

PLATED: +/- 0.07mm  
HOLE TOLERANCE  
UNLESS SPECIFIED  
NON PLATED: +/- 0.05mm

DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILLIMETERS			
FIGURE	FINISHED SIZE	PLATED	QTY
•	0.2032	PLATED	11 MAX TOL
•	0.254	PLATED	195 MAX TOL
•	0.4064	PLATED	338 MAX TOL
•	0.9906	PLATED	12 MAX TOL
•	1.016	PLATED	5
•	1.6002	PLATED	8
•	1.905	PLATED	4
•	2.1082	PLATED	12
•	0.7112	NON-PLATED	1
•	1.0922	NON-PLATED	1
•	3.175	NON-PLATED	2

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09NOV2018	S.BROOKES

NOTES:

ACCEPTABILITY; PER ANALOG DEVICES, INC. SPECIFICATION TST00115 LATEST REVISION.

MATERIALS; ROGERS 4003(8 MILS) AND RF4 COMPOSITE FOR RF BUILD. SEE LAYER STACK-UP FOR MORE DETAIL.

BONDING AGENT; PREIMPREGNATED B STAGE EPOXY GLASS CLOTH IN ACCORDANCE WITH IPC-L-109 (LATEST REV.).

CLADDING; EXTERNAL LAYERS 1/2 OZ. AFTER PLATING 53UM TOTAL. INTERNAL SIGNAL LAYERS 1 OZ COPPER. INTERNAL PLANE LAYERS 1 OZ COPPER.

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

SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR WHITE.

U.L. RATING; 94VO MINIMUM. WAIVED FOR ROGERS MATERIAL.

- FABRICATION:
- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
  - UNDIMENSIONED HOLES TO BE LOCATED WITHIN +/- .005 OF THEIR TRUE POSITION WITH RESPECT TO ARTWORK.
  - PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
  - HOLE DIAMETERS APPLY AFTER PLATING.
  - FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL, INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
  - MINIMUM DESIGN LINE WIDTH IS .008 INCH.
  - MINIMUM DESIGN SPACING IS .008 INCH.
  - BOARD/PANEL MUST MEET IPC-A-600 (LATEST REV.) CLASS 2 FOR FLATNESS.
  - MFGR. 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(N/A) D. MFGR. LOGO - DESIGNATED AREA, B. DATE CODE (STAMP) E. SUCCESSFUL ELECTRICAL BOARD TEST. C. FLAMMABILITY RATING F. LOT NUMBER - DESIGNATED AREA.
  - NON-FUNCTIONAL PADS MAY BE REMOVED FROM INNER SIGNAL LAYERS AT MFGR. DISCRETION.
  - IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFGR. MAY TEAR DROP PADS TO MAINTAIN ANNULAR RING AT PAD TO CIRCUIT INTERFACE ONLY AND MUST INSURE ELECTRICAL INTEGRITY. REPAIRS PER IPC-R-700 ARE ALLOWED.
  - MODIFICATIONS TO THE ARTWORK, OTHER THAN THOSE DESCRIBED ON THE FABRICATION DRAWING, ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
  - SURFACE FINISH TOP AND BOTTOM IS ENIG.
  - FINISHED BOARD MUST BE ROHS COMPLIANT.
  - NOTE THE 16 HOLES AT THE EDGE OF THE BOARD THAT WILL BE A HALF MOON AND PLATED.
  - NOTE THE TOLERANCE ON THE THICKNESS IS CRITICAL BECAUSE OF THE SIDE LAUNCH SMA'S. THE BOARD MUST NOT BE ABOVE 0.061" THICK.

## 4 LAYER STACKUP


PRIMARY SILKSCREEN	
PRIMARY SOLDER MASK	
LYR 1 - SIG 50ohm(TOP)- [Start Cu=17um. After Plating=53um or 1.5oz]	8mil ROGERS 4003
LYR 2 - GND Plane - [Cu = 17um]	CORE FR4
LYR 3 - PWR Plane - [Cu = 17um]	8mil ROGERS 4003
LYR 4 - SIG (BOT)- [Start Cu=17um. After Plating=53um]	
SECONDARY SOLDER MASK	
SECONDARY SILKSCREEN	

CHARACTERISTIC IMPEDANCE ON LAYER 1 : IMPEDANCE CALCULATIONS ARE WITHOUT SOLDERMASK.

A.--> 50 OHM SINGLE ENDED CO-PLANAR WAVEGUIDE (+/-5%).  
0.38mm TRACE WIDTH, GAP TO GROUND PLANE ON LAYER 1 = 0.2mm EITHER SIDE

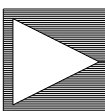
B.--> 100 OHM DIFFERENTIAL (+/-5%). LINE WIDTH = 0.152mm.(ADJUST IF NECESSARY).  
SEPARATION BETWEEN PAIRS = 0.127mm.

## PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.010 --1/32 -- 2 .XXX -.005 .XXX -.0050	APPROVAL EVAL ENGINEER IAN COLLINS	DATE 09NOV18	<div>ANALOG DEVICES</div> <div>WWM DIVISION RAHEEN INDUSTRIAL PARK LIMERICK IRELAND</div>			
	HARDWARE SERVICES PAT SHEAHAN	09NOV18				
	CHECKED IAN COLLINS	09NOV18				
	APPROVED IAN COLLINS	09NOV18				
MATERIAL	PCB DESIGN ENGINEER PAT SHEAHAN	09NOV18	TITLE FABRICATION EV-ADF4372SD2Z			
FINISH						
DO NOT SCALE DWG			SIZE	FSCM NO 24355	DRAWING NUMBER 09-051000	REV B
			SCALE	1/1	SHEET 1 OF 2	

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A	INITIAL RELEASE	09NOV2018	S.BROOKES

DRILL CHART: TOP to GROUND			
ALL UNITS ARE IN MILLIMETERS			
FIGURE	FINISHED SIZE	PLATED	QTY
.	0.254	PLATED	630

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE				ANALOG DEVICES		WWW DIVISION RAHEEN INDUSTRIAL PARK LIMERICK IRELAND			
TOLERANCES			EVAL ENGINEER IAN COLLINS		09NOV18		TITLE  FABRICATION  EV - ADF4372SD2Z							
DECIMALS   FRACTIONS   ANGLES			HARDWARE SERVICES PAT SHEAHAN		09NOV18									
XX .0010   --1/32   -- 2			CHECKED IAN COLLINS		09NOV18									
.XXX --.005			APPROVED IAN COLLINS		09NOV18									
.XXXX --.0050			PCB DESIGN ENGINEER PAT SHEAHAN		09NOV18									
MATERIAL														
FINISH												SIZE  24355		FSCM NO  09-051000
DO NOT SCALE DWG							SCALE   1 / 1				SHEET   OF 2			