

NOTES (UNLESS OTHERWISE SPECIFIED):

GENERAL

- 1) PCB IS 12-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
*GP2 - INTERNAL PLANE LAYER 2 GERBER DATA
*GP3 - INTERNAL PLANE LAYER 3 GERBER DATA
*GP4 - INTERNAL PLANE LAYER 4 GERBER DATA
*GP5 - INTERNAL PLANE LAYER 5 GERBER DATA
*GP6 - INTERNAL PLANE LAYER 6 GERBER DATA
*GBL - BOTTOM LAYER GERBER DATA
*GTO - TOP OVERLAY GERBER DATA
*GBO - BOTTOM OVERLAY GERBER DATA
*GTP - TOP-SIDE SOLDER PASTE MASK
*GBP - BOTTOM-SIDE SOLDER PASTE MASK
*GTS - TOP SOLDER MASK GERBER DATA
*GBS - BOTTOM SOLDER MASK GERBER DATA

- 5) THE PHOTO TOOL SHALL NOT BE COMPENSATED WITHOUT PRIOR ENGINEERING APPROVAL.
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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.
- 8.1) DRILL TOLERANCES $\pm 0.003"$
- 8.2) 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 = $\pm 0.005"$.XX = $\pm 0.020"$

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

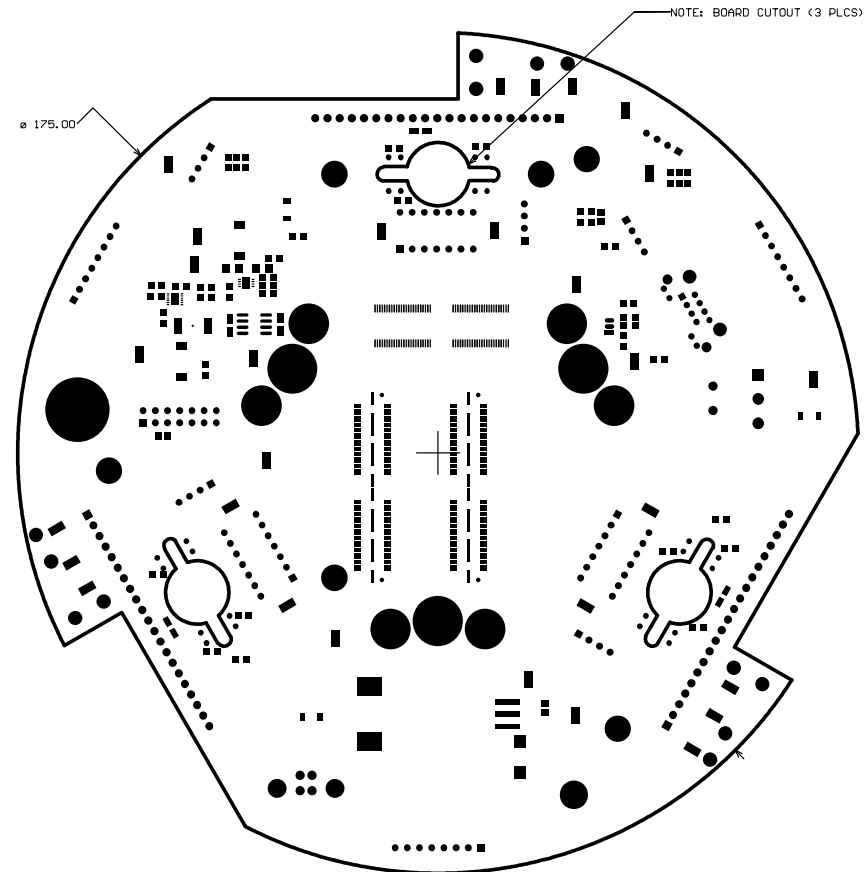
- 16) THE SOLDERMASK SHALL BE BLACK LIQUID PHOTO-IMAGEABLE PER IPC-SM-840, TYPE-B, CLASS 2.
- 17) THE SOLDERMASK REGISTRATION ALLOWANCE IS 0.003". THERE SHALL BE NO SOLDERMASK ON ANY SOLDER PAD OR LAND.

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: 175-00008 rev 1, PCB, M2 Focus Drive.PcbDoc

Layer Name	Copper cladding
Top Layer (*.GTL)	1/2 oz. (1 oz. Finished)
Mid-Layer 1 (*.G1)	1/2 oz
+24V (*.GP1)	1/2 oz
GND (*.GP2)	1/2 oz
+5V (*.GP3)	1/2 oz
+12V (*.GP4)	1/2 oz
-12V (*.GP5)	1/2 oz
+3.3V (*.GP6)	1/2 oz
Bottom Layer (*.GBL)	1/2 oz. (1 oz. Finished)

NOTE: Non-standard board thickness

PRIMARY PCB SPECIFICATIONS

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

NUMBER OF LAYERS — 9
FINISHED THICKNESS — .094
BASE MATERIAL — FR4
PLATING TYPE — GOLD IMMERSION
SOLDER MASK COLOR — BLACK

NOTICE

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FILE 175-00008, M2 Focus Drive			
REV C	DOC NO. — GPT	REV 2	SHEET 1 of 20