1 oz	Finished



NOTICE
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PRIMARY PCB SPECIFICATIONS

(REFER TO COMPLETE SPEC LISTING AT LEFT FOR FURTHER DETAILS)

NUMBER OF LAYERS – 4

FINISHED THICKNESS – .062"

BASE MATERIAL – FR4

PLATING TYPE – GOLD IMMERSION

SOLDER MASK COLOR – BLACK

Las Cumbres Observatory
Global Telescope Network

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DATE
11/29/2010

DESIGNED
Rich Lobdill

DRAWN
Rich Lobdill

SCALE
1 : 1

DESIGNED DATE

APPROVED DATE

TITLE
175-00021, 1m FWS SuperFin Apps Board

REV
C

DOC NO.
- GPT

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