

A

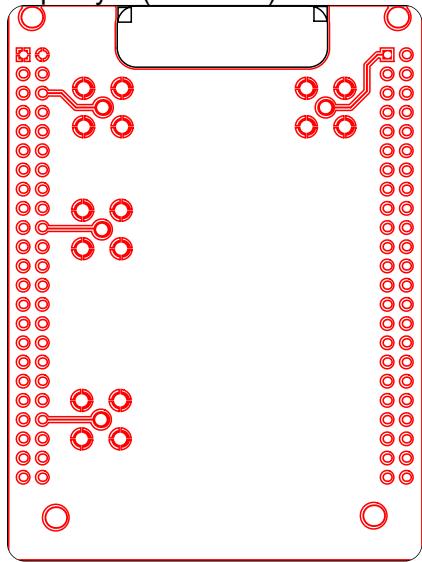
B

C

D

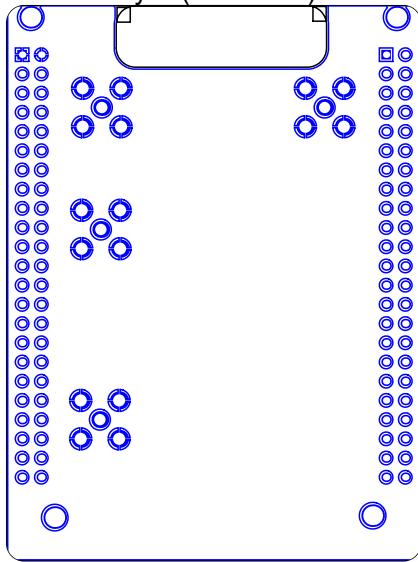
E

Top Layer (Scale 1:1)



TOP

Bottom Layer (Scale 1:1)

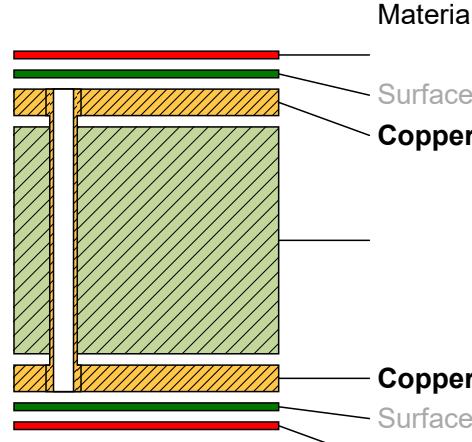


BOTTOM

NOTES: UNLESS OTHERWISE SPECIFIED

1. BOARD AND BONDING MATERIALS SHALL CONFORM TO IPC-4101 (CURRENT REVISION). THE MATERIAL SHALL BE FR-4 WITH UL 94V-0 RATING AT A TEMPERATURE RATING OF 130 DEGREES C OR GREATER. FINAL BOARD THICKNESS AND TOLERANCES ARE SPECIFIED WITH THE LAYER STACK INFORMATION.
2. THE FINISHED BOARD SHALL MEET THE REQUIREMENTS OF IPC-A-600. "WARP AND TWIST" SHALL NOT EXCEED 0.007 INCH PER INCH WITH A MAX OF 0.09 INCH MEASURED IN ACCORDANCE WITH IPC-TM-650, METHOD 2.4.2.2.
3. SOLDER MASK SHALL BE PHOTO-IMAGED LIQUID POLYMER BOTH SIDES OF BOARD IN ACCORDANCE WITH IPC-SM-840C, USING BLACK SOLDER MASK TAIYO "PSR-4000" OR EQUIVALENT. EXPOSED TRACES ARE UNACCEPTABLE.
4. ALL EXPOSED CONDUCTIVE PATTERN AREAS NOT COVERED WITH SOLDER MASK OR OTHER PLATING SHALL BE ELECTROLESS NICKEL IMMERSION GOLD (ENIG).
5. SILKSCREEN SHALL BE WHITE, PERMANENT, ORGANIC, NON-CONDUCTIVE INK, EQUIVALENT TO WOR-NOW-CAT-L-INK 50-10R. THERE SHALL BE NO SILKSCREEN ON ANY SOLDERABLE COMPONENT.
6. FABRICATE PCB IN ACCORDANCE WITH IPC-A-600, CLASS 2; USING CUSTOMER SUPPLIED DATA FILES.
7. PCB BOARD SHALL BE ELECTRICALLY TESTED FOR SHORTS AND OPENS USING CUSTOMER SUPPLIED IPC-D-356 NETLIST.
8. HOLE SIZES REFER TO FINISHED HOLE SIZES.
9. FINISHED HOLE SIZE TOLERANCE SHALL BE +/- 0.005 INCH.
10. IF THIEVING IS TO BE ADDED IT SHALL HAVE A CLEARANCE GREATER THAN 1.200 INCH FROM PCB FEATURES. SOME EXAMPLES ARE BOARD EDGE, COPPER, HOLES, ETC.
11. FIDUCIALS MAY BE MODIFIED, WITH MOVING THE ORIGIN OF THE FIDUCIAL, WITHIN THE 0.080 INCH DIAMETER SOLDER MASK RELIEF AS DEFINED IN THE GERBER FILE.

Layer Stack Legend



Material	Layer	Thickness	Dielectric Material	Type	Gerber
Top Overlay				Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GT_L
		1.50mm	FR-4		<i>Dielectric</i>
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.59mm

Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
□	92	0.85mm	Plated	
○	4	1.50mm	Plated	
▽	16	1.60mm	Plated	
☆	4	2.50mm	Plated	
116 Total				

Title	Beaglebone Cape Board - Fabrication
Part #	001-0002
Rev. #	0
Author	HILT
Date	11/10/2025

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