

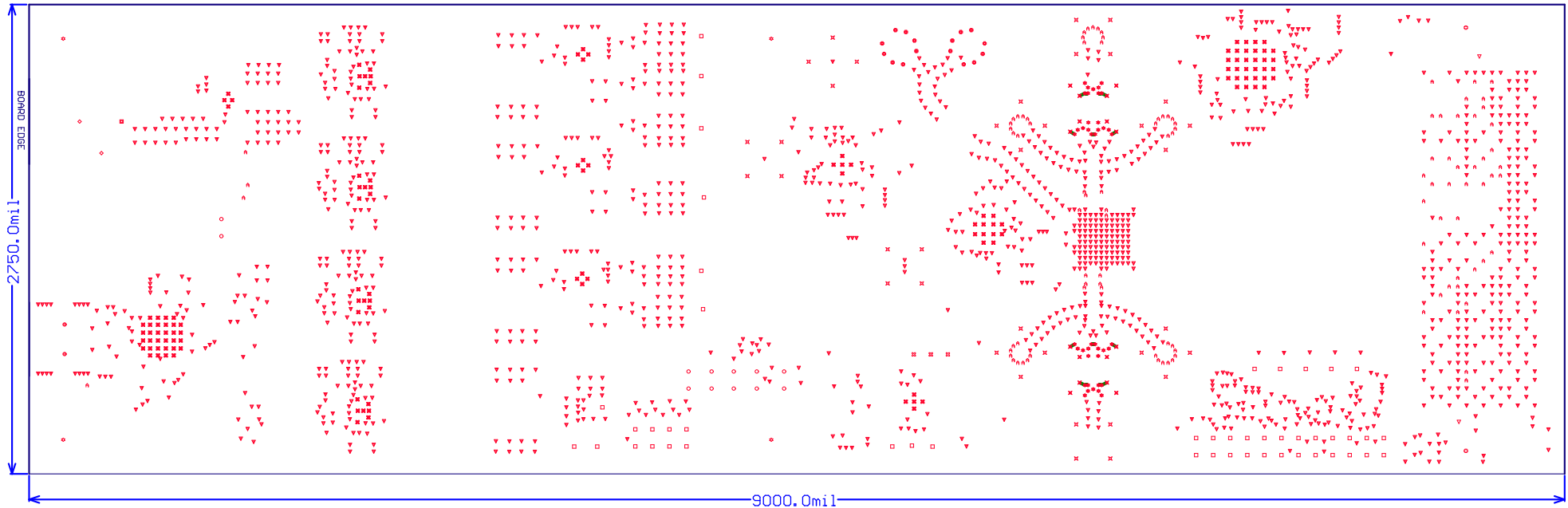
12. ALL THROUGH VIAS TO BE PLUGGED WITH NON-CONDUCTIVE EPOXY. PLUGGED VIAS TO BE PLATED OVER TO PRESENT FLAT SURFACE. NO POTHOLES.

1.ALL 11.5 MIL TRACES ON L01 LAYER NEED TO BE HAVE 50 OHM IMPEDANCE +/- 10%  
2.ALL 11.5 MIL TRACES ON L14 LAYER NEED TO BE HAVE 50 OHM IMPEDANCE +/- 10%  
3.ALL 3.3 MIL TRACES ON L03 AND L12 LAYER NEED TO BE HAVE 50 OHM IMPEDANCE +/- 10%  
4.ALL 7 MIL TRACE WIDTH WITH 7 MIL AIRGAP ON L01 AND L14 LAYERS NEED TO BE HAVE 100 OHM TIGHTLY COUPLED DIFFERENTIAL IMPEDANCE +/- 10%  
5.ALL 10.5 MIL TRACE WIDTH WITH 20.5 MIL AIRGAP ON L01 AND L14 LAYERS NEED TO BE HAVE 100 OHM DIFFERENTIAL IMPEDANCE +/- 10%  
6.ALL 3.25 MIL TRACE WIDTH WITH 8 MIL AIRGAP ON L03 AND L12 LAYERS NEED TO BE HAVE 100 OHM DIFFERENTIAL IMPEDANCE +/- 10%  
7.NO VENDOR LOGO OR NAME ON THE BOARD  
8.HOLES LESS THAN 12 MIL ARE DRILL SIZES AND NOT FINISHED HOLE SIZES (FHS)  
9.MINIMUM PLATING IN ALL THE THROUGH HOLE SHALL BE 0.001 INCH Cu  
10.ALL 8.00 MIL VIAS SHOULD BE NON CONDUCTIVE VIA FILLING FROM TOP AND BOTTOM SIDE

Symbol	Hit Count	Finished Hole Size	Plated	Hole Type	Physical Length	Rout Path Length
□	1	39.76mil (1.010mm)	PTH	Slot	140.16mil (3.560mm)	100.39mil (2.550mm)
◇	2	29.92mil (0.760mm)	PTH	Slot	120.08mil (3.050mm)	90.16mil (2.290mm)
◎	2	35.43mil (0.900mm)	NPTH	Round	-	-
▽	2	50.00mil (1.270mm)	NPTH	Round	-	-
⊕	2	106.00mil (2.692mm)	NPTH	Round	-	-
⊗	3	45.28mil (1.150mm)	PTH	Round	-	-
☆	4	125.98mil (3.200mm)	PTH	Round	-	-
○	12	40.16mil (1.020mm)	PTH	Round	-	-
⊗	16	15.75mil (0.400mm)	PTH	Round	-	-
✕	16	25.00mil (0.635mm)	PTH	Round	-	-
✕	36	59.06mil (1.500mm)	PTH	Round	-	-
★	42	10.00mil (0.254mm)	PTH	Round	-	-
□	49	40.00mil (1.016mm)	PTH	Round	-	-
⌒	102	8.00mil (0.203mm)	PTH	Round	-	-
⊗	130	7.87mil (0.200mm)	PTH	Round	-	-
▽	1486	8.00mil (0.203mm)	PTH	Round	-	-
	1905 Total					

**Slot definitions :** **Root Path Length** = Calculated from tool start centre position to tool end centre position.  
**Physical Length** = Root Path Length + Tool Size = Slot length as defined in the PCB layout

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top SilkScreen				
2	Top Solder Mask	TAIYO-4000-BN	0.50mil	3.9	
3	Top Copper	Copper	2.00mil		COPPER + PLATING
4	Dielectric 1	MEG6-R-5775K	6.00mil	3.42	
5	Layer 2 (GND1)	Copper	0.60mil		
6	Dielectric 2	MEG6-R-5670K	3.30mil	3.23	
7	Layer 3 (SIG1)	Copper	0.60mil		
8	Dielectric 3	MEG6-R-5775K	3.00mil	3.42	
9	Layer 4 (GND2)	Copper	0.60mil		
10	Dielectric 4	MEG6-R-5670K	3.50mil	3.23	
11	Layer 5 (PWR1)	Copper	1.20mil		
12	Dielectric 5	MEG6-R-5775K	2.60mil	3.58	
13	Layer 6 (GND3)	Copper	1.20mil		
14	Dielectric 6	MEG6-R-5670K	3.00mil	3.23	
15	Layer 7 (PWR/SIGNAL2)	Copper	1.20mil		
16	Dielectric 7	MEG6-R-5775K	3.00mil	3.42	
17	Layer 8 (PWR/SIGNAL3)	Copper	1.20mil		
18	Dielectric 8	MEG6-R-5670K	3.00mil	3.23	
19	Layer 9 (GND4)	Copper	1.20mil		
20	Dielectric 9	MEG6-R-5775K	2.60mil	3.58	
21	Layer 10 PWR2)	Copper	1.20mil		
22	Dielectric 10	MEG6-R-5670K	3.50mil	3.23	
23	Layer 11 (GND5)	Copper	0.60mil		
24	Dielectric 11	MEG6-R-5775K	3.00mil	3.42	
25	Layer 12 (SIG4)	Copper	0.60mil		
26	Dielectric 12	MEG6-R-5670K	3.30mil	3.23	
27	Layer 13 (GND6)	Copper	0.60mil		
28	Dielectric 13	MEG6-R-5775K	6.00mil	3.42	
29	Bottom Copper	Copper	2.00mil		COPPER + PLATING
30	Bottom Solder Mask	TAIYO-4000-BN	0.50mil	3.9	
31	Bottom Silk				



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: N/A	REV: C	SUN REV: Not In VersionControl	Texas Instruments (TI) and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. TI and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. TI and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.	ENGINEER: DWG	LAYOUT BY: BMR
LAYER NAME = <del>Altium Drawing</del>	M2 Board Dimensions				print_Scale: 1:1	ALTUM DESIGNER VERSION: 305-PD18-0843
PLOT NAME = Fabrication Drawing	GENERATED : 03-Apr-20 6:50:51 AM	TEXAS INSTRUMENTS				

1	2	3	4	5	6
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## DESIGN INFORMATION

MIN. TRACK WIDTH: 3.25 MIL  
MIN. CLEARANCE: 4 MIL  
MIN. VIA PAD SIZE: 15.7 MIL

MINIMUM ANNUAL RING 5mil EXTERNAL  
PER IPC-D-275 CLASS 2 LEVEL C  
REGISTRATION TOLERANCES: METAL +/- 5 MIL, HOLES +/- 3 MIL

**MATERIAL:**

☐ FR-408 ☐ FR-4 High Tg ☒ OTHER TAIYO 4000/MEG

THICKNESS: ☒ 62 MIL (1.6mm) +/-10% ☐ OTHER \_\_\_\_\_

TOLERANCE: X ANSI IPC-6012 TYPE 3 CLASS 2

OTHER +/-	
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BOW & TWIST: ☒ ANSI IPC-6012 TYPE 3 CLASS 2

☐ OTHER +/- \_\_\_\_\_

### DRILLING:

REFERENCE: X AS SHOWN X NC\_DRILL FILES

PTH MIN COPPER THICKNESS: ☒ 1MIL ☐ OTHER \_\_\_\_\_

**BOARD FINISH:**

SILKSCREEN: ☒ TOP ☒ BOTTOM

SILKSCREEN COLOR: ☒ WHITE ☐ OTHER \_\_\_\_\_

SOLDER RESIST COLOR: ☐ GREEN ☐ BLUE ☒ OTHER RED

SURFACE FINISH: ☒ IMMERSION GOLD (ENIG) ☐ ENEPIG  
☐ IMM. TIN/SILVER OR EQUIV ☐ OTHER \_\_\_\_\_

ARRAY/PANEL: ☐ CUT AND TRIM PER MECH LAYER 1

	N.C. ROUTE	X	V. SCORE
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**CERTIFICATION:** MATERIALS AND WORKMANSHIP FOR ALL PCBs  
TO MEET OR EXCEED THE REQUIREMENTS OF:

X ANSI IPC-A-600F CLASS ->  1  2  3

X	UL 94V-0	X	RoHS		OTHER	<u>PER ORDER</u>
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### ADDITIONAL REQUIREMENTS:

MICROSECTION: ☐ YES

BARE BOARD ELEC. TEST:	NONE	X	REQUIRED	PER ORDER
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MANUFACTURER'S UL: ☐ RAIL ☐ METAL ☒ SILK



PROJECT TITLE:

ADC12DJ5200RF EVM

DESIGNED FOR:

TI

FILE NAME:

ADC12DJ5200RF EVM

ENGINEER:

DWG

LAYOUT BY:

BMR

ALTium DESIGNER VERSION:

305-PD18-0843

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print_Scale: 1:1
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