

REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
2	AMBRD-0084 APOLLO4 PLUS EVB CARD v2 SOLDER UPDATE	29MAR2022	D.LANZONI

NOTES (UNLESS OTHERWISE SPECIFIED):

1. THE FINISHED PRINTED CIRCUIT BOARD SHALL MEET THE REQUIREMENTS OF IPC-A-6012.
2. CONFIGURATION OF THE PRINTED CIRCUIT BOARD NOT SPECIFICALLY DIMENSIONED ON THE DRAWING SHALL BE CONTROLLED BY THE GERBER DATA.
3. MATERIAL: GLASS EPOXY, NATURAL COLOR. LAMINATED NEMA GRADE FR4. SEE LAYER STACKUP FOR COPPER WEIGHT AND LAYER ORIENTATION. CORE AND PREPREG COMBINATIONS ARE OPTIONAL TO THE MANUFACTURER UNLESS OTHERWISE SPECIFIED IN THE LAYER STACKUP.
FINISHED PRINTED CIRCUIT BOARD SHALL MEET UL 94V-0 FLAMMABILITY RATING AND BE MARKED WITH THE REQUIRED UL CODE NUMBER.
4. PLATING: ALL HOLES AND CONDUCTIVE SURFACES SHALL BE PLATED WITH .001" COPPER MINIMUM.
5. ALL HOLE DIAMETERS ARE STATED AS FINISHED HOLE SIZES.
6. FABRICATION TOLERANCES: END PRODUCT TRACE WIDTHS AND LANDS SHALL NOT VARY MORE THAN THE SMALLER OF .002" OR 20% OF THE TRACE WIDTH FROM THE GERBER DATA.
7. SOLDER MASK: PHOTO-IMAGED LIQUID POLYMER IN ACCORDANCE WITH IPC-SM-840, TYPE B, CLASS 2, OVER BARE COPPER
8. COMPONENT MARKING: SILKSCREEN WITH NON-CONDUCTIVE EPOXY INK. LANDS AND EXPOSED PLATED AREAS TO BE FREE OF INK.
9. BOW AND TWIST: SHALL NOT EXCEED .007" PER INCH.
10. FINISHED BOARD SHALL MATCH SUPPLIED IPC-356 NET LIST.
11. 4-MIL AND 8-MIL VIAS ARE ALLOWED TO BE PLATED SHUT OR FILLED WITH SOLDER MASK.
12. THIS IS A CONTROLLED-IMPEDANCE BOARD. 50 OHM CONTROLLED IMPEDANCE ON 4 MIL TRACES ON EXTERNAL LAYERS, 3.5 MIL TRACES ON INTERNAL LAYERS. VENDOR MAY ADJUST DIELECTRIC THICKNESS AND/OR CONDUCTOR WIDTHS AS REQUIRED.
- ~~13. 4-MIL TRACES REQUIRE 60 OHM SINGLE ENDED IMPEDANCE CONTROL~~
14. DIFF PAIR NETS MUST BE FABRICATED WITH 90 OHM DIFF IMPEDANCE: EXTERNAL 4.0 MIL TRACES WITH 6 MIL AIRGAP
15. DIFF PAIR NETS MUST BE FABRICATED WITH 100 OHM DIFF IMPEDANCE: EXTERNAL 3.0 MIL TRACES WITH 6 MIL AIRGAP
16. BOARD THICKNESS = 62 MILS

