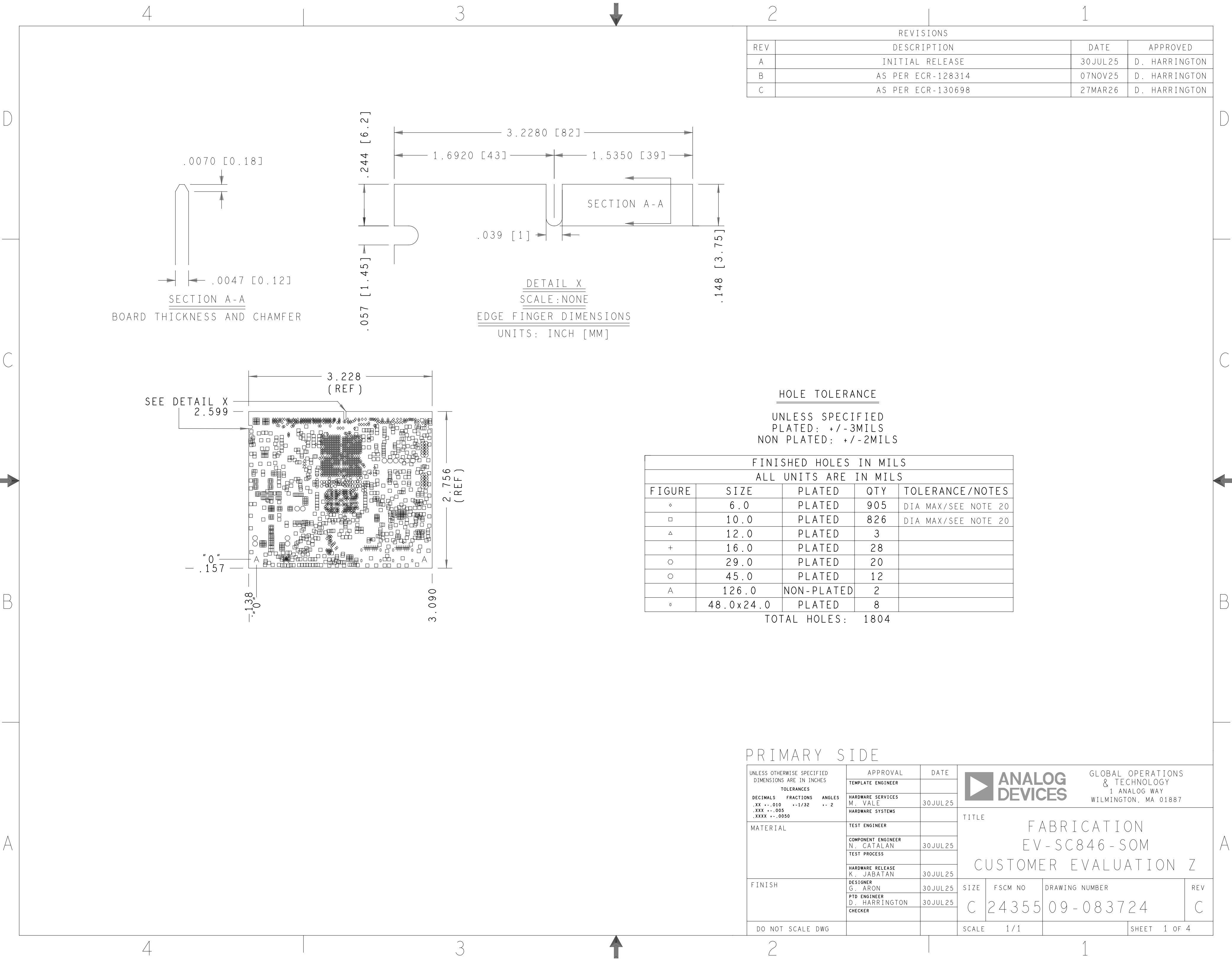




REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	30JUL25	D. HARRINGTON
B	AS PER ECR-128314	07NOV25	D. HARRINGTON
C	AS PER ECR-130698	27MAR26	D. HARRINGTON

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
◊	6.0	PLATED	905	DIA MAX/SEE NOTE 20
◻	10.0	PLATED	826	DIA MAX/SEE NOTE 20
△	12.0	PLATED	3	
+	16.0	PLATED	28	
○	29.0	PLATED	20	
○	45.0	PLATED	12	
A	126.0	NON-PLATED	2	
◊	48.0x24.0	PLATED	8	

TOTAL HOLES: 1804

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE	 GLOBAL OPERATIONS & TECHNOLOGY 1 ANALOG WAY WILMINGTON, MA 01887		
TOLERANCES			TEMPLATE ENGINEER					
DECIMALS	FRACTIONS	ANGLES	HARDWARE SERVICES	M. VALE	30JUL25	TITLE FABRICATION EV-SC846-SOM CUSTOMER EVALUATION Z		
.XX --.010	--1/32	-- 2	HARDWARE SYSTEMS					
.XXX --.005			TEST ENGINEER					
.XXXX --.0050			COMPONENT ENGINEER		30JUL25			
MATERIAL			N. CATALAN					
			TEST PROCESS					
			HARDWARE RELEASE		30JUL25			
			K. JABATAN					
FINISH			DESIGNER	G. ARON	30JUL25	SIZE	FSCM NO	DRAWING NUMBER
			PTD ENGINEER	D. HARRINGTON	30JUL25	C	24355	09-083724
			CHECKER					REV
								C
DO NOT SCALE DWG						SCALE	1/1	SHEET 1 OF 4

NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
ALL DOCUMENTS & SPECIFICATIONS REFERRED TO BELOW SHOULD BE THE LATEST REVISIONS.

MATERIAL: HOMOGENOUS MATERIALS IN THIS BOARD SHALL BE COMPLIANT WITH THE EU DIRECTIVE 2002/95/EC

2. BOARD MATERIAL:(USE CHECKED ITEMS)
- (X) ISOLA 370HR OR S1000-2 OR IT180 OR EQUIVALENT
() ISOLA-FR408HR OR EQUIVALENT
() ISOLA 15410
() MEGTRON 6
() NELCO-4000-13
() ROGERS 4350B
() ROGERS 3003
() ARLON 85N
() EM370D
() OTHER _____
3. ALL LAMINATES & BONDING MATERIALS SHOULD BE SELECTED FROM IPC-4101 OR IPC-4103,(TG<170 DEG C TD>300 DEG C)
UL FLAMMABILITY RATING 94V-0. BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF UL796/UL796F.
4. REFER TO IPC-6010 SERIES, CLASS 2 FOR FABRICATION. WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2.
5. REFER TO LAMINATION DIAGRAM FOR OVERALL BOARD THICKNESS, TOLERANCE APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES. FINISHED THICKNESS MEASURED FROM TOP COPPER TO BOTTOM COPPER.
6. BOW & TWIST NOT TO EXCEED 0.0075 INCHES (0.75%) PER LINEAR INCH AND SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.22.
7. ACCEPTABILITY PER ADI SPECIFICATION TST00115.

TOOLING:

8. IMPEDANCE REQUIREMENTS: IF NO STACKUP IS DEFINED, THE VENDOR IS ALLOWED TO ADJUST THE DIELECTRIC THICKNESS & TRACE WIDTHS TO MEET THE IMPEDANCE REQUIREMENT. IF SPECIFIED, THE VENDOR MUST MEET THE REQUIREMENTS LISTED IN THE IMPEDANCE TABLE. ANY ADJUSTMENT MADE TO THE DEFINED STACKUP, TRACE WIDTH & SPACING THAT IMPACT THE REQUIREMENTS MUST HAVE WRITTEN APPROVAL FROM ADI.
9. FILLET OPTIONS TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS.
() FILLETS ALLOWED
(X) FILLETS NOT ALLOWED
10. THIEVING:
() VENDOR MAY ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS MAINTAINING A MINIMUM 0.100 INCH CLEARANCE FROM ALL COPPER FEATURES.
(X) VENDOR MAY NOT ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS.
11. LAYER TO LAYER REGISTRATION SHALL BE WITHIN 0.003 INCHES.

FINISH:

12. DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN 0.005 INCHES DTP,UNLESS SPECIFIED.
MINIMUM BARREL PLATING OF 0.001 INCHES. PLATED HOLES SHALL NOT BE ROUGH OR IRREGULAR SO AS TO HINDER PROPER SOLDER WICKING. BARREL RELIEF ON SOLDERMASK ALLOWED IN UNFILLED VIA IN PAD HOLES.
13. PLATING SPECIFICATION:
(X) REFER TO LAMINATION DIAGRAM FOR FINISHED COPPER WEIGHT/THICKNESS REQUIRMENTS
THE STARTING COPPER WEIGHT/THICKNESS CAN VARY AS LONG AS THE FINISHED COPPER WEIGHT/THICKNESS IS NOT LESS THAN THE SPECIFIED VALUE.
14. SURFACE FINISH:
(X) IMMERSION GOLD (ENIG) 1.58-3.94 MICRO INCHES OVER 118-236 MICRO INCHES MIN. OF ELECTROLESS NICKEL PER IPC-4552
() OSP (ORGANIC SOLDERABILITY PRESERVATIVE)
() IMMERSION SILVER
() SOFT WIRE BONDABLE GOLD 30-50 MICRO INCHES OF SOFT WIRE
BONDABLE GOLD OVER 100-150 MICRO INCHES OF NICKEL
(X) EDGE CONNECTOR FINGERS ARE TO BE PLATED WITH 100 MICRO-INCHES(.0001") OF LOW STRESS NICKEL UNDER 30 MICRO-INCHES (.0003") OF GOLD
() OTHER _____
15. SOLDERMASK:
SOLDERMASK OVER BARE COPPER OR BARE GOLD (BOTH SIDES) TO MEET IPC-SM-840.
IF PRESENT,DO NOT MODIFY SOLDERMASK DEFINED PADS (MASK OPENINGS LESS THAN COPPER PAD) WITHOUT APPROVAL.
(X) LPI
() OTHER _____
COLOR
() GREEN
(X) OTHER: BLUE
16. APPLY SILKSCREEN TO BOTH SIDES USING A NON-CONDUCTIVE, EPOXY BASED INK PER ARTWORK.
(X) WHITE
() OTHER

IMPEDANCE TABLE (RFQ ONLY)				
IMPEDANCE TOLERANCE: +/-10%				
LAYER	40 OHM TRACE WIDTH	50 OHM TRACE WIDTH	76 OHM TRACE WIDTH/SPACE	90 OHM TRACE WIDTH/SPACE
TOP	-	0.00550	-	0.00525/0.00475
L3_SIG1	0.00430	0.00450	0.00420/0.00400	-
L5_SIG2	0.00430	0.00450	0.00420/0.00400	-
L8_SIG3	0.00430	0.00450	0.00420/0.00400	-
L10_SIG4	0.00430	0.00450	0.00420/0.00400	-
BOTTOM	-	0.00550	-	0.00525/0.00475

NOTE: DO NOT EDIT THIS TABLE MANUALLY,USE IMPEDANCE TABLE GENERATOR FROM ADI Tools.

TESTING:

17. FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-D-356A NETLIST OR ODB++ FORMAT FILE.
THE PCB SHALL HAVE A VERIFICATION STAMP.
18. A TIME DOMAIN REFLECTOMETER REPORT (TDR) FOR EACH IMPEDANCE CONTROLLED LAYER & A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT. INSTANCES WHERE TDR TESTING CAN'T BE PERFORMED BECAUSE THE TRACE LENGTH IS TOO SHORT ON THE OUTER LAYERS AT THE PIN ESCAPES IS ACCEPTABLE. ALL OTHER INSTANCES MUST BE REPORTED.

MISCELLANEOUS:

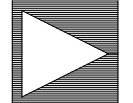
19. IF PRESENT, ALL BLIND/BURIED VIAS WITH AN ASPECT RATIO <1:1 TO BE PLATED SHUT WITH COPPER WHEN USED AS VIA-IN-PAD OR AS A STACKED VIA. BLIND/BURIED VIAS WITH AN ASPECT RATIO >1:1 TO BE FILLED WITH NON-CONDUCTIVE EPOXY.
20. FOR VIA FILL INFORMATION REFER TO DRILL CHART:
(X) NON-CONDUCTIVE EPOXY FILL ALL 0.006 AND 0.010 INCHES DRILLED VIAS
() COPPER FILL ALL 0.XXXX INCHES DRILLED VIAS
21. INTENTIONAL SHORTS:
IF AN INTENTIONAL SHORT REPORT IS SUPPLIED AND DOES NOT MATCH THE FAB DATA THEN ADI APPROVAL IS REQUIRED.
22. PEMNUTS:
() PEMNUTS TO BE INSTALLED BY FABRICATOR
() PEMNUTS NOT TO BE INSTALLED BY FABRICATOR
(X) NOT APPLICABLE
23. MANUFACTURER TO ETCH/STAMP WITH PERMANENT NON-CONDUCTIVE INK
ON SECONDARY SIDE UNLESS OTHERWISE SPECIFIED:
A. UL CODE-FLAMMABILITY RATING FOR THOSE APPROVED MATERIALS(IF APPLICABLE)
B. DATE CODE
C. LOT NUMBER
D. MANUFACTURER LOGO
24. PANELIZATION:
BOARDS TO BE SHIPPED IN ARRAY AND KEPT INTACT
PANEL TO BE SUBJECTED TO CUSTOMERS APPROVAL
PANEL SOLDER PASTE STENCIL GERBER TO BE PROVIDED TO ANALOG
25. MINIMUM DESIGN LINE WIDTH IS .0042 INCHES.
26. MINIMUM DESIGN SPACING IS .004 INCHES.

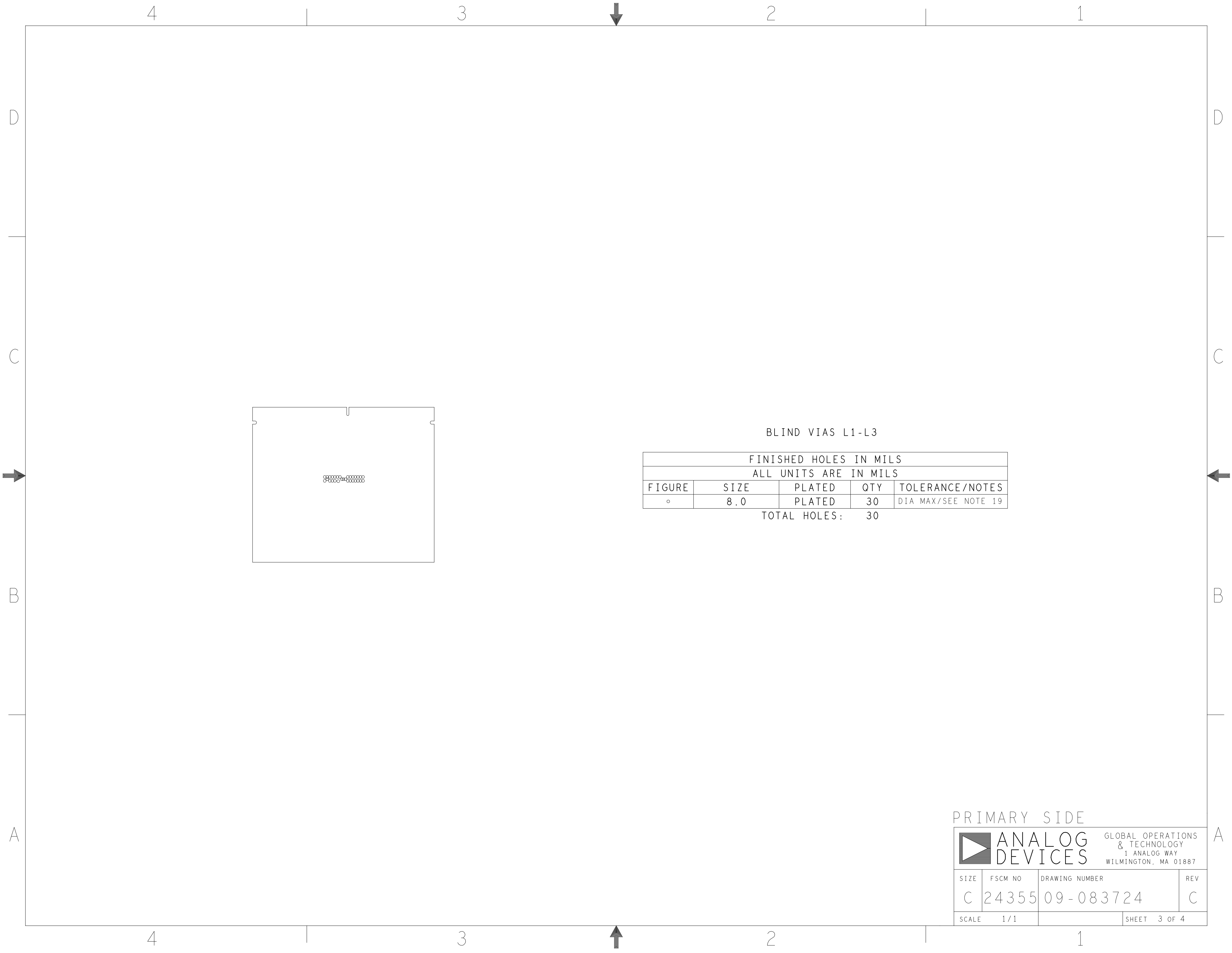
FAB NOTES REVISION: 2ND NOVEMBER 2022

12-LAYER STACKUP				
LAMINATION DIAGRAM				
LAYER NUMBER	LAYER NAME	COPPER THICKNESS (OZ, INCH)	DIELECTRIC THICKNESS (INCH)	MATERIALS
1	TOP	1 OZ, 0.0014" MIN		FINAL CU (THICKNESS AFTER PLATING)
			TBD	ISOLA 370HR/EQUIVALENT
2	L2_GND	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
3	L3_SIG1	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
4	L4_GND	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
5	L5_SIG2	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
6	L6_PWR1	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
7	L7_PWR2	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
8	L8_SIG3	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
9	L9_GND	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
10	L10_SIG4	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
11	L11_GND	0.5 OZ, 0.0007"		CU CLAD
			TBD	ISOLA 370HR/EQUIVALENT
12	BOTTOM	1 OZ, 0.0014" MIN		FINAL CU (THICKNESS AFTER PLATING)

THE FINISHED PCB THICKNESS TO BE: 0.047" +/-8.5%

PRIMARY SIDE

 ANALOG DEVICES	GLOBAL OPERATIONS & TECHNOLOGY 1 ANALOG WAY WILMINGTON, MA 01887		
	SIZE	FSCM NO	DRAWING NUMBER
C	24355	09-083724	REV C
SCALE	1/1	SHEET 2 OF 4	

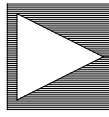


BLIND VIAS L1-L3

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	8.0	PLATED	30	DIA MAX/SEE NOTE 19

TOTAL HOLES: 30

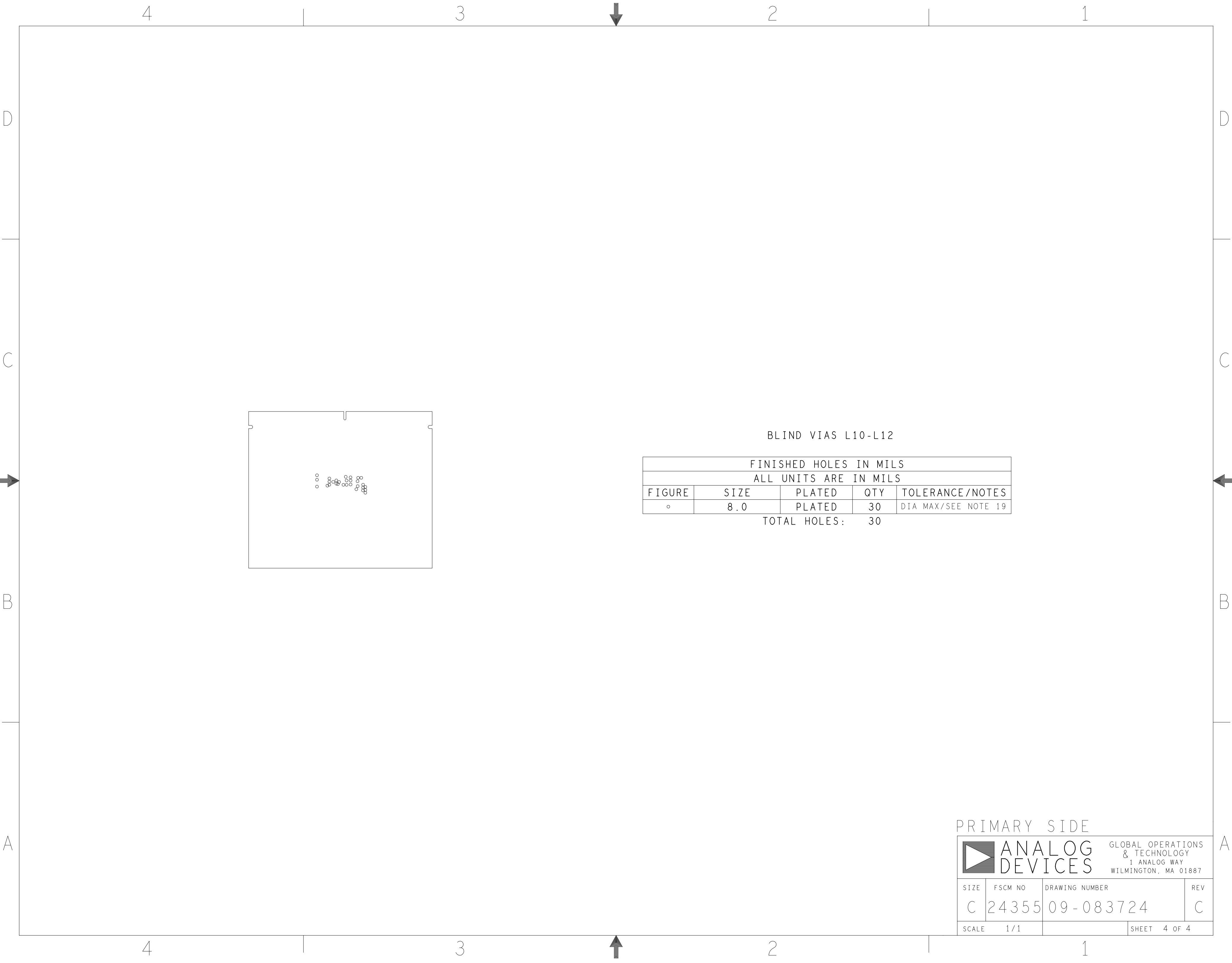
PRIMARY SIDE



GLOBAL OPERATIONS
& TECHNOLOGY

1 ANALOG WAY
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-083724	C
SCALE	1/1	SHEET 3 OF 4	

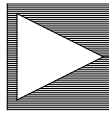


BLIND VIAS L10-L12

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	8.0	PLATED	30	DIA MAX/SEE NOTE 19

TOTAL HOLES: 30

PRIMARY SIDE



ANALOG
DEVICES

GLOBAL OPERATIONS
& TECHNOLOGY
1 ANALOG WAY
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-083724	C
SCALE	1 / 1	SHEET 4 OF 4	