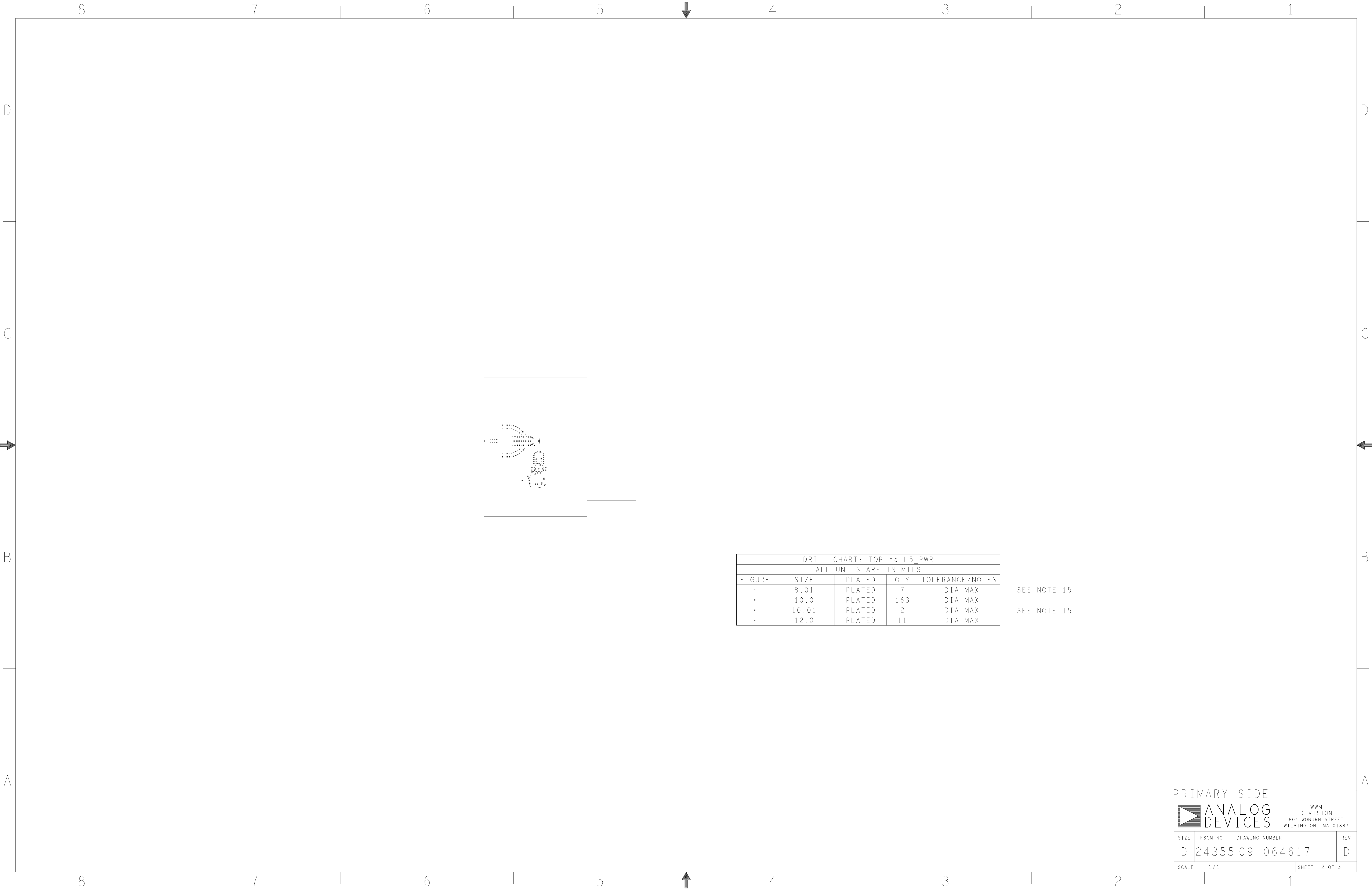


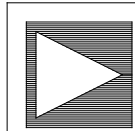


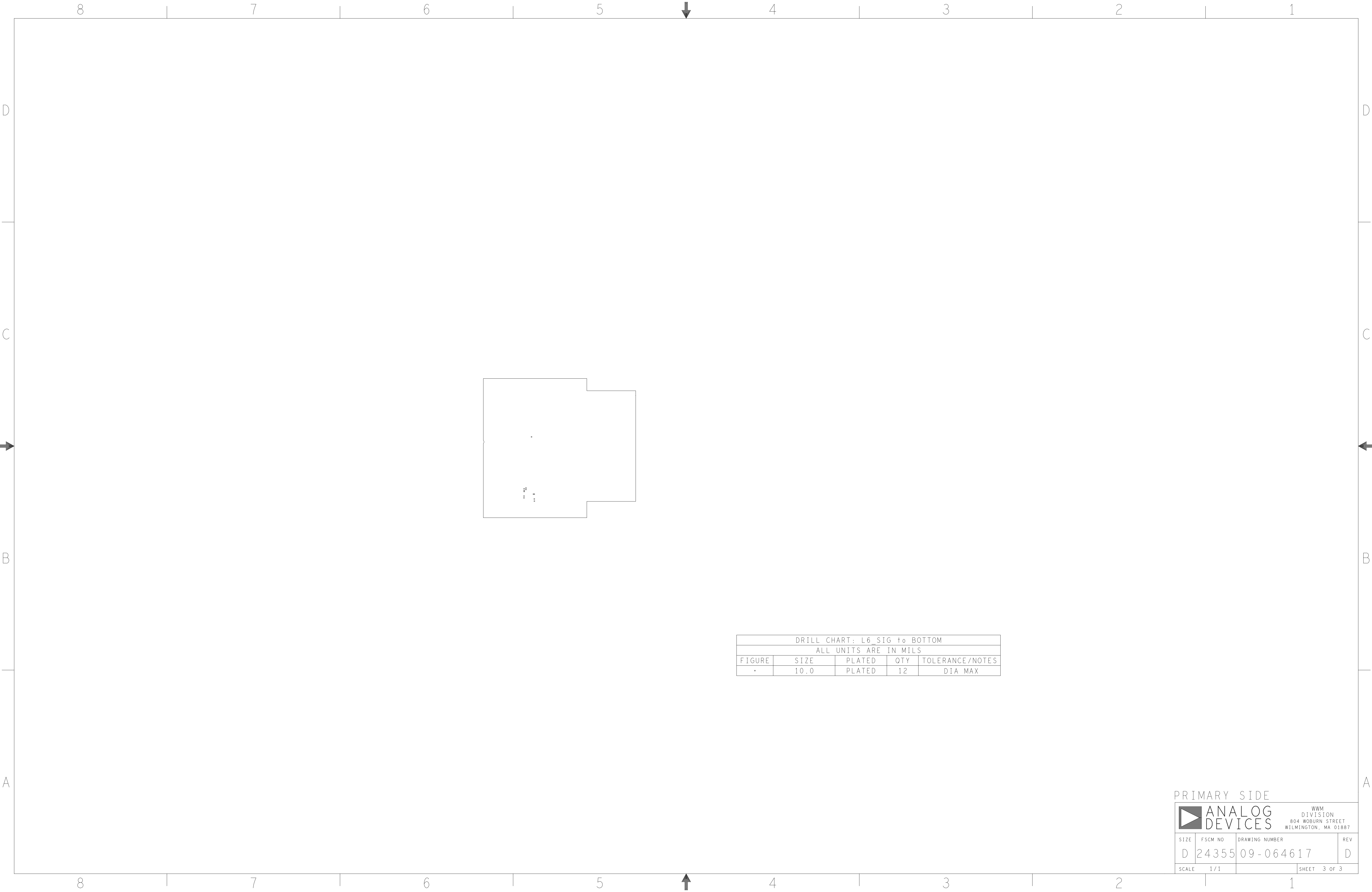
DRILL CHART: TOP to L5_PWR				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
•	8.01	PLATED	7	DIA MAX
•	10.0	PLATED	163	DIA MAX
•	10.01	PLATED	2	DIA MAX
•	12.0	PLATED	11	DIA MAX

SEE NOTE 15

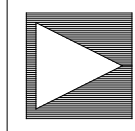
SEE NOTE 15

PRIMARY SIDE

		WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
		SIZE	REV
D	24355	DRAWING NUMBER	D
SCALE	1/1	SHEET	2 OF 3



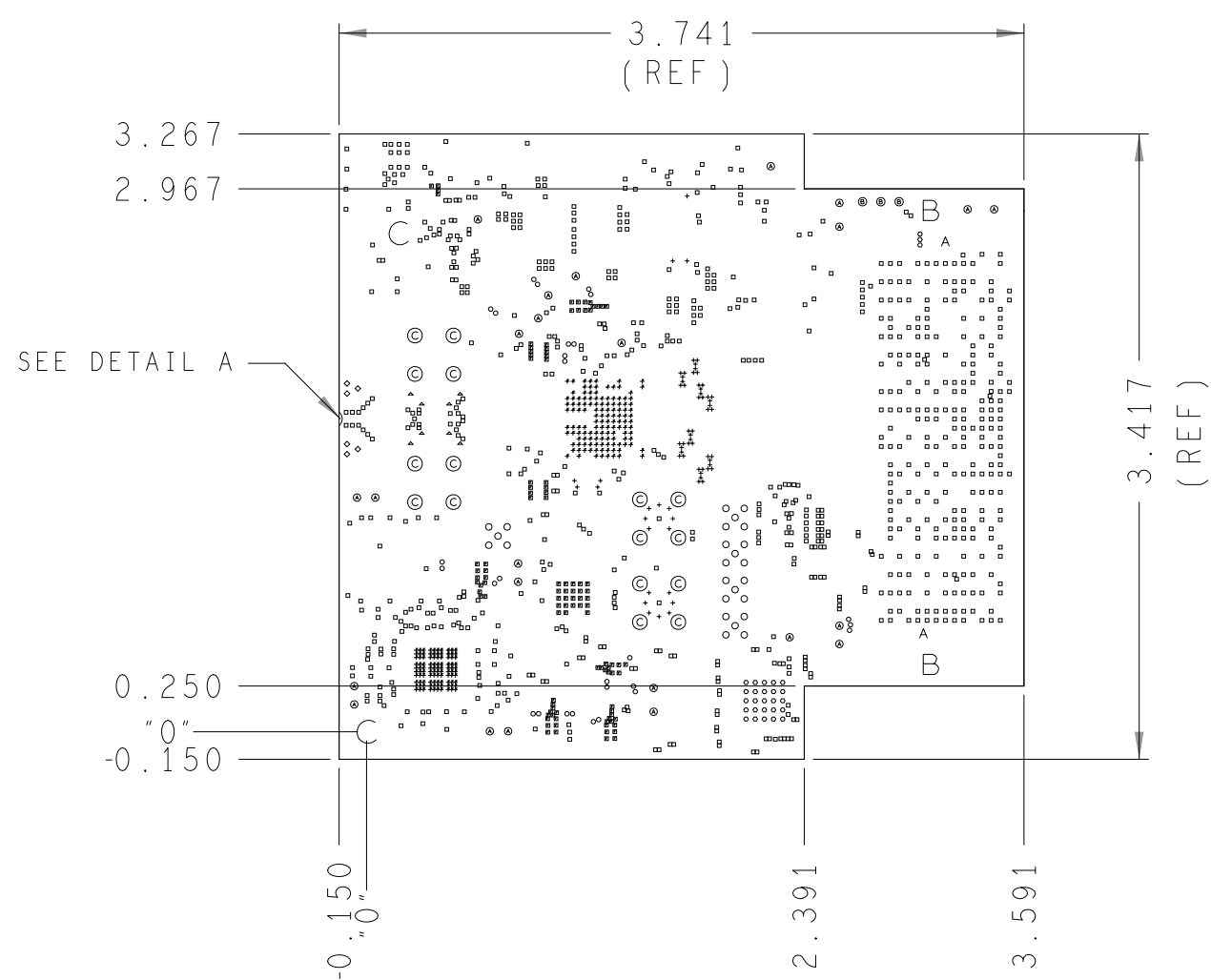
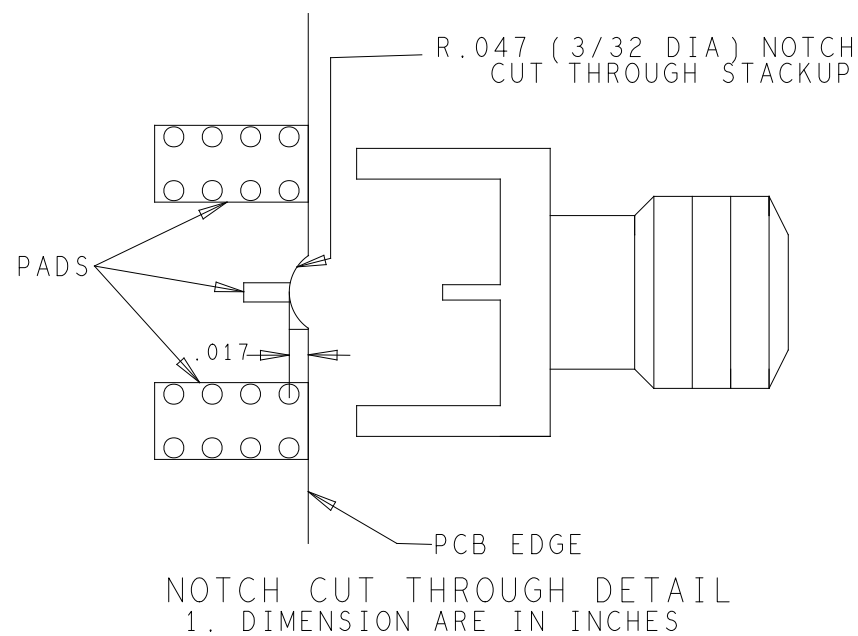
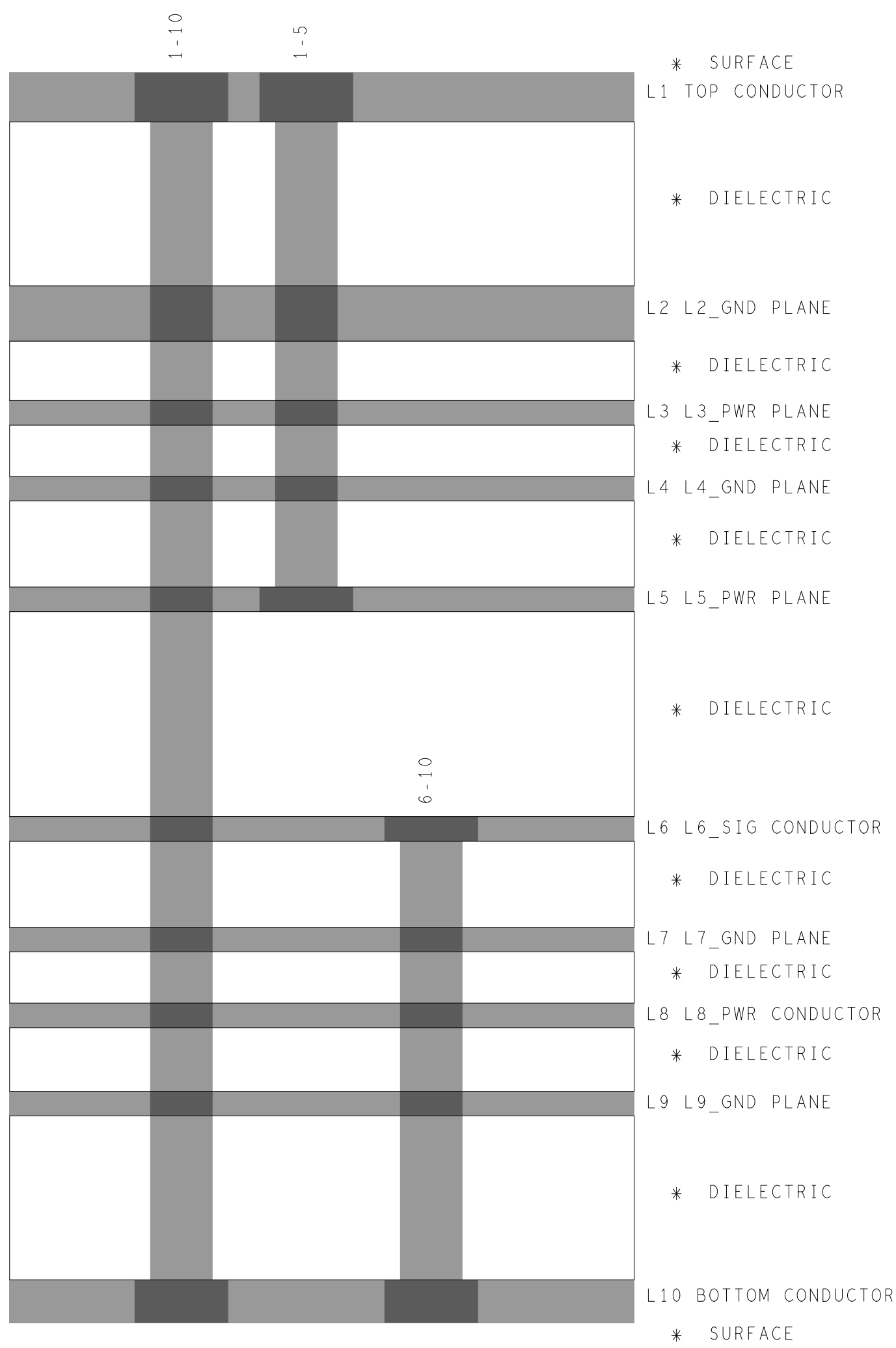
PRIMARY SIDE

ANALOG
DEVICES

WWM
DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
D	24355	09-064617	D
SCALE	1/1	SHEET	3 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08MAY20	P. PASAQUIAN
A1	CHANGES AS PER ECR-100755	29JAN21	P. PASAQUIAN
B	CHANGES AS PER ECR-107917	12MAY22	P. JAYAMOHAN
C	CHANGES AS PER ECR-109208	24JUN22	D. ITO
D	CHANGES AS PER ECR-128114	17OCT25	J. MORENO



HOLE TOLERANCE

UNLESS SPECIFIED
PLATED: +/- 3 MILS
NON PLATED: +/- 2 MILS

IMPEDANCE TABLE

NOTE: ALL IMPEDANCE TOLERANCE +/-10%
SE = SINGLE ENDED, DP = DIFFERENTIAL PAIR

LAYER	IMPEDANCE	REFERENCE	LINE WIDTH	SPACE
L1	50 OHMS SE	L2	14.5 MILS	N/A
L1	100 OHMS DP	L2	5 MILS	6 MILS
L1	100 OHMS DP	L2	5.6 MILS	5.4 MILS
L1	100 OHMS DP	L2	9 MILS	11 MILS
L1	50 OHMS DP	L2	38 MILS	62 MILS
L1	25 OHMS SE	L2	38 MILS	N/A
L6	100 OHMS DP	L7	5.6 MILS	5.4 MILS
L10	100 OHMS DP	L9	5.6 MILS	5.4 MILS
L10	100 OHMS DP	L9	9 MILS	11 MILS

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
•	8.0	PLATED	69	DIA MAX
•	8.01	PLATED	228	DIA MAX; SEE NOTE 15
•	10.0	PLATED	797	DIA MAX
•	10.01	PLATED	106	DIA MAX; SEE NOTE 15
•	12.0	PLATED	28	DIA MAX; SEE NOTE 15
•	16.0	PLATED	28	DIA MAX
•	20.0	PLATED	6	
•	25.0	PLATED	8	
•	35.0	PLATED	25	
•	40.0	PLATED	24	
•	45.0	PLATED	3	
⊙	60.0	PLATED	16	
▲	50.0	NON-PLATED	2	
B	110.0	NON-PLATED	2	
C	125.0	NON-PLATED	2	

SPECIFICATIONS:

ROHS COMPLIANCE NOTE: HOMOGENEOUS MATERIALS IN THIS BOARD SHALL BE COMPLIANT
THE EU RoHS DIRECTIVE 2002/95/EC

MATERIALS; ALL LAMINATES AND BONDING MATERIALS SHOULD BE SELECTED FROM
IPC-4101 OR IPC-4103, MINIMUM T_g>170degC, T_d>300degC,
U.L. RATING OF 94 V-0

MATERIAL FAMILY; FR408HR; EPOXY/GLASS, Tg=180C, Td=370C CTE/Z=220, Df=.012

CLADDING; EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ.
INTERNAL SIGNAL LAYERS .5 OZ. COPPER.
INTERNAL PLANE LAYERS 1 OZ. COPPER.

NOTE: IF THE LAYER STACKUP CONFLICTS WITH THE ABOVE
CLADDING SPECIFICATIONS THEN THE LAYER STACKUP SHALL
TAKE PRECEDENCE.

SOLDER MASK; SHALL BE LIQUID PHOTOIMAGEABLE (LPI) APPLIED ON BOTH SIDES OVER BARE COPPER OR GOLD AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3. COLOR BLUE.

SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR: WHITE
SYNTHETIC INKJET PRINTING ALLOWED FOR DENSE BOARDS,
COLOR: WHITE

SURFACE FINISH; ENIG (ELECTROLESS NICKEL/IMMERSION GOLD)
PER IPC-4552 LATEST REVISION

INTENTIONAL SHORTS; IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN
INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL
IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT
DOES NOT MATCH "READ_ME.2" FILE PROVIDED.

TEST REQUIREMENTS; 100% NETLIST ELECTRICAL VERIFICATION USING CUSTOMER SUPPLIED IPC-D-356 NETLIST FOR OPENS AND SHORTS WHEN "GERBER DATA" IS PROVIDED. THIS VERIFICATION ALSO REQUIRED FOR "ODB++" DATA PER EMBEDDED NETLIST.

REQUIREMENTS:

1. REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
2. ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
3. MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
4. HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.005 INCHES FROM THEIR TRUE POSITION.
5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 INCH BY CROSS SECTION.
6. HOLE DIAMETERS APPLY AFTER PLATING.
7. FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
8. MINIMUM DESIGN LINE WIDTH IS .005 INCH.
9. MINIMUM DESIGN SPACING IS .006 INCH.
10. NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.
11. IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFRG. MAY REQUEST APPROVAL TO TEAR DROP PADS TO MAINTAIN ANNULAR RING. (AT PAD TO TRACE INTERSECTION ONLY AND ELECTRICAL INTEGRITY MUST BE MAINTAINED.)
12. THEIVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - A. THEIVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
 - B. THERE SHALL BE NO THEIVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
13. MFRG. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;
 - A. U.L. CODE-FLAMMABILITY RATING
 - D. MFRG LOGO
 - B. DATE CODE (STAMP).
 - E. SUCCESSFUL ELECTRICAL TEST.
 - C. LOT NUMBER
14. REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED.
15. VIAS FILLED WITH NON-CONDUCTIVE EPOXY AND PLATED OVER. COPLANAR ON BOTH SIDES WITHIN .001 INCH PRIOR TO FINAL PLATING.
16. BOARDS TO BE SHIPPED IN ARRAY AND KEEP INTACT
PANEL TO BE SUBJECTED TO CUSTOMER'S APPROVAL.
PANELED SOLDER PASTE STENCIL SHOULD BE SENT TO THE CUSTOMER.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVAL	DATE	 ANALOG DEVICES		HSX DIVISION	
TOLERANCES		TEMPLATE ENGINEER N/A				804 WOBURN STREET WILMINGTON, MA 01887	
DECIMALS	FRACTIONS	ANGLES		 TITLE FABRICATION AD9213 CUSTOMER EVAL Z			
XX . . .010	-- 1/32	-- 2					
XXX . . .005			08MAY20				
XXXX . . .0050							
MATERIAL		TEST ENGINEER N/A					
		COMPONENT ENGINEER M. TAN	08MAY20				
		TEST PROCESS N/A					
		HARDWARE RELEASE K. JIBATAN	08MAY20				
FINISH		DESIGNER J. PACAMARRA	08MAY20	SIZE	FSCM NO	DRAWING NUMBER	REV
		PTD ENGINEER P. PASAQUIAN	08MAY20	D	24355	09-064617	D
		CHECKER N/A					
DO NOT SCALE DWG				SCALE	1/1	SHEET 1 of 3	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVAL	DATE	 ANALOG DEVICES		HSX DIVISION	
TOLERANCES	TEMPLATE ENGINEER N/A				804 WOBURN STREET WILMINGTON, MA 01887	
DECIMALS FRACTIONS ANGLES	HARDWARE SERVICES M. VALE	08MAY20	TITLE	FABRICATION		
XX . . .010 +-1/32 +- .2	HARDWARE SYSTEMS N/A					
XXX . . .005						
XXXX . . .0050						
MATERIAL	TEST ENGINEER N/A		AD9213 CUSTOMER EVAL Z			
	COMPONENT ENGINEER M. TAN	08MAY20				
	TEST PROCESS N/A					
	HARDWARE RELEASE K. JIBATAN	08MAY20				
FINISH	DESIGNER J. PACAMARRA	08MAY20	SIZE	FSCM NO	DRAWING NUMBER	REV
	PTD ENGINEER P. PASAQUIAN	08MAY20	D	24355	09-064617	D
	CHECKER N/A					
DO NOT SCALE DWG			SCALE	1/1		SHEET 1 of 3