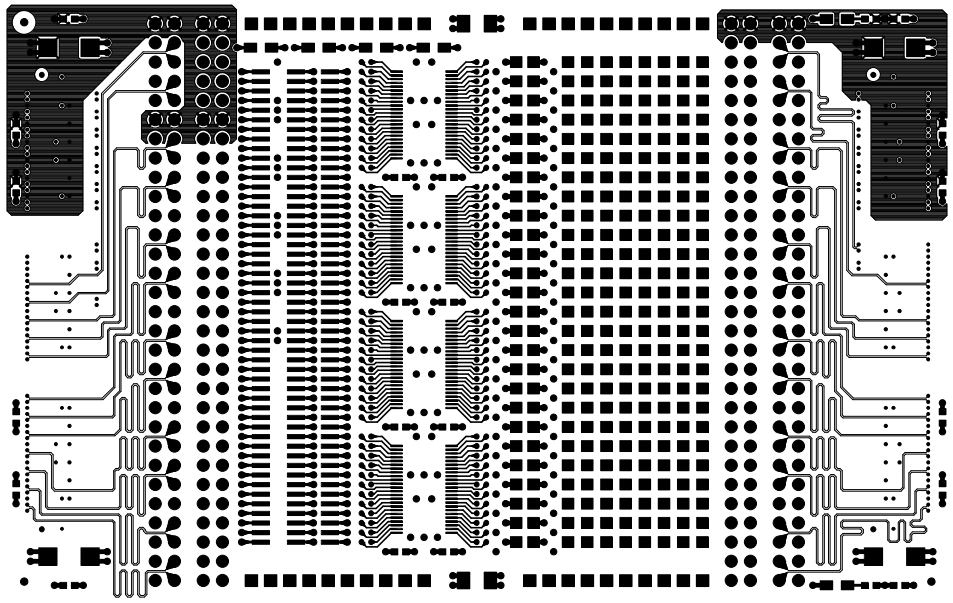
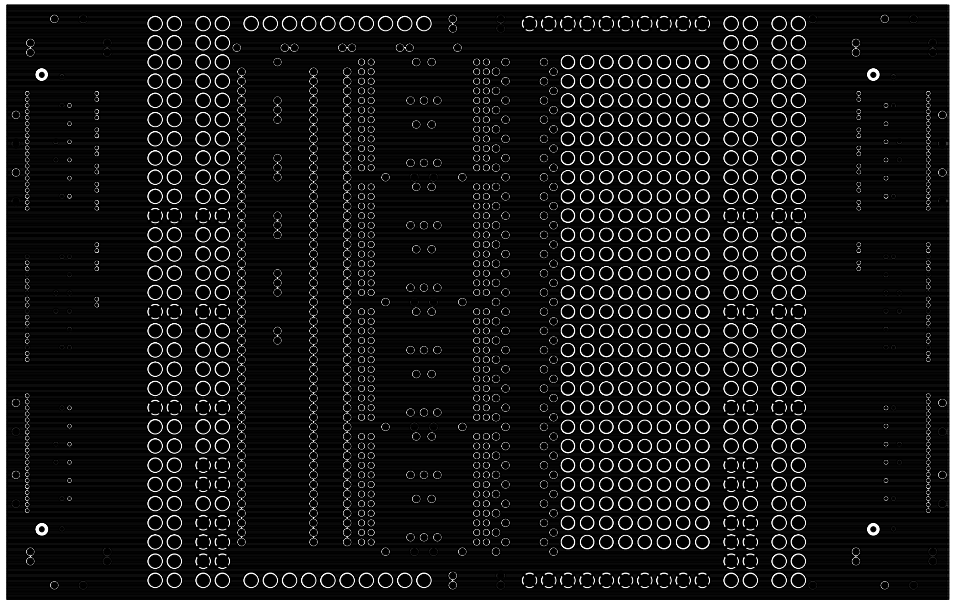
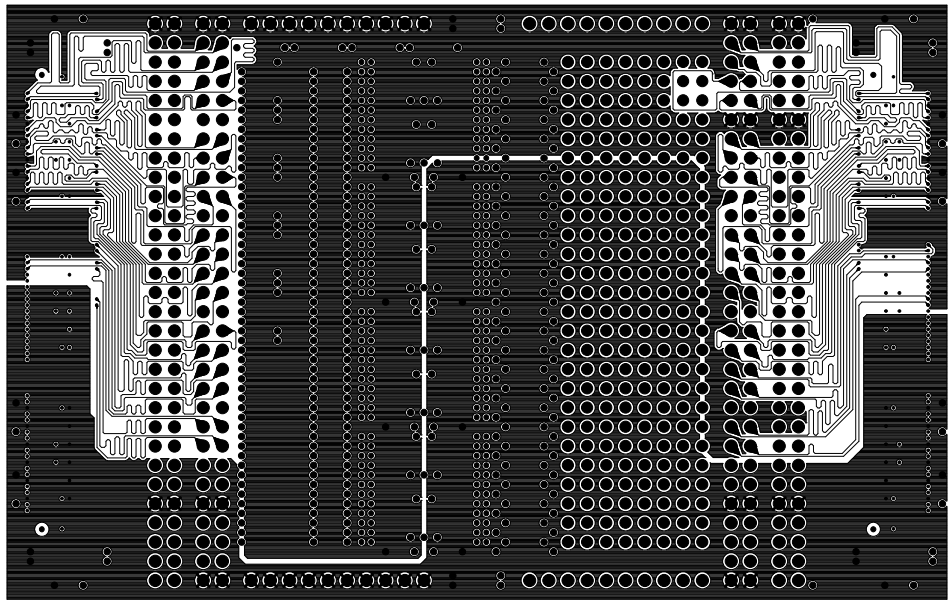


AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PRIMARY COMPONENT SIDE – LAYER 1	



AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: GND PLANE - LAYER 2	



AES		
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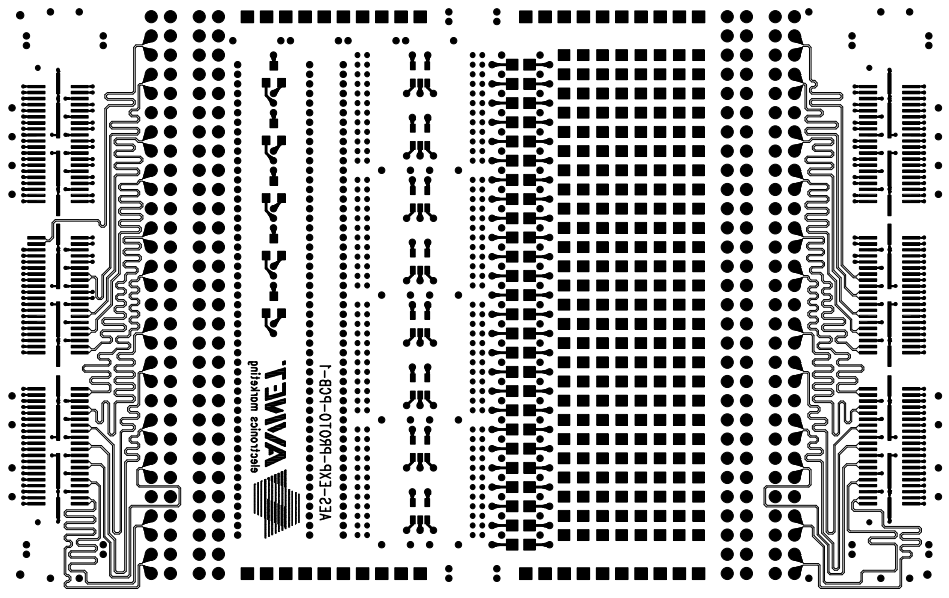
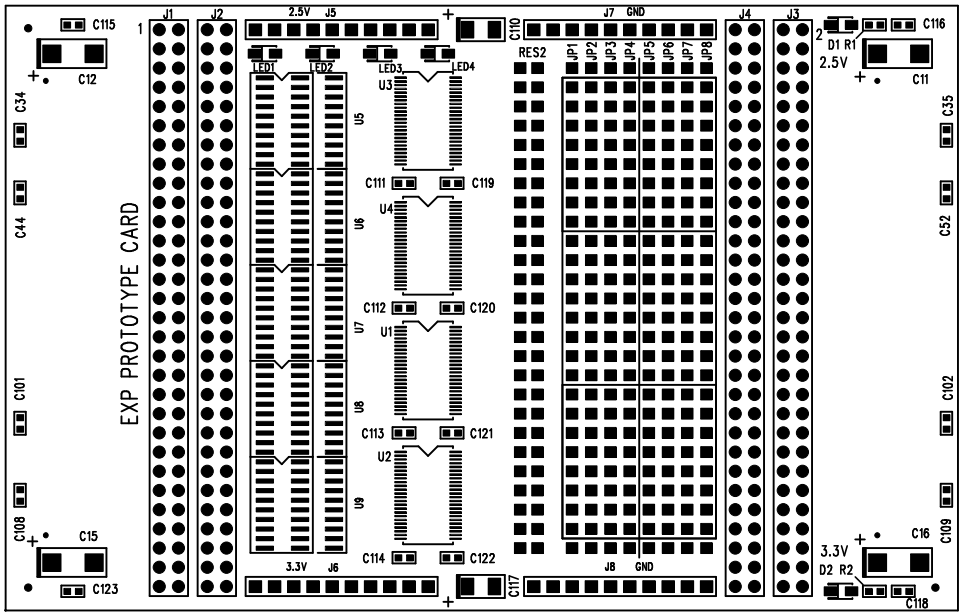
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PWR PLANE – LAYER 3	

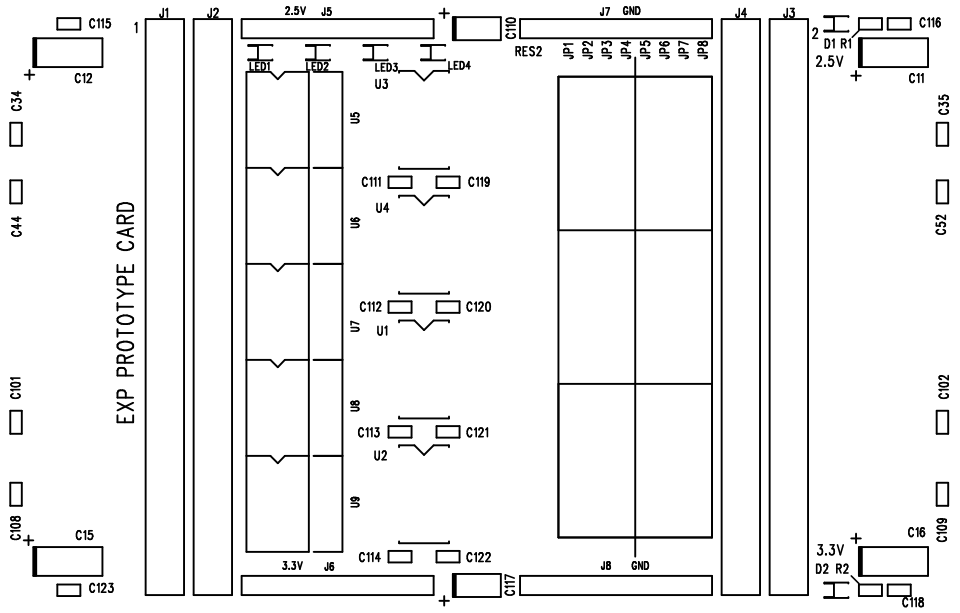


AES	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: SECONDARY COMPONENT SIDE - LAYER 4	



AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PRIMARY SILKSCREEN	

CUSTOMER: AVNET ELECTRONIC MARKETING DATE: SEP-19-06	2EA
TITLE: EXP PROTOTYPE CARD REV: A	
LEVEL: SECONDARY SILKSCREEN	



AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PRIMARY SILKSCREEN	

J1
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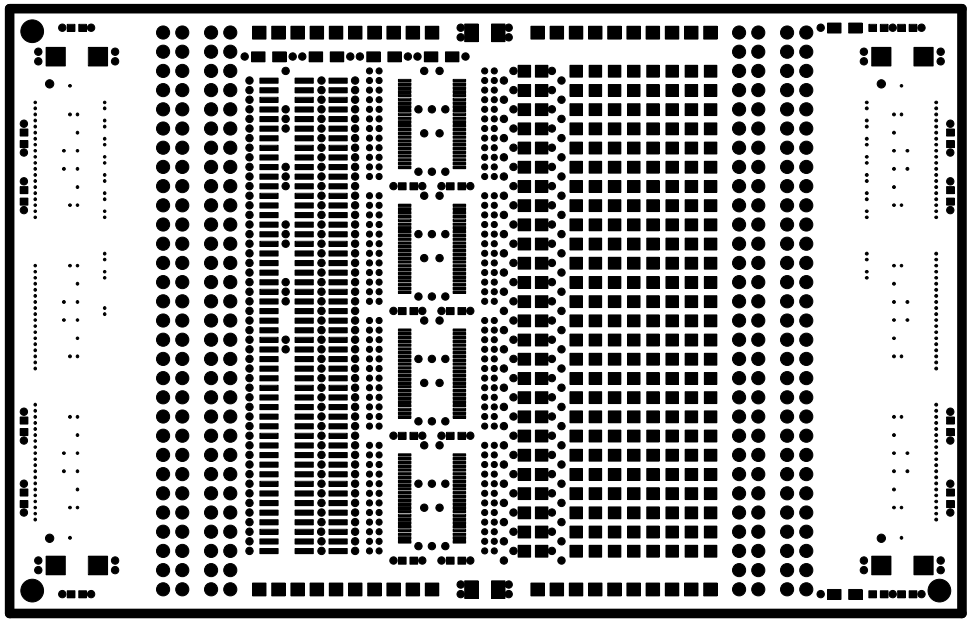

AES		
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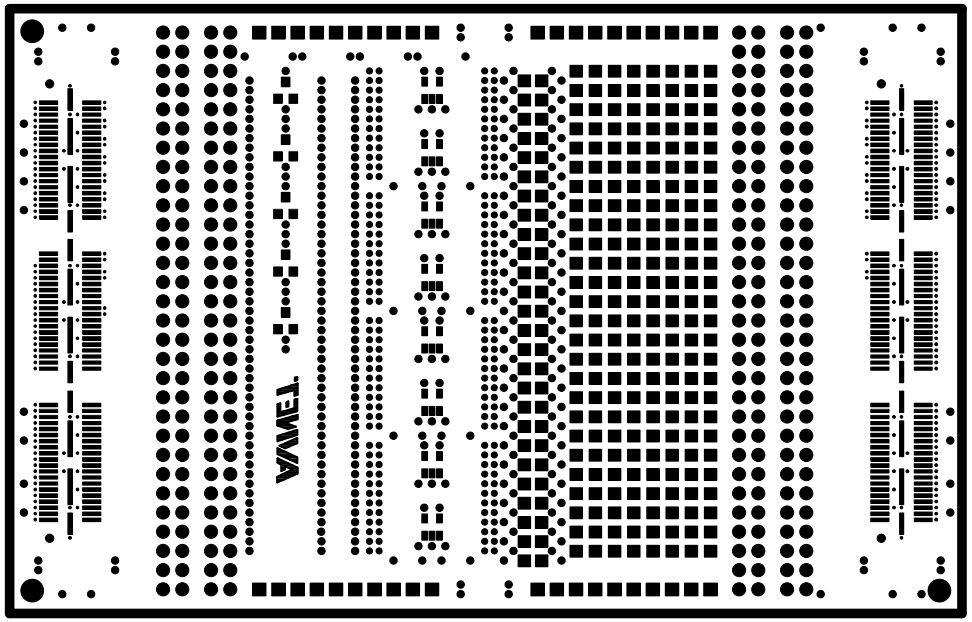
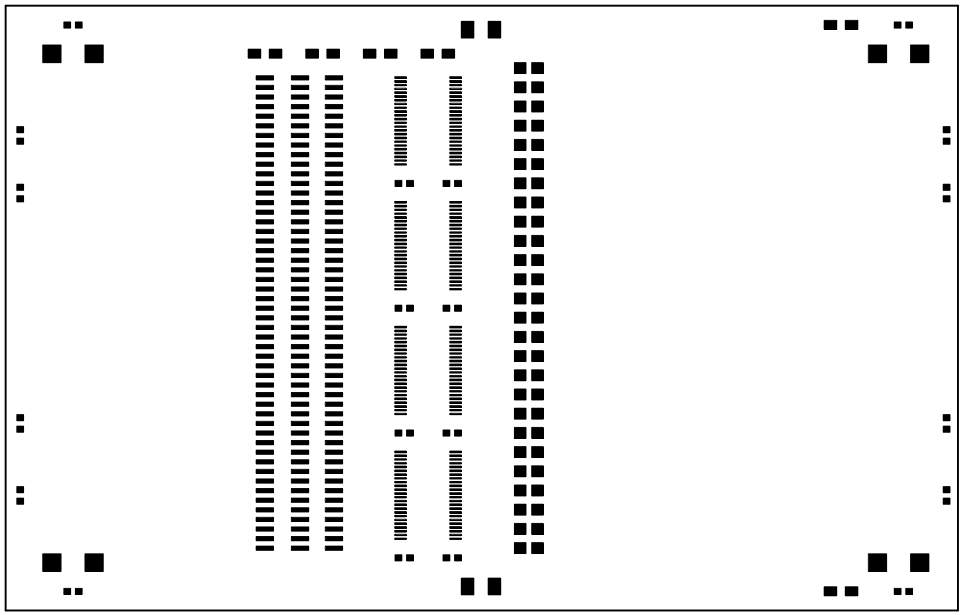
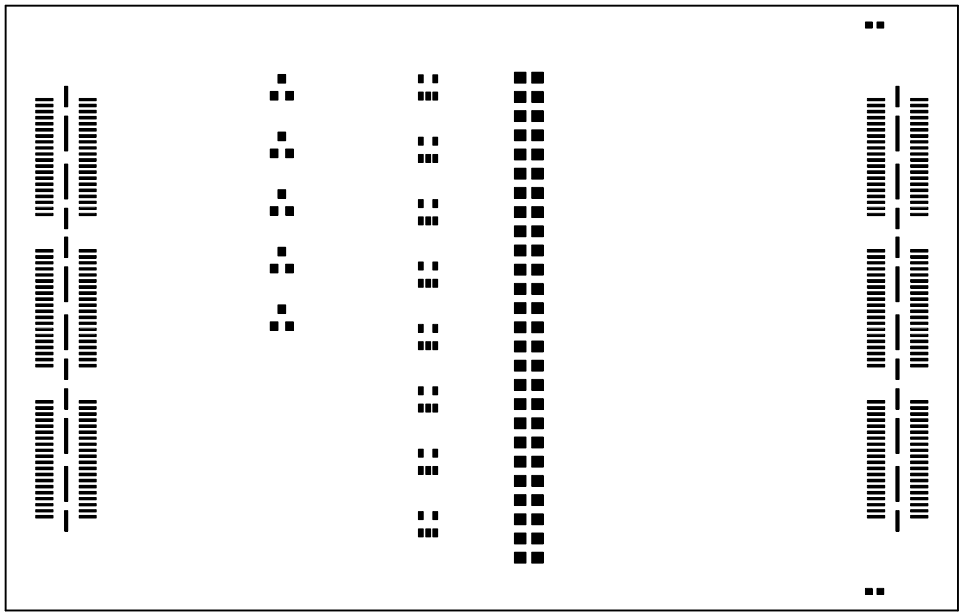
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PRIMARY SOLDER MASK	



AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: SECONDARY SOLDER MASK	



AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: PRIMARY SOLDER PASTE	



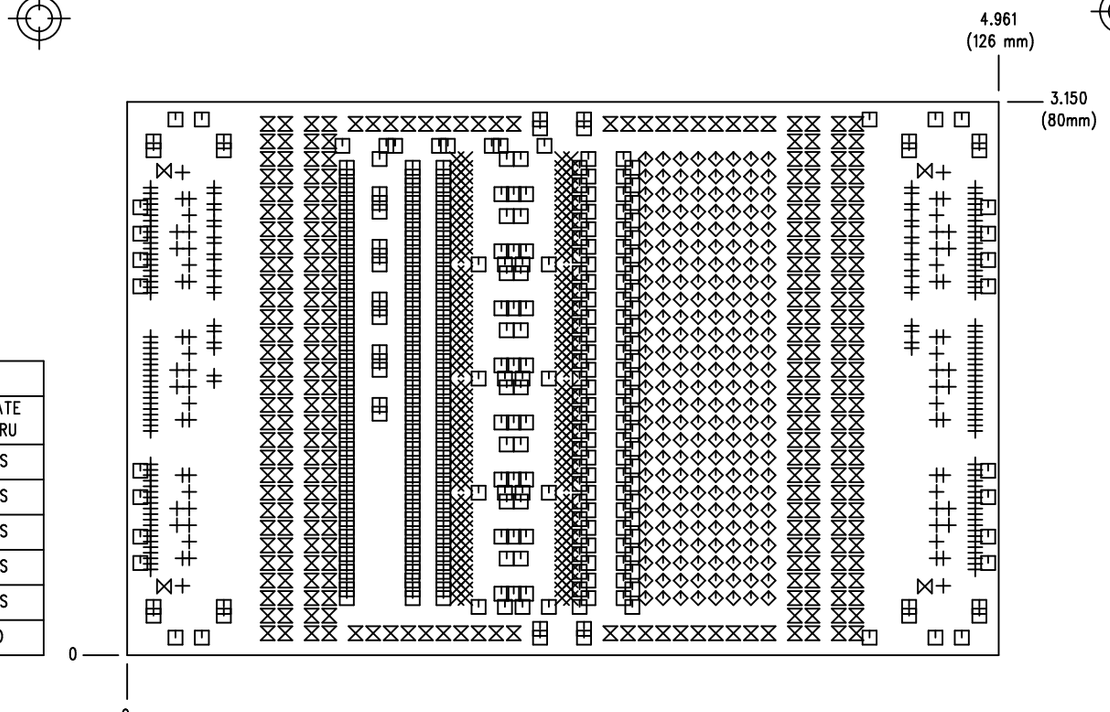
AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: SECONDARY SOLDER PASTE	

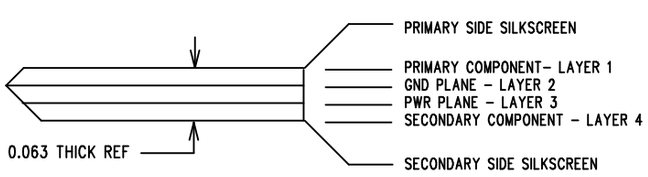
NOTES: UNLESS OTHERWISE SPECIFIED

1. BOARD SHALL BE FABRICATED – PERFORMANCE CLASS II AS PER IPC-6011 AND IPC-6012
2. VENDOR LOGO, VENDOR P/N, REVISION AND DATE CODE OF MANUFACTURING SHALL BE ETCHED ON THE SOLDER SIDE. THE DATE CODE SHALL BE IN THE FORMAT: "WWYY" WHERE WW=WEEK AND YY=YEAR
3. FABRICATE USING FILM "FAB/DRILL IDENT" FOR REFERENCE
4. PERMANENTLY MARK BARE BOARD WITH TEST STAMP USING WHITE, NON-CONDUCTIVE, RoHS COMPLIANT INK
5. SILKSCREEN BOTH SIDES WITH NON-CONDUCTIVE, RoHS COMPLIANT INK, NOT ALLOWED ON COMPONENT PADS, COMPONENT MOUNTING HOLES, OR VIAS (COLOR = WHITE)
6. MATERIAL: PER IPC-4101A/24/26/29/99, COPPER CLAD, HIGH TEMPERATURE FR4 CLASS EPOXY GLASS RATED UL94V-0. MUST BE RoHS COMPLIANT AND SURVIVE A LEAD-FREE ASSEMBLY MAX REFLOW OF 260 DEG C (6 PASSES)
   - Td RATING: > 340 DEG C
   - Z AXIS CTE < 3.5%
   - Tg > 170 DEG C (MIN)
7. SOLDER MASK: SMOBC PER IPC-SM-840C, CLASS T, MUST BE RoHS COMPLIANT, TYPE LPI, 0.0002" MIN TO 0.0008" MAX MEASURED OVER COPPER PLATING, MUST CLEAR ALL LANDS AS INDICATED ON GERBER SOLDER MASK LAYERS, (COLOR = RED)
8. FINISH: ELECTRO-LESS NICKEL IMMERSION GOLD (ENIG), 2-8 MICRO INCHES GOLD OVER 150-250 MICRO INCHES NICKEL
9. SOLDERABILITY TEST: CATEGORY 2 OF J-STD-003
10. ALL TEST POINTS SHALL BE FREE OF SOLDERMASK AND SILKSCREEN
11. ALL HOLE SIZES ARE AFTER PLATING
12. VENDOR MAY USE TEAR DROPS TO IMPROVE ANNULAR RINGS AS LONG AS DRC RULES ARE FOLLOWED
13. FINISHED BOARDS SHALL NOT HAVE NICKS, SCRATCHES, VOIDS, EXPOSED COPPER, POOR PLATING OR MISDRILLED HOLES
14. TIE-BARS ON THERMAL PADS SHOULD BE 15 MILS MINIMUM WIDTH
15. MAKE ALL VIA CONNECTIONS TO POWER AND GROUND PLANES SOLID (IE: THERMALS WITH 25 MIL O.D. OR 45 MIL O.D. SHOULD BE REMOVED FROM INNER PLANE LAYERS)
16. VENDOR MAY ADD COPPER THIEVING AS NEEDED TO IMPROVE MANUFACTURABILITY, THIEVING TO BE 0.030" ROUND PADS AT 0.050" SPACING. THIEVING WILL HAVE A MINIMUM OF 0.100" CLEARANCE FROM EXISTING COPPER AND SHOULD NOT BE PLACED UNDER SURFACE MOUNT DEVICES
17. ALL UNCONNECTED PADS ON INNER SIGNAL LAYERS MUST BE REMOVED
18. ALL FINISHED BOARDS TO BE 100% ELECTRICALLY TESTED
19. UNLESS OTHERWISE INDICATED, ALL LINEAR TOLERANCES SHALL BE XX +/- .010 AND XXX +/- .005

ADDITIONAL NOTES:

20. FINISHED BOARD THICKNESS = 0.063"(+/- 0.007")



HOLE CHART			
DIA AFTER PLATING	QTY	SYM	PLATE THRU
.010 +.001 -.008	220	+	YES
.014 +.001 -.008	192	×	YES
.020 +/- .003	383	□	YES
.035 +/- .003	208	◇	YES
.040 +/- .003	280	⧖	YES
.040 +/- .003	4	⋈	NO

AES		
	CUSTOMER: AVNET ELECTRONIC MARKETING	DATE: SEP-19-06
	TITLE: EXP PROTOTYPE CARD	REV: A
	LEVEL: FAB/DRILL IDENT