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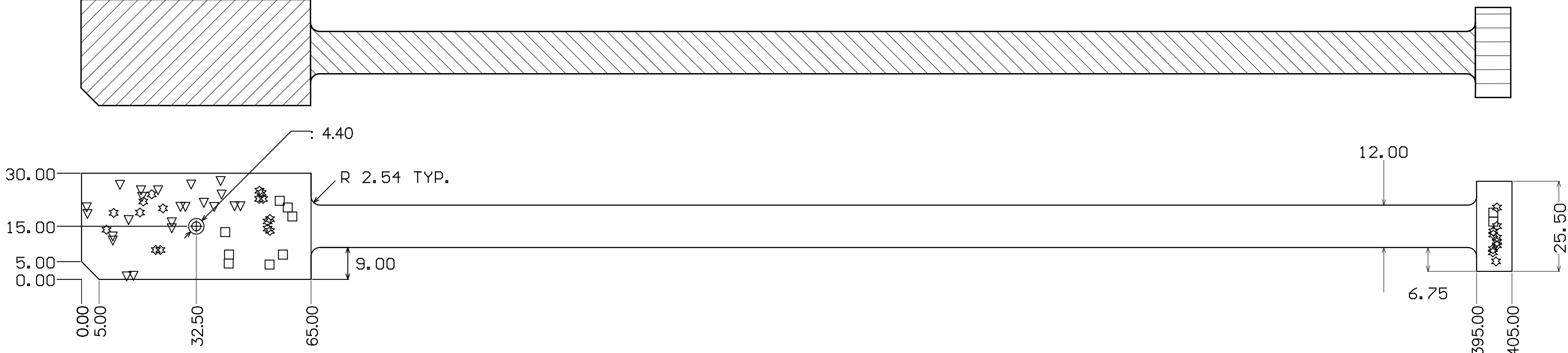
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	Layer	Name	Material	Thickness	Constant	Rigid Stack	Flex Stack	Rigid Stack 2
5	1	Flex Coverlay Top	Polyimide/Adhesive	0.051mm	3.5			
8	2	Top Overlay						
7	3	Top Solder	Solder Resist	0.010mm	3.5			
1	4	Component Side	Copper	0.036mm				
1	5	Dielectric 1	FR-4	0.381mm	4.8			
2	6	Ground Plane	Copper	0.036mm				
2	7	Dielectric 11	FR-4	0.226mm	4.2			
4	8	Flex Shield Top	Copper	0.018mm				
6	9	Dielectric 6	Polyimide	0.051mm	3.78			
6	10	Dielectric 10	Adhesive	0.041mm	3.78			
3	11	Diff Pair	Copper	0.018mm				
3	12	Dielectric 9	Polyimide	0.076mm	3.5			
2	13	Flex Shield Bot	Copper	0.018mm				
2	14	Dielectric 12	FR-4	0.226mm	4.2			
1	15	Power Plane	Copper	0.036mm				
1	16	Dielectric 4	FR-4	0.381mm	4.2			
7	17	Solder Side	Copper	0.036mm				
8	18	Bottom Solder	Solder Resist	0.010mm	3.5			
5	19	Bottom Overlay						
5	20	Flex Coverlay Bot	Polyimide/Adhesive	0.051mm	3.5			



20. BOW AND TWIST OF RIGID SECTIONS SHALL NOT EXCEED 0.75% WHEN MEASURED DIAGONALLY.
19. ALL UNDIMENSIONED HOLES SHALL BE LOCATED WITHIN 0.12 RADIUS OF THE POSITION INDICATED BY THE MASTER PATTERN ARTWORK.
18. ALL COPPER FEATURE SIZES OF THE FINISHED PRINTED WIRING FLEXPRINT SHALL BE WITHIN ±10% OF THE SIZE INDICATED BY THE MASTER PATTERN ARTWORK.
17. REGISTRATION OF ALL PRINTED WIRING ELEMENTS AFTER LAMINATION SHALL BE WITHIN 0.076 mm OF THE TRUE POSITION.
16. PAIRED TRACES IN FLEX AREA ARE TO HAVE 100 OHMS ±10% DIFFERENTIAL IMPEDANCE. TRACE WIDTH AND SPACE MAY BE ADJUSTED TO OBTAIN THIS.
15. ELECTRICAL TEST: CONTINUITY SHORT AND OPEN TESTING ON ALL AVAILABLE EXPOSED TERMINAL PADS USING IPC-D-356A NETLIST DATA. CONTINUITY TEST SHALL BE AT 5 OHMS MAX. SHORTS TESTING SHALL BE PERFORMED AT 200V. MINIMUM ISOLATION OF 100M OHMS.
14. LEGEND OVER SOLDER MASK ON BOTH SIDES OF PWB USING HYSOL M-SERIES/CATALYST 20/A WHITE EPOXY INK. LEGEND MARKING SHALL NOT BE NEARER THAN .005 INCH TO ANY PAD. CHARACTER HEIGHT SHALL BE .030 INCH MINIMUM.
13. AFTER APPLICATION OF SOLDER MASK, PLATE ALL EXPOSED COPPER WITH ENIG PER IPC-6013.
12. APPLY SOLDER MASK, ITEM 7, TO TOP AND BOTTOM OVER BARE COPPER, COMPONENT PADS TO BE FREE FROM BLEEDING OR MISREGISTRATION.
11. FABRICATE AND INSPECT PRINTED WIRING BOARD PER IPC-6013B, CLASS 2, TYPE 4.
10. FOIL LAMINATION MAY BE APPLIED AS AN ALTERNATE COSTRUCTION ON OUTER LAYERS.
- 9 MATERIAL: NON-SUPPORTED ADHESIVE FILM (THICKNESS AND QUANTITY AS REQUIRED) PER IPC-4203/18-0000MX
- 8 MATERIAL: NON-SUPPORTED POLYIMIDE FILM, ADHESIVE ONE SIDE PER IPC-4203/1-E1E1M1/0
- 7 MATERIAL: 1 OZ COPPER CLAD, SINGLE SIDED, .002 IN. THICK POLYIMIDE LAMINATE PER IPC-4204/11-E1E2Z CU-W7-HS/0
- 6 MATERIAL: 1 OZ COPPER CLAD, DOUBLE SIDED, .003 IN. THICK POLYIMIDE LAMINATE PER IPC-4204/11-E1E3Z CU-W7-HS/HS
- 5 MATERIAL: 0.135 mm THICK EPOXY/WOVEN GLASS PREPEG PER IPC-4101/P 26-E2116 TW RE VC
- 4 MATERIAL: 1 OZ COPPER CLAD, DOUBLE SIDED, 0.38 mm THICK EPOXY/WOVEN GLASS LAMINATE PER IPC-4101/L 26-0380-C1/C1

3. THIS IS A REDUCED DIMENSION DRAWING. ADDITIONAL DIMENSIONS NEEDED TO DEFINE THE TRUE PROFILES OF THIS PART SHALL BE OBTAINED FROM THE MASTER CAD MODEL DATABASE NAMED 10369692-A.ZIP. DIMENSIONS AND TOLERANCES SHALL BE INTERPRETED PER ASME Y14.5M.
2. THIS DOCUMENT AND RELATED ARTWORK ARE COMPUTER GENERATED. ALL MODIFICATIONS ARE TO BE PERFORMED TO THE ORIGINAL DATABASE ON FILE IN SECTION 383.
1. THE FINISHED PRINTED WIRING BOARD SHALL MEET THE REQUIREMENTS OF IPC-A-600-X (LATEST REVISION).

NOTES: UNLESS OTHERWISE SPECIFIED

THIS DOCUMENT HAS BEEN REVIEWED AND DETERMINED NOT TO CONTAIN EXPORT CONTROLLED TECHNICAL DATA.

QTY REQD	ITEM NO	REF DES	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	ZONE
	AR	8		SERIES M. CATALYST 20/A	INK, WHITE EPOXY		14	
	AR	7		LPI, SM P41	SOLDERMASK, PROBIMER 52	IPC-SM-840 CL A	12	
	AR	6			ACRYLIC ADHESIVE FILM NON-SUPPORTED		9	
	AR	5			POLYIMIDE FILM ACRYLIC ADHESIVE ONE SIDE		8	
	AR	4			POLYIMIDE FILM CU CLAD 1/2 OZ.		7	
	AR	3			POLYIMIDE FILM CU CLAD 1/2 OZ. / 1/2 OZ.		6	
	AR	2			GLASS BASE EPOXY RESIN PREPREG, B-STAGE		5	
	AR	1			GLASS BASE EPOXY RESIN CU CLAD 1 OZ / 1 OZ		4	

PARTS LIST

MATERIAL		THIRD ANGLE PROJECTION		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS  LINEAR TOLERANCES:  0 to 6 ±0.1 OVER 6 to 30 ±0.2 OVER 30 to 120 ±0.3 OVER 120 to 315 ±0.5 OVER 315 to 1000 ±0.8  ANGULAR TOLERANCES: ±0.5°  MACHINE FINISH ✓  DO NOT SCALE DRAWING INTERPRET DWG PER ASME Y14.100M		CONTRACT NO _____  APPD _____ DATE _____  DWN _____ CHK _____ STRUCT _____ MAIL _____ TERM _____ CONT _____  ENGR _____ DSGN _____ SUPV _____		JET PROPULSION LABORATORY CALIFORNIA INSTITUTE OF TECHNOLOGY PASADENA, CA 91109					
MATERIAL PER SPECIFICATION		THIRD ANGLE PROJECTION		SEE PDMS FOR APPROVAL SIGNATURES AND DATES		EDGE SENSOR – SENSE BOARD RIGID-FLEX PWB FABRICATION		SIZE D 23835		CAGE CODE 10369692		REV A	
						SCALE: 1/1		UNCLASSIFIED		SHEET 1 OF 1			