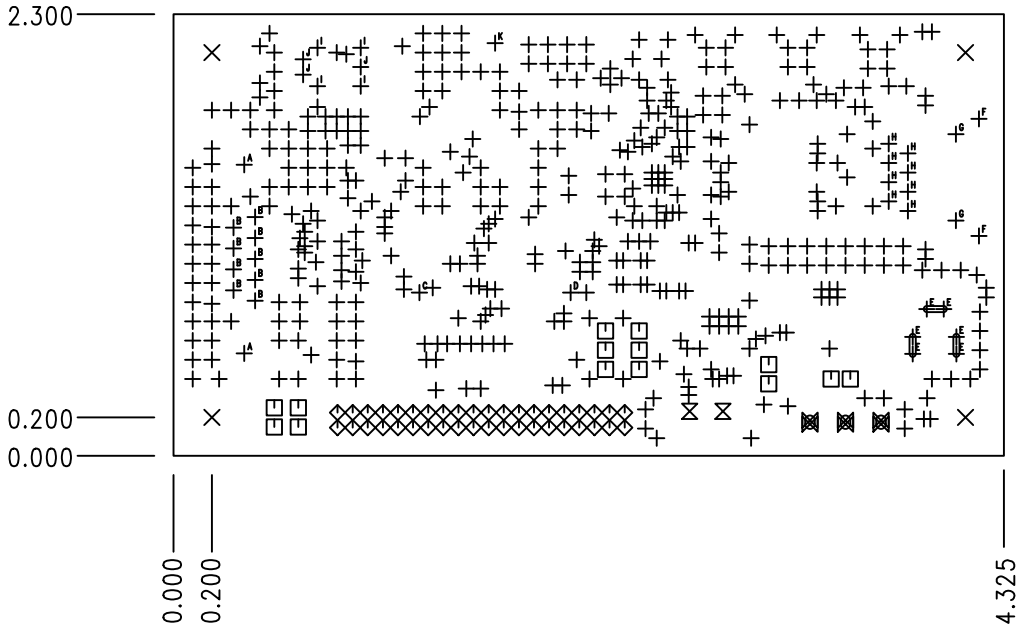
REVISION HISTORY		
C2	Initial Release	11/30/2017

IMPEDANCE CONTROLLED SIGNALS

Signal & Pairs	Trace Width	Impedance Requirement	Signal Layers	Reference Layer
ERX+/- ETX+/- IEORX+/- IEOTX+/- ERXP/M ETXP/M	8.5 MIL TRACE ~16 MIL GAP 10.1 MIL TRACE 19.9 MIL GAP	100 Ohm +/-10% differential	Layer 1 Layer 2	Layer 2; no ref where void Layer 3; no ref where void
USB+/- EXTUSB+/-	8.5 MIL TRACE ~8.1 MIL GAP	90 Ohm +/-10% differential	Layers 1	Layers 2
All others	8 MIL	50 Ohm +/-10% single-ended	Layers 1&4	Layer 2; no ref where void Layer 3; no ref where void

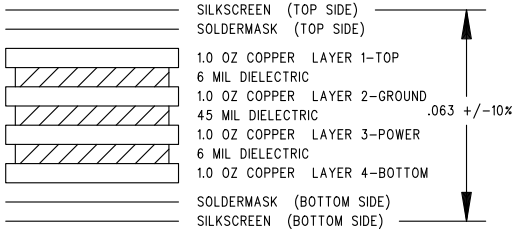
SIZE	QTY	SYM	PLATED	TOL
0.01	463	+	YES	+/-0.003
0.175	4	X	YES	+/-0.005
0.04	14	square	YES	+/-0.003
0.0315	40	diamond	YES	+/-0.003
0.03543	2	hourglass	NO	+/-0.003
0.05 x 0.07	3	bowtie	YES	+/-0.003
0.125	2	A	YES	+/-0.005
0.047	9	B	YES	+/-0.003
0.06299	1	C	NO	+/-0.003
0.04331	1	D	NO	+/-0.003
0.032 x 0.12	3	E	YES	+/-0.003
0.062	2	F	YES	+/-0.003
0.128	2	G	NO	+/-0.003
0.035	8	H	YES	+/-0.003
0.0935	4	I	NO	+/-0.003
0.039	3	J	NO	+/-0.003
0.09843	1	K	YES	+/-0.003



Notes: apply unless specified otherwise.

1. Material: Polyclad PCL-FR-370HR or equivalent. Overall thickness = .063"+/-10%
2. Unless otherwise specified, all hole dimensions apply after plating. All plated through holes to have a minimum of .001" copper.
3. All holes shall be located within .003" diameter of true position. Layer to layer registration shall be within .003". All holes surrounded by land shall have a minimum annular ring of .001". All via in pads must be filled with THP-100DX1 material.
4. Apply soldermask over bare copper, color GREEN; mask shall meet IPC-SM-840 to a thickness specification of 5 um to 18 um.
5. All exposed copper shall be coated with electroless nickel/immersion gold finish. Nickel plating shall be 118-275u" thick over copper. Gold plating shall be 2-8u" thick over nickel. Boards shall pass solderability testing per J-STD-003. There shall be no evidence of exposed copper.
6. Warp or twist of board shall not exceed .010 inch per inch.
7. Silkscreen using non-conductive epoxy ink. Color: WHITE.
8. Remove all burrs and break all sharp edges.
9. Board shall meet the requirements of UL796 with a flammability rating of 94V-0. Vendor's UL logo or designation shall be located on the solder side of board.
10. Fabricate in accordance with ANSI/IPC-A-600, class 2.
11. Dimensions and tolerances per ASME Y14.5M.
12. Fabricate using artwork 330-333-GBR Rev C2.
13. Any rework shall be to IPC-R-700C guidelines and tested per section VI. Test results shall be included with each shipment. Reworked items shall be separated from non-reworked items and the outer packaging labeled as "reworked items enclosed".
14. Tent all vias both sides.
15. All materials and processes must be RoHS compliant.

LAYUP DETAIL
4 LAYER



Lantronix

TITLE:
FABRICATION DRAWING
XPICO 240 Eval Board

DWG	DWG NO:	REV:
A	330-333-FAB-R	C2
SIZE	SCALE: 1 : 1	SHEET: 1 OF 1