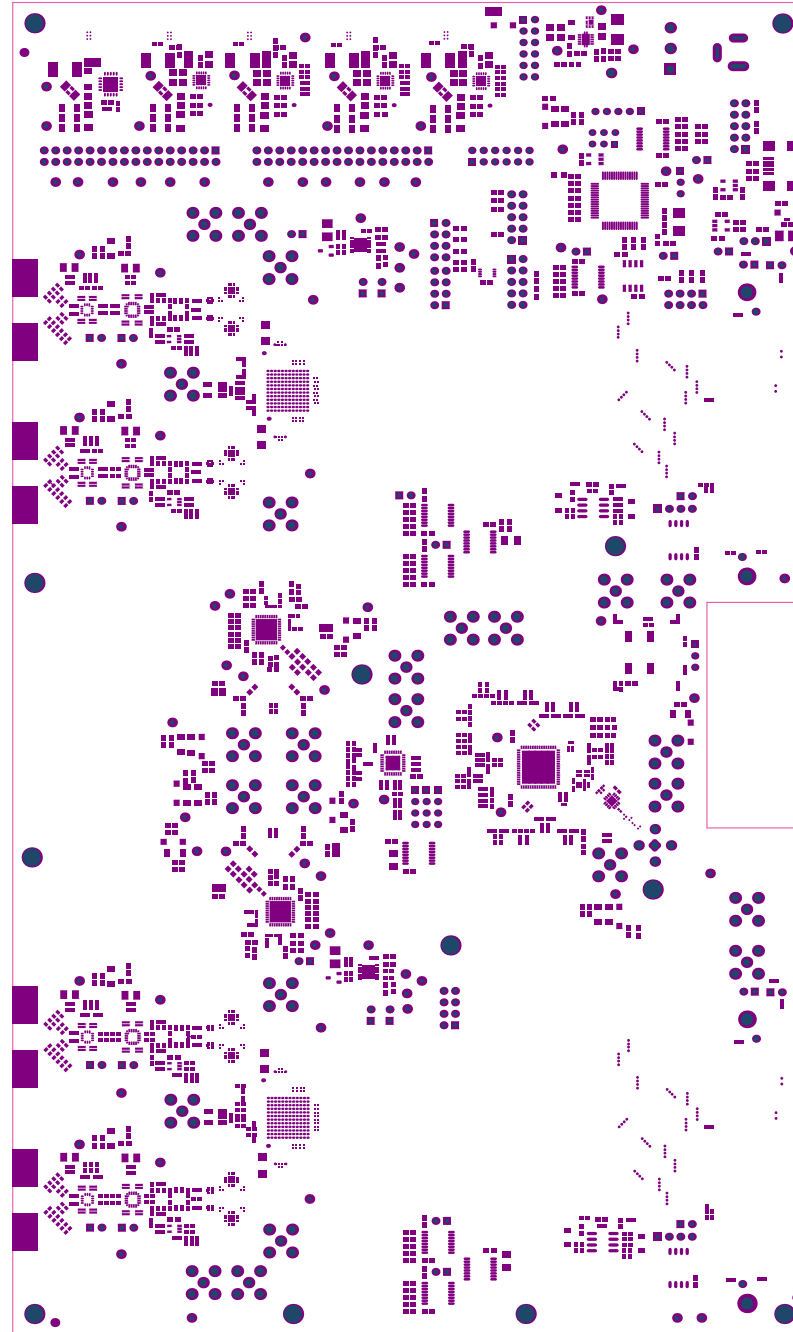
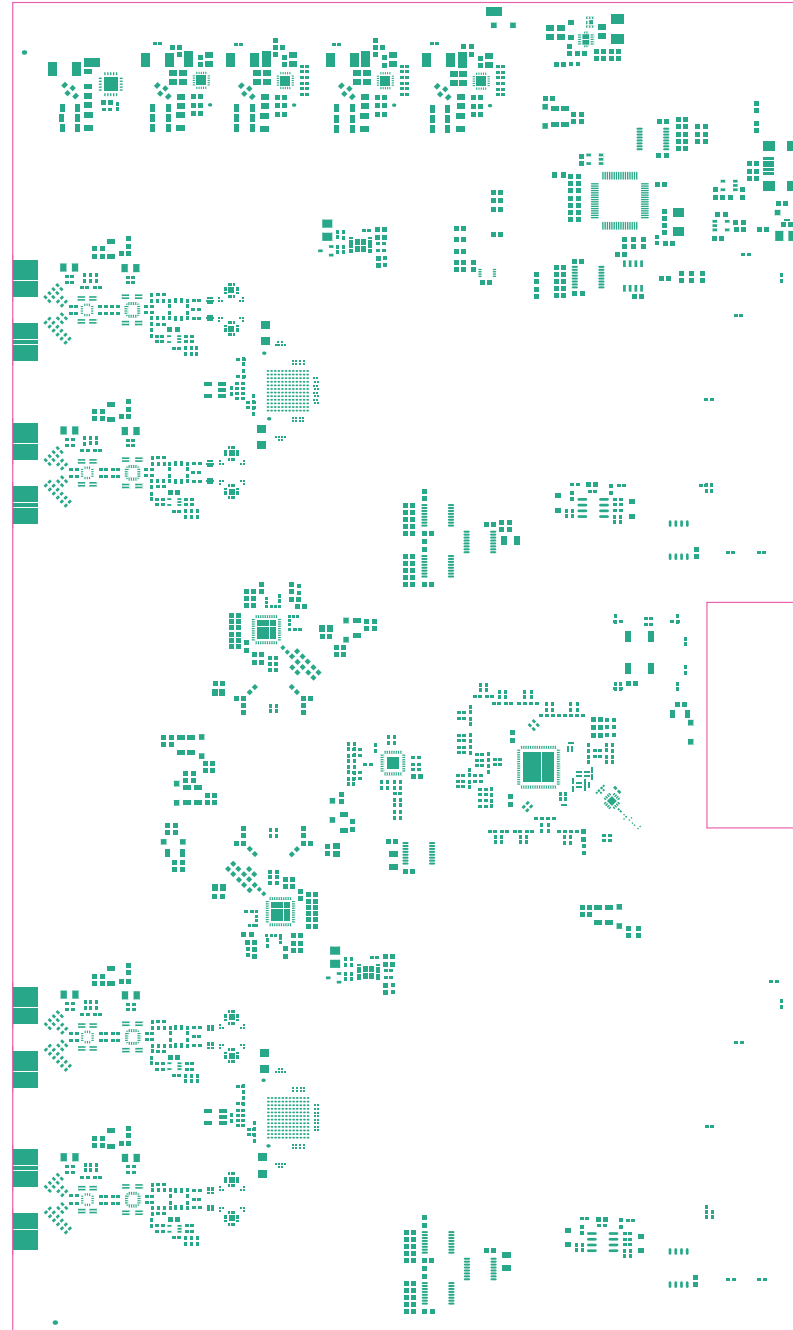


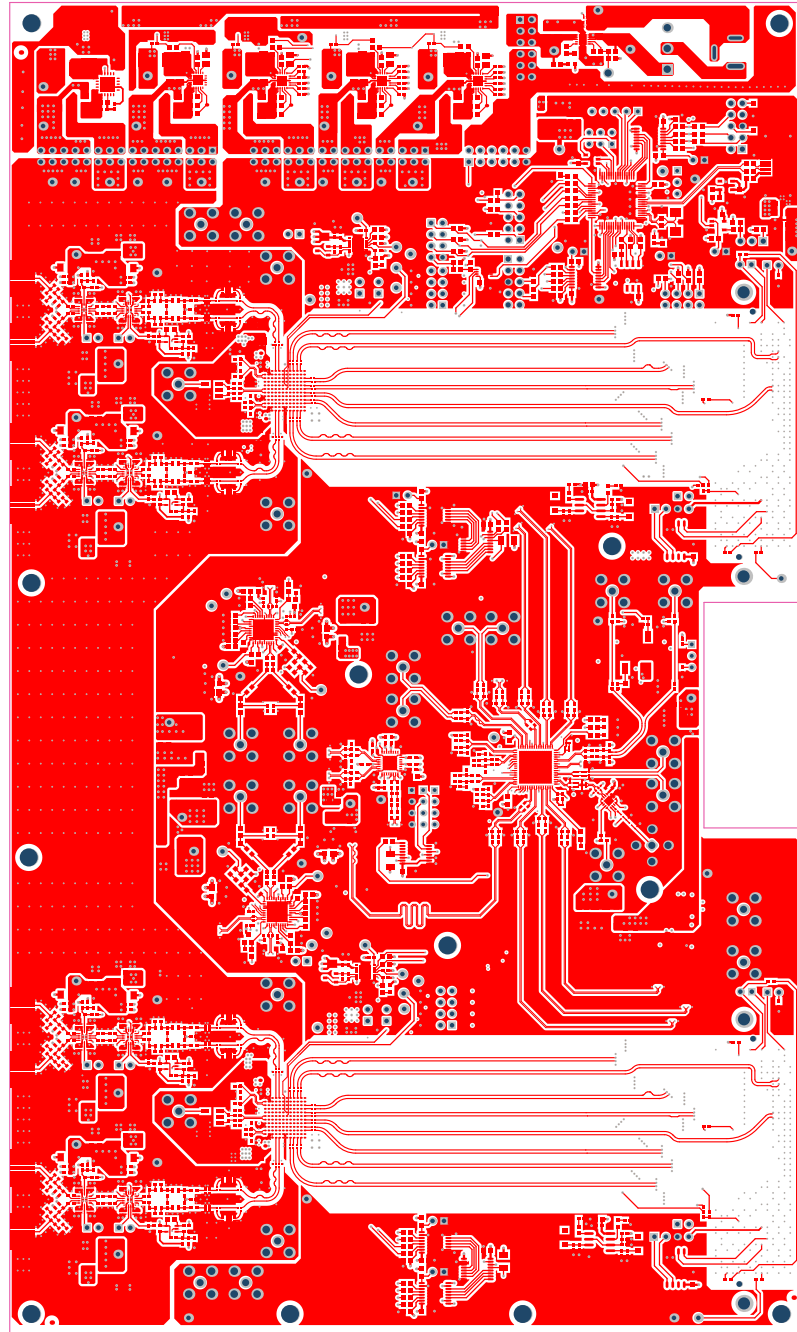
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: e3	SUN REV:
LAYER NAME = TOP OVERLAY	TID #: 010122		
PLOT NAME = Top Overlay	GENERATED : 5/16/2019 9:53:56 AM	TEXAS INSTRUMENTS	



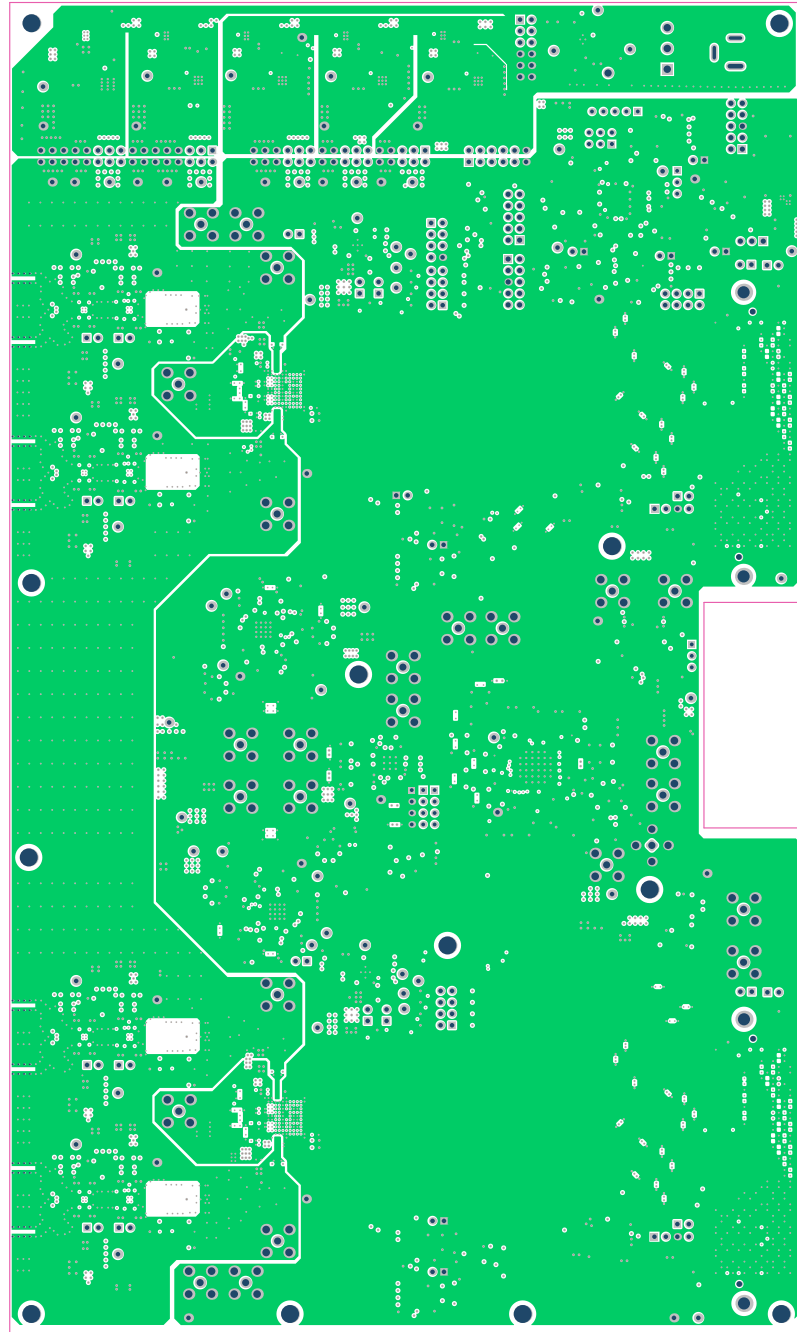
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = TOP SOLDER	TID #: 010122		
PLOT NAME = Top Solder Mask	GENERATED : 5/16/2019 9:53:59 AM		TEXAS INSTRUMENTS



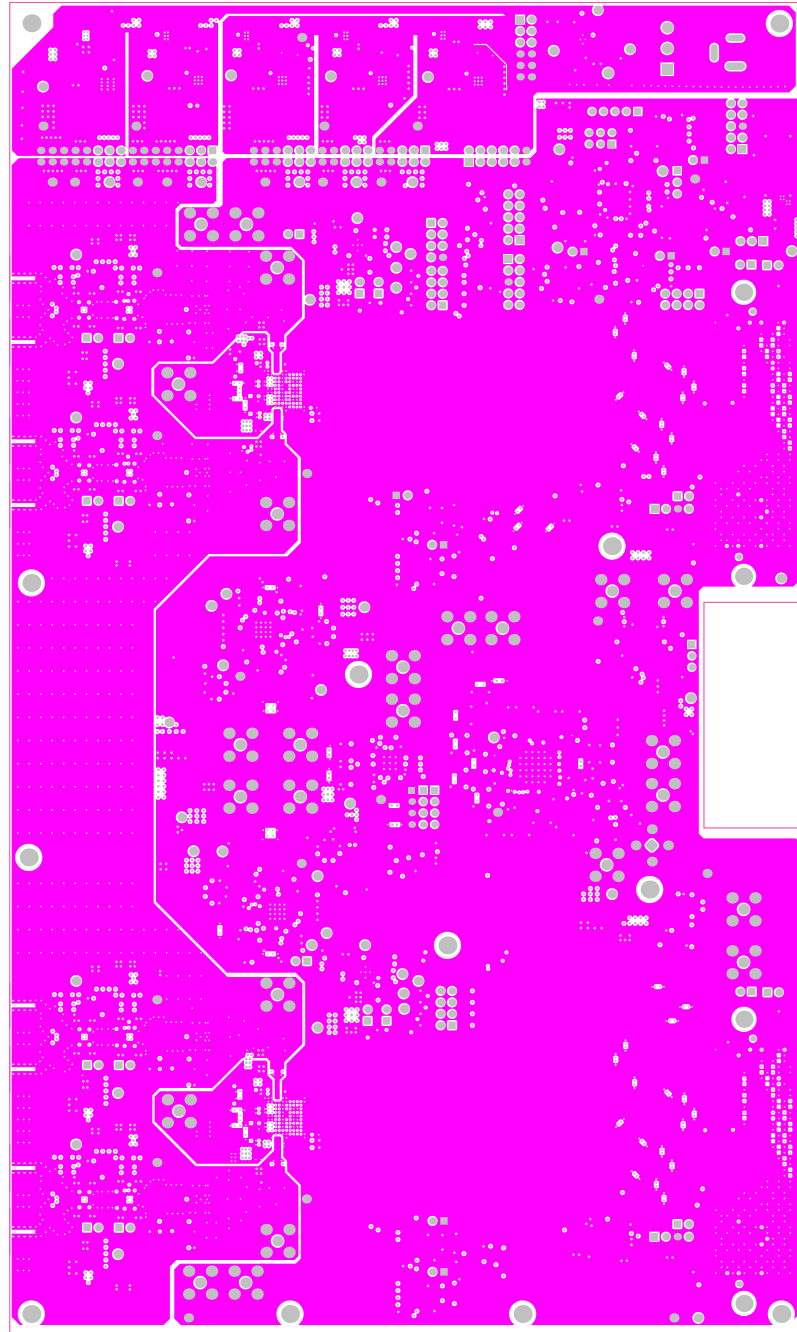
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = TOP PASTE	TID #: 010122		
PLOT NAME = TOP PASTE	GENERATED : 5/16/2019 9:54:00 AM	TEXAS INSTRUMENTS	



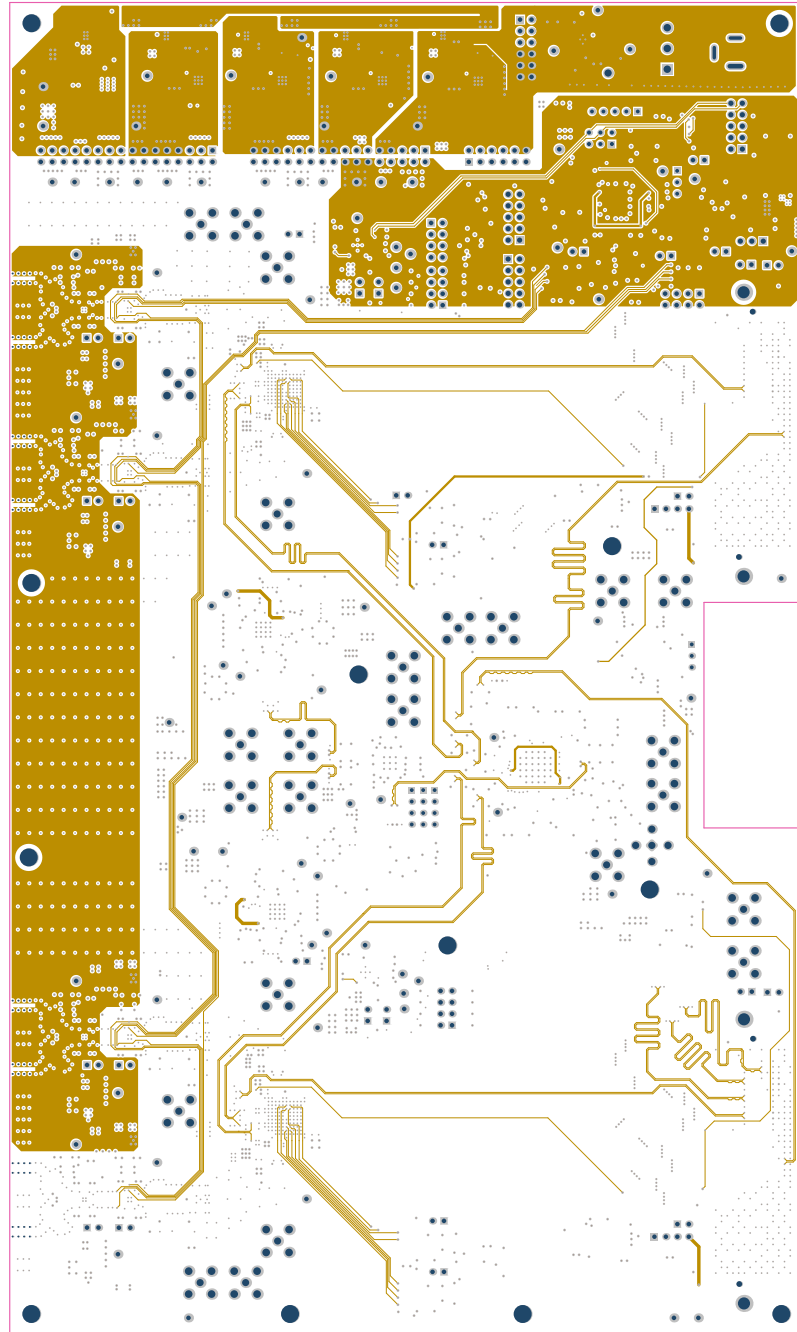
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L1_TOP LAYER	TID #: 010122		
PLOT NAME = L1_Top Layer	GENERATED : 5/16/2019 9:54:01 AM		TEXAS INSTRUMENTS



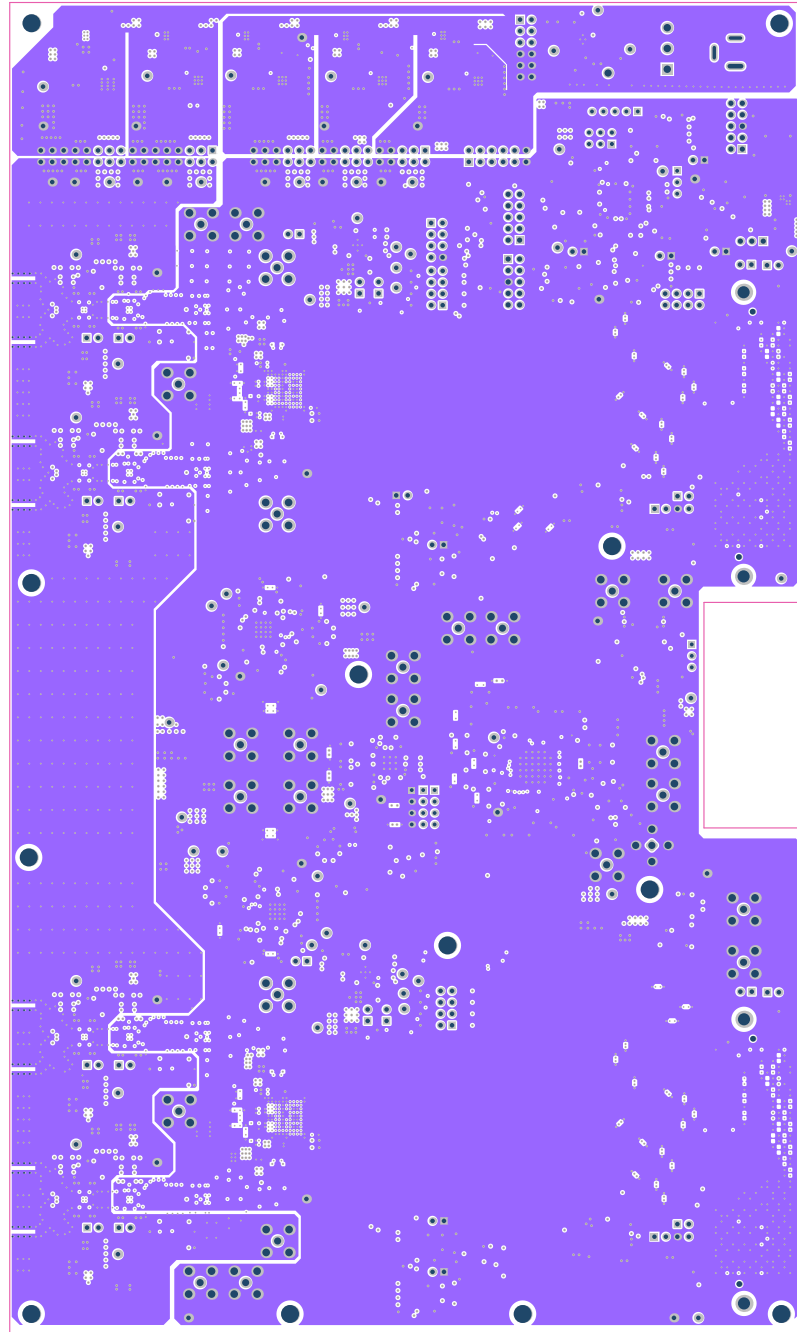
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L2_GND	TID #: 010122		
PLOT NAME = L2_GND	GENERATED : 5/16/2019 9:54:02 AM		TEXAS INSTRUMENTS



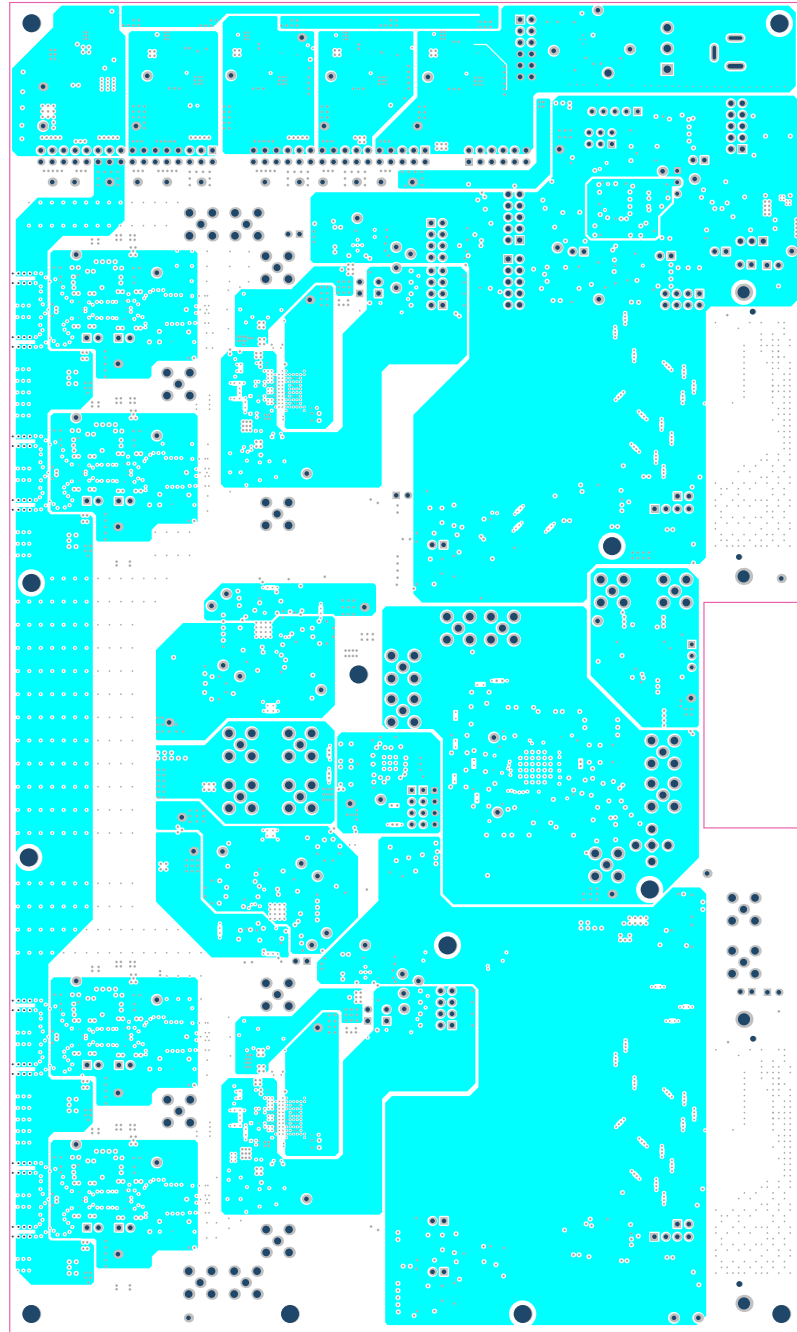
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L3_GND	TID #: 010122		
PLOT NAME = L3_GND	GENERATED : 5/16/2019 9:54:03 AM	TEXAS INSTRUMENTS	



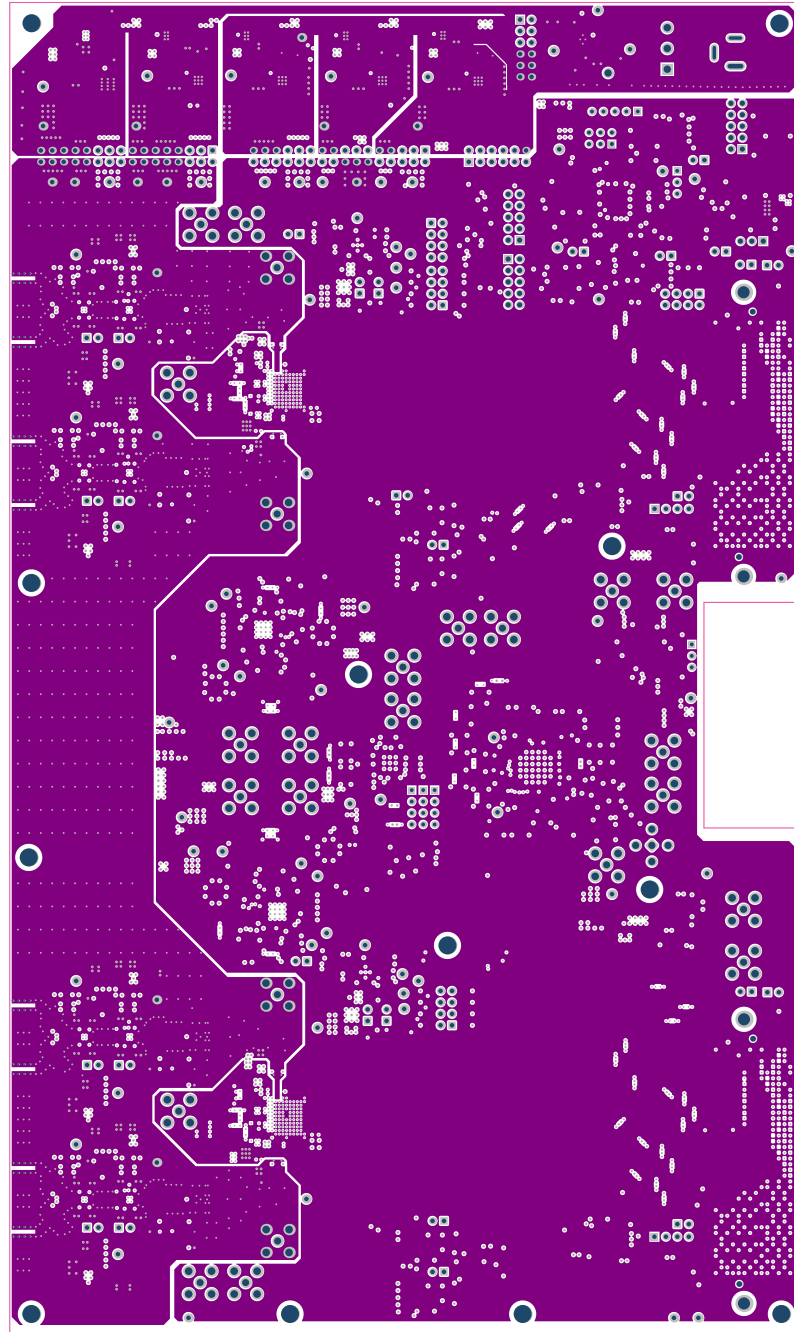
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L4_Signal Layer 1	TID #: 010122		
PLOT NAME = L4_Signal Layer 1	GENERATED : 5/16/2019 9:54:04 AM		TEXAS INSTRUMENTS



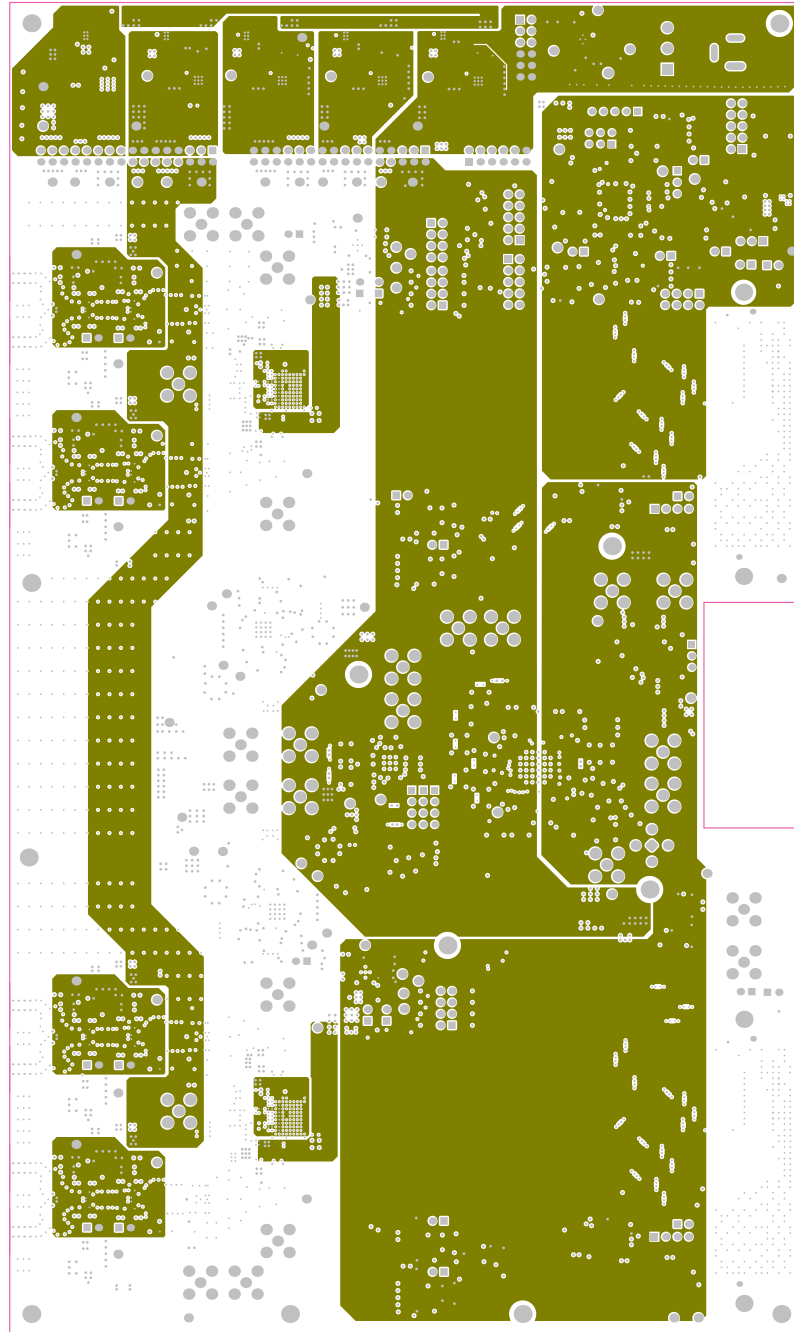
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L5_GND	TID #: 010122		
PLOT NAME = L5_GND	GENERATED : 5/16/2019 9:54:06 AM		TEXAS INSTRUMENTS



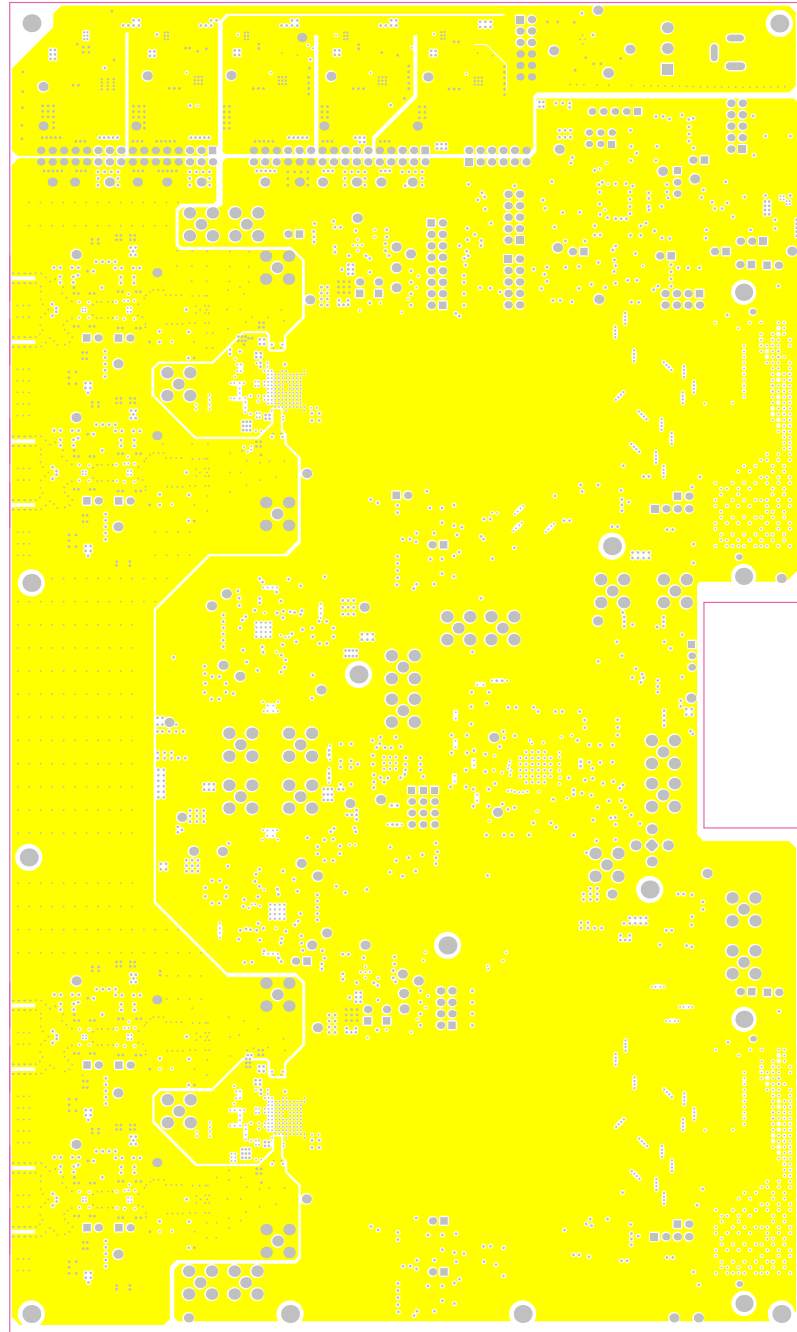
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L6_PWR	TID #: 010122		
PLOT NAME = L6_PWR	GENERATED : 5/16/2019 9:54:07 AM		TEXAS INSTRUMENTS



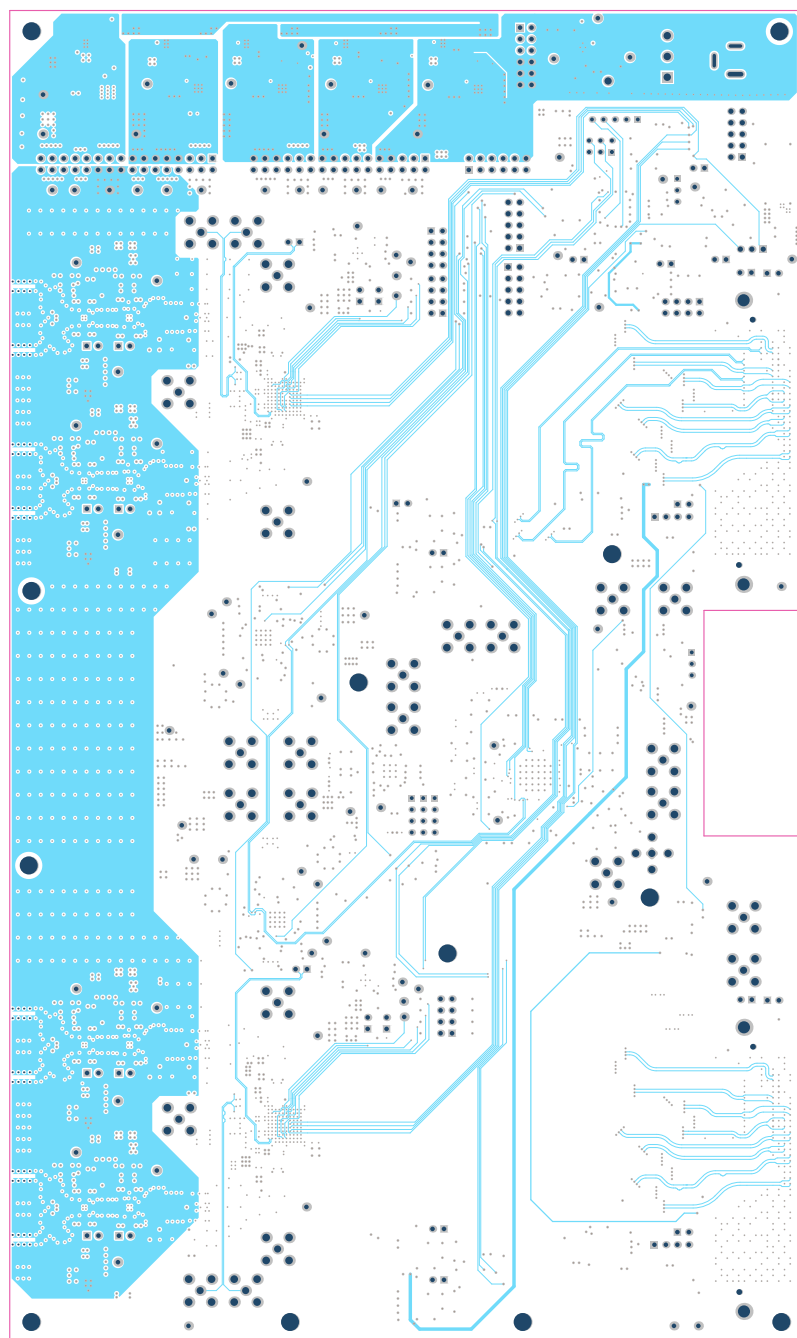
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L7_GND/PLR	TID #: 010122		
PLOT NAME = L7_GND	GENERATED : 5/16/2019 9:54:08 AM	TEXAS INSTRUMENTS	



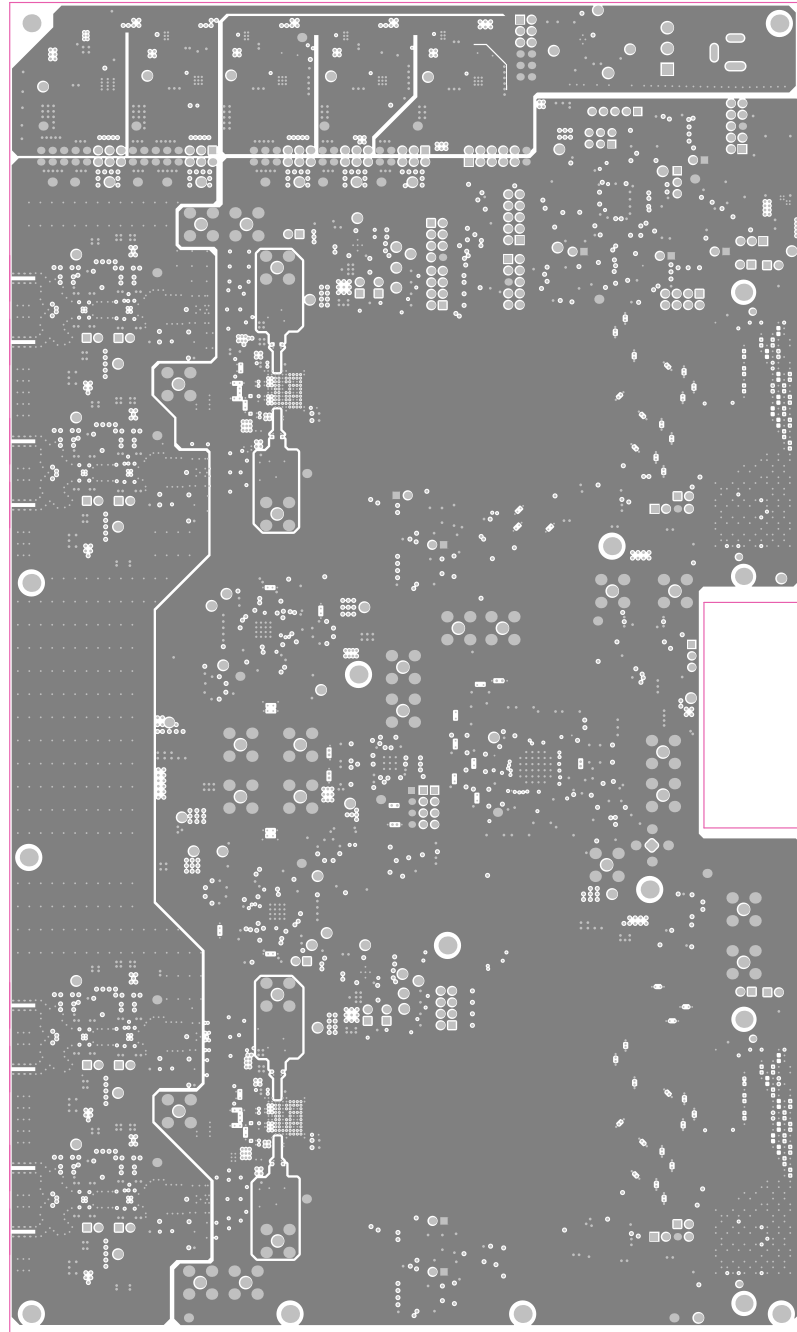
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L8_PWR	TID #: 010122		
PLOT NAME = L8_PWR	GENERATED : 5/16/2019 9:54:09 AM	TEXAS INSTRUMENTS	



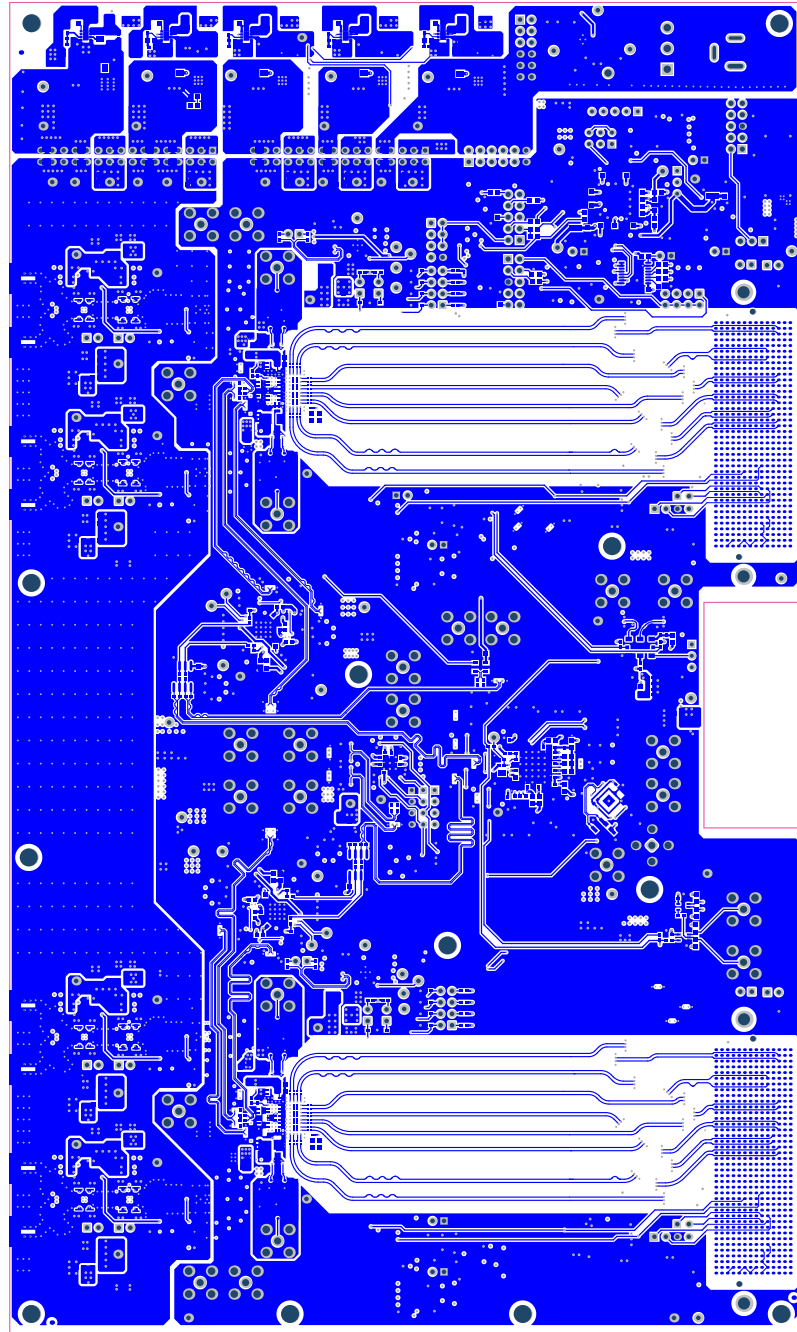
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = LS_GND/PWR	TID #: 010122		
PLOT NAME = LS_GND	GENERATED : 5/16/2019 9:54:10 AM	TEXAS INSTRUMENTS	



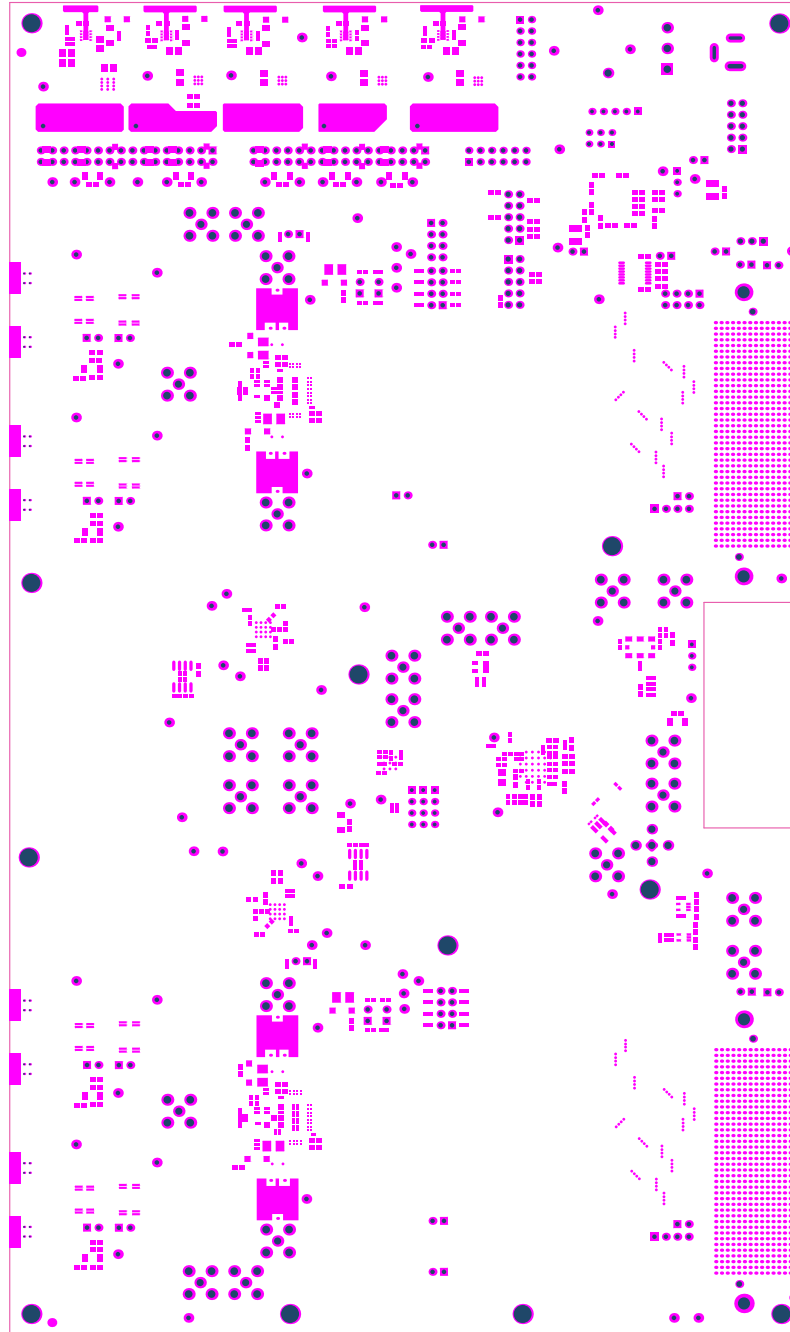
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L10_Signal_Layer_2	TID #: 010122		
PLOT NAME = L10_Signal_Layer_2	GENERATED : 5/16/2019 9:54:11 AM	TEXAS INSTRUMENTS	



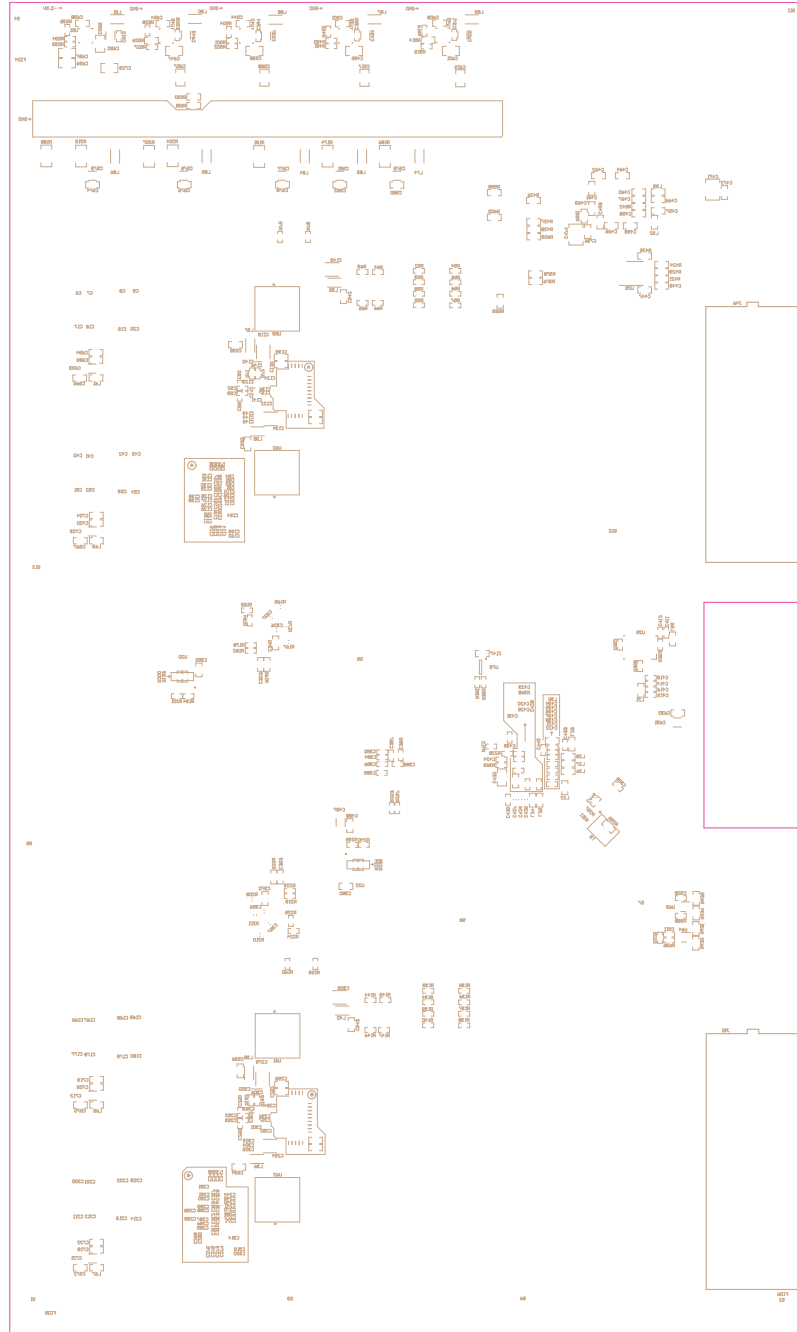
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = L11_GND	TID #: 010122		
PLOT NAME = L11_GND	GENERATED : 5/16/2019 9:54:12 AM	TEXAS INSTRUMENTS	



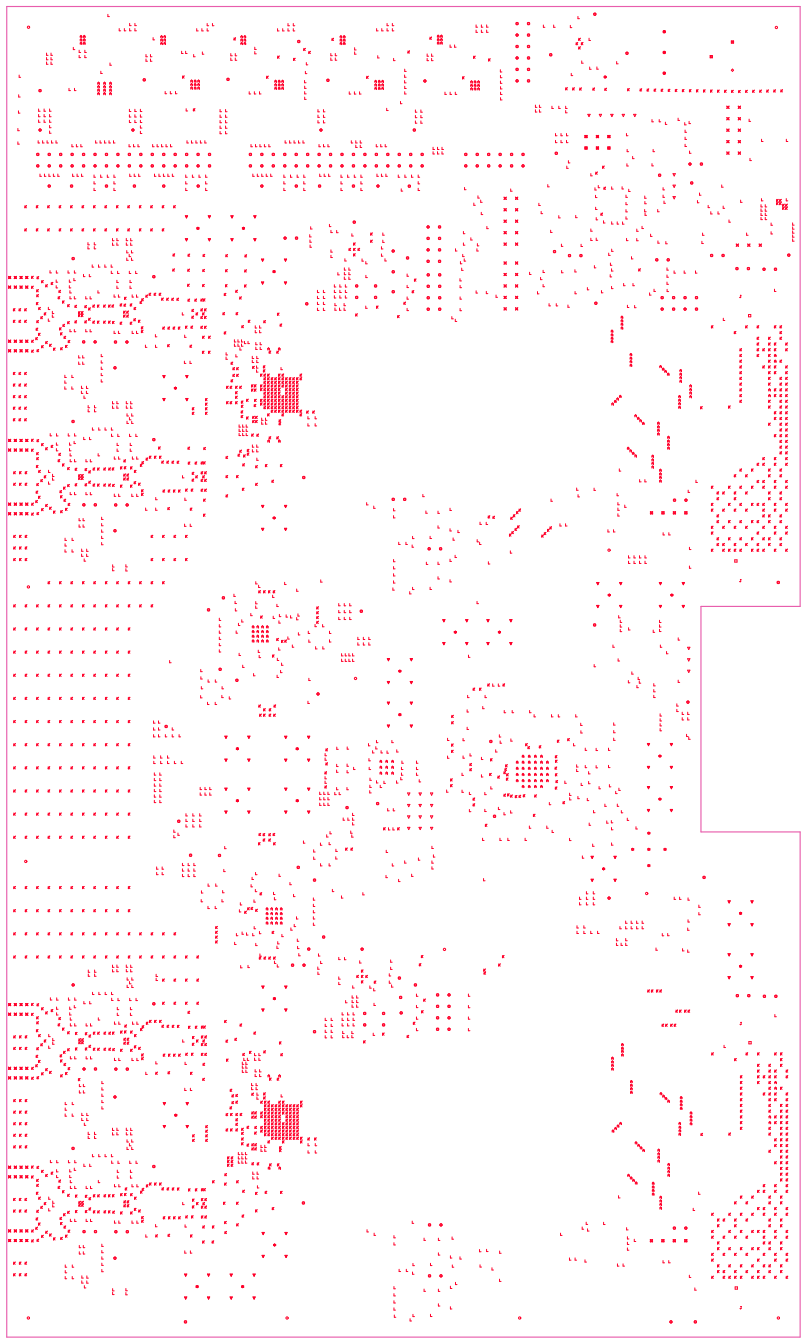
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: c3	SUN REV:
LAYER NAME = L12_Bottom Layer	TID #: 010122		
PLOT NAME = L12_Bottom Layer	GENERATED : 5/16/2019 9:54:13 AM		TEXAS INSTRUMENTS



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = BOTTOM SOLDER	TID #: 010122		
PLOT NAME = Bottom Solder Mask	GENERATED : 5/16/2019 9:54:14 AM	TEXAS INSTRUMENTS	



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME = BOTTOM OVERLAY	TID #: 010122		
PLOT NAME = Bottom Overlay	GENERATED : 5/16/2019 9:54:15 AM	TEXAS INSTRUMENTS	



Symbol	Count	Hole Size	Hole Length	Routed Path Length	Plated	Hole Type
⊘	89	89.76mil (1.010mm)	140.16mil (3.560mm)	100.39mil (2.550mm)	PTH	Slot
⊘	89	101mil (1.600mm)	-	-	PTH	Round
⊘	24	82mil (0.760mm)	120.08mil (3.050mm)	90.16mil (2.290mm)	PTH	Slot
⊘	24	82mil (0.760mm)	-	-	PTH	Round
⊘	64	96mil (1.650mm)	-	-	PTH	Round
⊘	1	50.00mil (1.270mm)	-	-	PTH	Round
⊘	1	106.00mil (2.692mm)	-	-	PTH	Round
⊘	2	62.99mil (1.600mm)	-	-	PTH	Round
⊘	3	35.94mil (0.9065mm)	-	-	PTH	Round
⊘	8	38.37mil (1.000mm)	-	-	PTH	Round
⊘	12	157.00mil (3.988mm)	-	-	PTH	Round
⊘	23	33.47mil (0.850mm)	-	-	PTH	Round
⊘	25	62.00mil (1.575mm)	-	-	PTH	Round
⊘	33	45.28mil (1.150mm)	-	-	PTH	Round
⊘	64	16.00mil (0.406mm)	-	-	PTH	Round
⊘	100	67.00mil (1.702mm)	-	-	PTH	Round
⊘	259	40.00mil (1.016mm)	-	-	PTH	Round
⊘	279	10.00mil (0.254mm)	-	-	PTH	Round
⊘	1590	12.00mil (0.305mm)	-	-	PTH	Round
⊘	1686	8.00mil (0.203mm)	-	-	PTH	Round

STACKUP:-

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top	Prepreg	0.060mil	4.2	1
2	Top	Copper	0.60mil	4.2	2
3	L1 Top Layer	Copper	0.60mil	4.2	3
4	Dielectric 1	R-5670k	5.60mil	4.2	4
5	L2_GND	Copper	0.60mil	4.2	5
6	Dielectric 2	R-5775K	5.00mil	4.2	6
7	L3_GND	Copper	0.60mil	4.2	7
8	Dielectric 3	R-5670k	7.50mil	4.2	8
9	L4_Signal Layer 1	Copper	0.60mil	4.2	9
10	Dielectric 4	R-5775K	4.00mil	4.2	10
11	L5_GND	Copper	0.60mil	4.2	11
12	Dielectric 5	R-5670k	4.30mil	4.2	12
13	L6_Pwr	Copper	0.60mil	4.2	13
14	Dielectric 6	R-5775K	3.00mil	4.2	14
15	L7_GND/Pwr	Copper	0.60mil	4.2	15
16	Dielectric 7	R-5670k	4.30mil	4.2	16
17	L8_Pwr	Copper	0.60mil	4.2	17
18	Dielectric 8	R-5775K	4.00mil	4.2	18
19	L9_GND/Pwr	Copper	0.60mil	4.2	19
20	Dielectric 9	R-5670k	7.50mil	4.2	20
21	L10_Signal Layer 2	Copper	0.60mil	4.2	21
22	Dielectric 10	R-5775K	5.00mil	4.2	22
23	L11_GND	Copper	0.60mil	4.2	23
24	Dielectric 11	R-5670k	5.60mil	4.2	24
25	L12_Bottom Layer	Copper	1.40mil	4.2	25
26	Bottom Solder	Solder Resist	0.40mil	3.5	26
27	Bottom Overlay				27

IMPEDANCE TABLE:-

Layer	50 OHM SE	50 OHM DIFF	100 OHM DIFF	100 OHM DIFF	REFERENCE
	TRACE WIDTH (MILS) +/-10%	WIDTH/SPACING (MILS) +/-10%	WIDTH/SPACING (MILS) +/-10%	WIDTH/SPACING (MILS) +/-10%	Layer
L1_Top Layer	11mils	8.2mil trace/ 6mil space	6mil trace/ 5mil space	10mil trace/ 18mil space	L2_GND Layer
L4_Signal Layer 1	5.5mils	NIL	4.9mil trace/ 2.1mil space	NIL	L5_GND Layer
L10_Signal Layer 2	6.5mils	NIL	5.9mil trace/ 6.5mil space	6.5mil trace/ 20.1mil space	L11_GND Layer
L12_Bottom Layer	11mils	NIL	6mil trace/ 5mil space	10mil trace/ 18mil space	L11_GND Layer

DESIGN INFORMATION

BOND PATTERN (REFER ALSO ARRAY/PANEL PROFILING INFORMATION)

Round 2.98MM X 2.98MM

PTH Round

Number of Layers : 12

MIN. TRACK WIDTH: 3.5 MIL

MIN. DRILL SIZE: 9 MIL

MIN. VIA DIA. SIZE: 16 MIL

EXTERNAL

REGISTRATION TOLERANCES: METAL +/- .5 MIL, HOLES +/- .3 MIL

MATERIALS:

FR-408 FR-4 High Tg OTHER R-5670K AND R-5775K

THICKNESS: 63 MIL (1.6mm) +/-10% OTHER

TOLERANCES: ANSI IPC-6012 TYPE 3 CLASS 2 OTHER +/-

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

COPPER THICKNESS (FINISHED):

OUTER: 1.4MIL (1oz) 2MIL (1.4oz) 2.8MIL (2oz)

INNER SIGNAL: 0.6MIL (1/2oz) 2.8MIL (2oz) N/A

DRAWING:

REFERENCE: AS SHOWN NC_DRILL FILES

PTH MIN COPPER THICKNESS: 1MIL OTHER

BOARD FINISH:

SILKSCREEN: TOP BOTTOM

SILKSCREEN COLOR: WHITE OTHER

SOLDER RESIST COLOR:

GREEN BLUE OTHER

SURFACE FINISH: IMMERSION GOLD (ENIG) ENIGP

IMM. TRN/SILVER OR EQUIV OTHER

ARRAY/PANEL: CUT AND TRIM PER MECH LAYER 1 N.C. ROUTE V. SCORE

CERTIFICATION: MATERIALS AND WORKMANSHIP FOR ALL PCBs TO MEET OR EXCEED THE REQUIREMENTS OF:

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

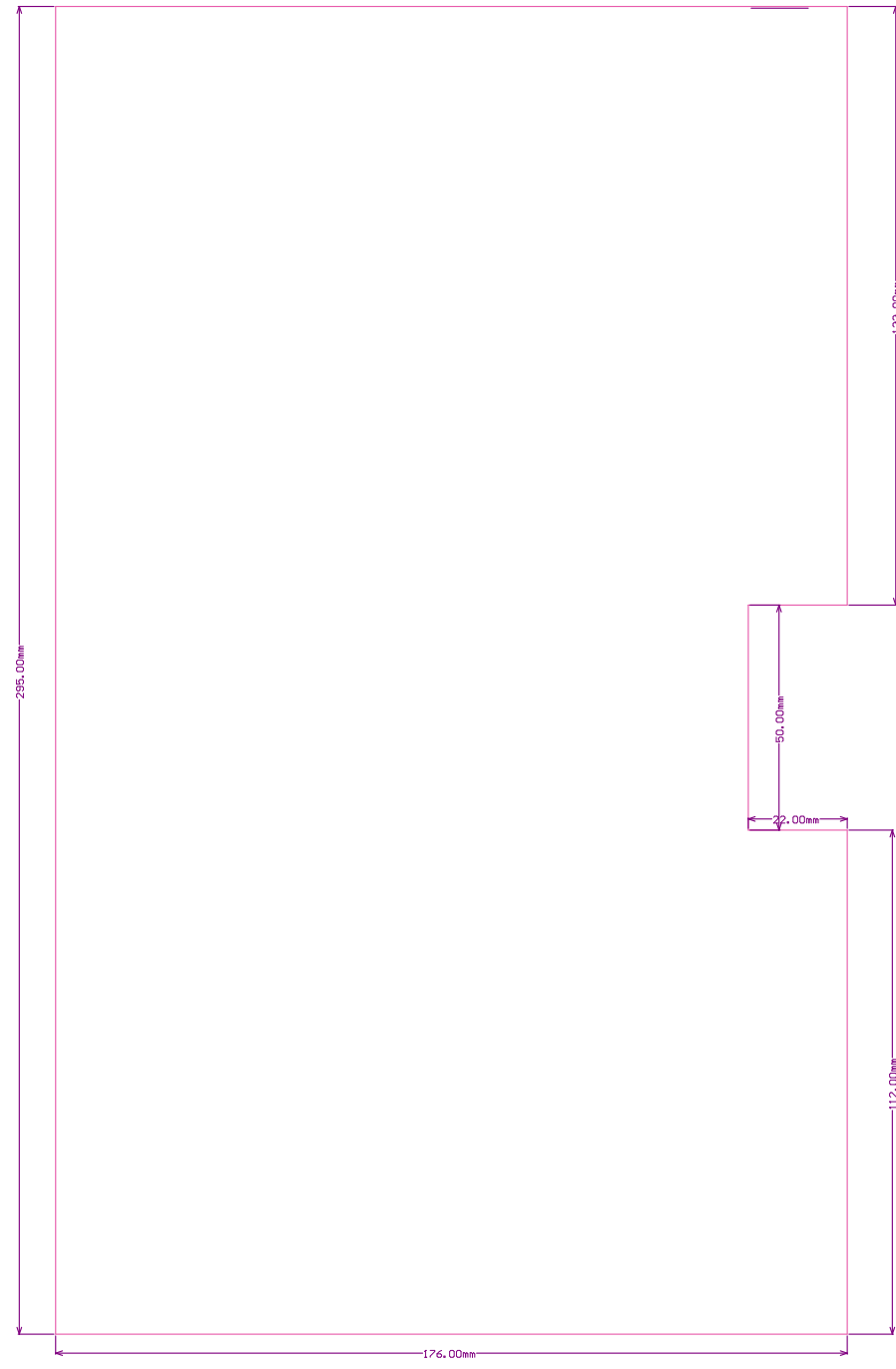
UL 94V-0 RoHS OTHER PER ORDER

ADDITIONAL REQUIREMENTS: VIA TENTING: YES NO

MICROSECTION: YES IMPEDANCE CONTROL: YES NO

BARE BOARD ELEC. TEST: NONE REQUIRED PER ORDER

MANUFACTURER'S UL: RAL METAL SILK



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: 03	SUN REV:
LAYER NAME =	TID #: 010122		
PLOT NAME = Board Dimensions	GENERATED : 5/16/2019 9:54:25 AM	TEXAS INSTRUMENTS	

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