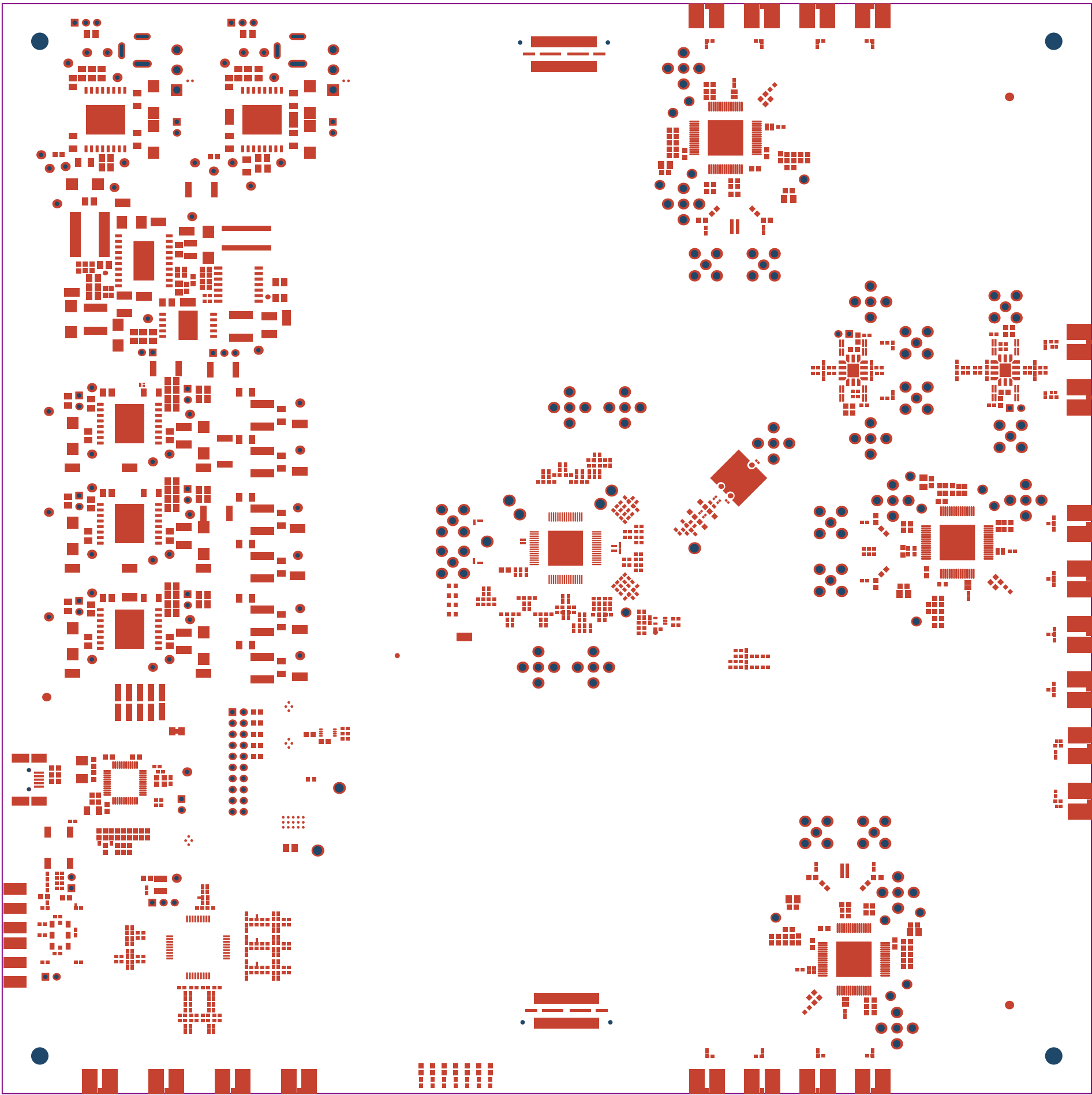
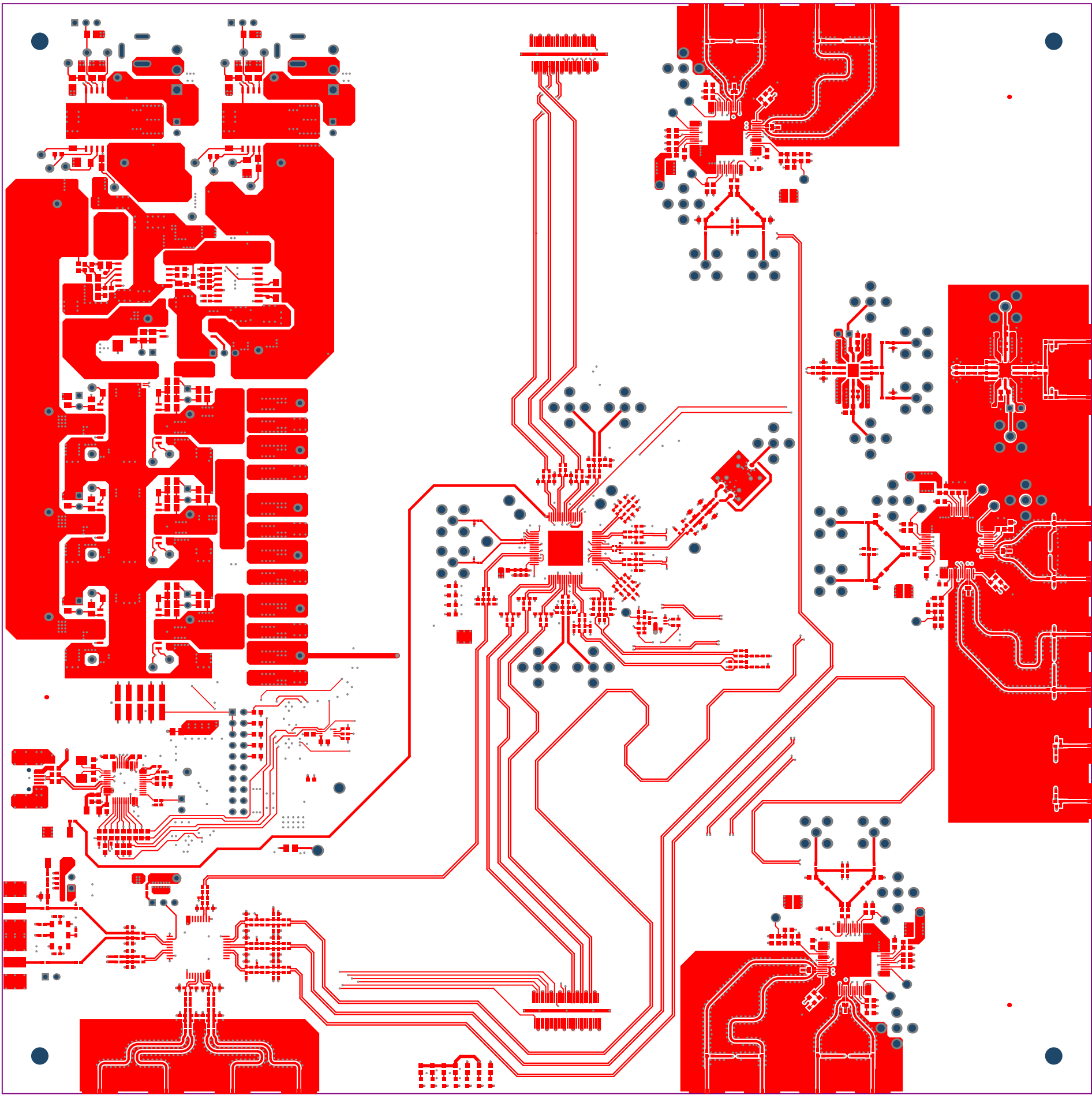


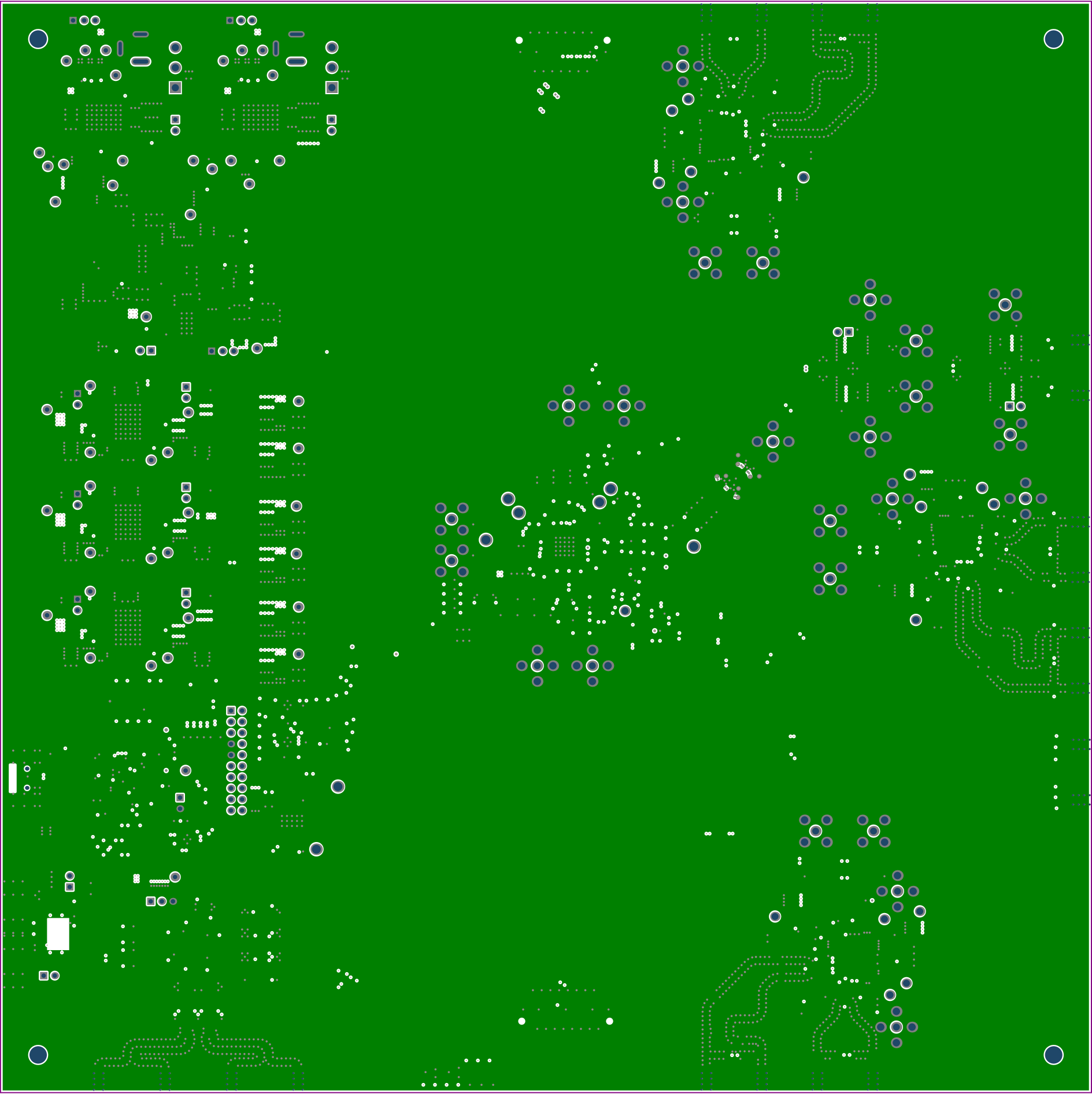
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = TOP OVERLAY	TID #:010131		
PLOT NAME = Top Overlay	GENERATED : 10/5/2022 2:56:21 PM		TEXAS INSTRUMENTS



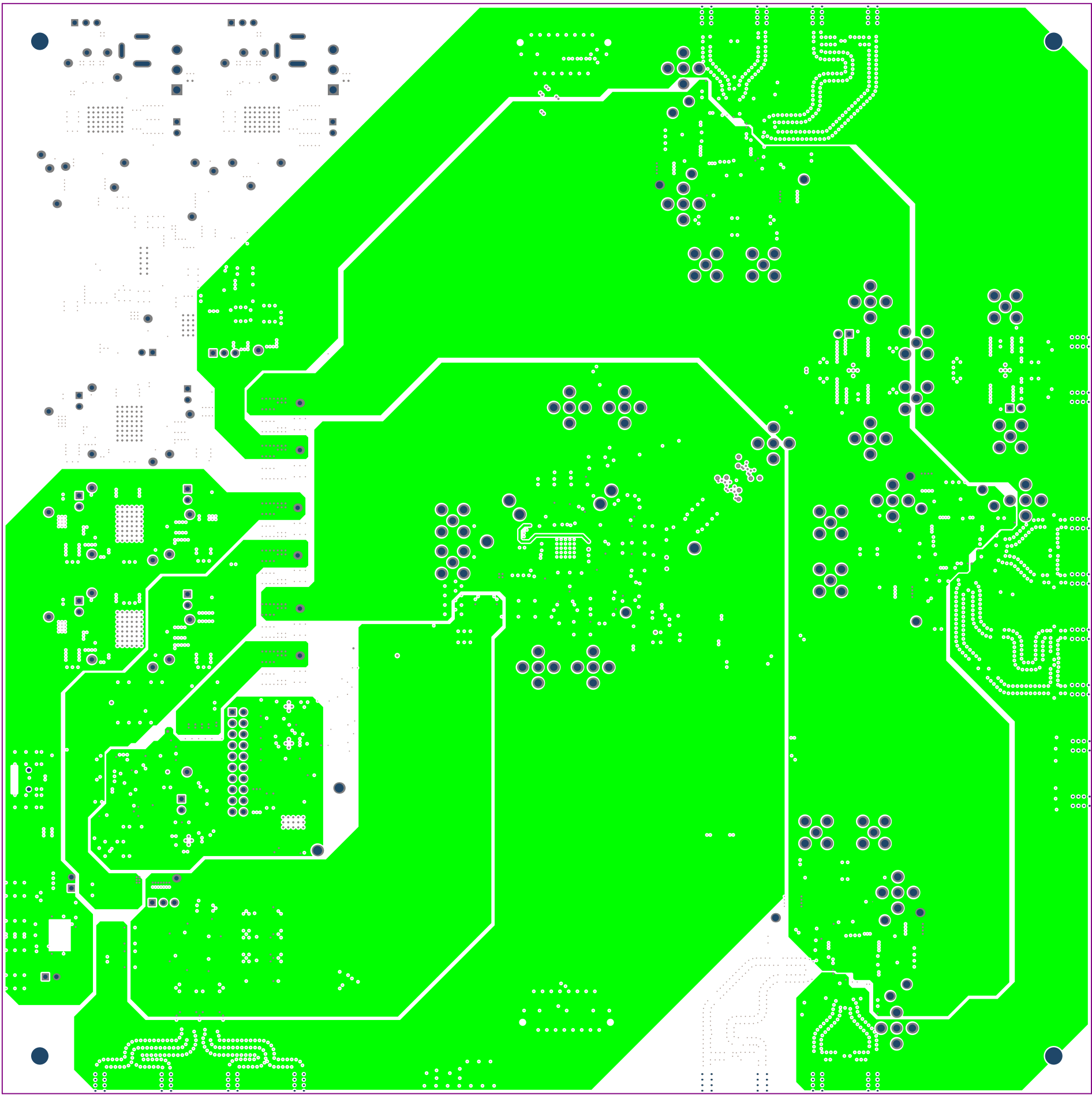
ALL ARTWOK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = TOP SOLDER	TID #:010131		
PLOT NAME = Top Solder Mask	GENERATED : 10/5/2022 2:56:24 PM	TEXAS INSTRUMENTS	



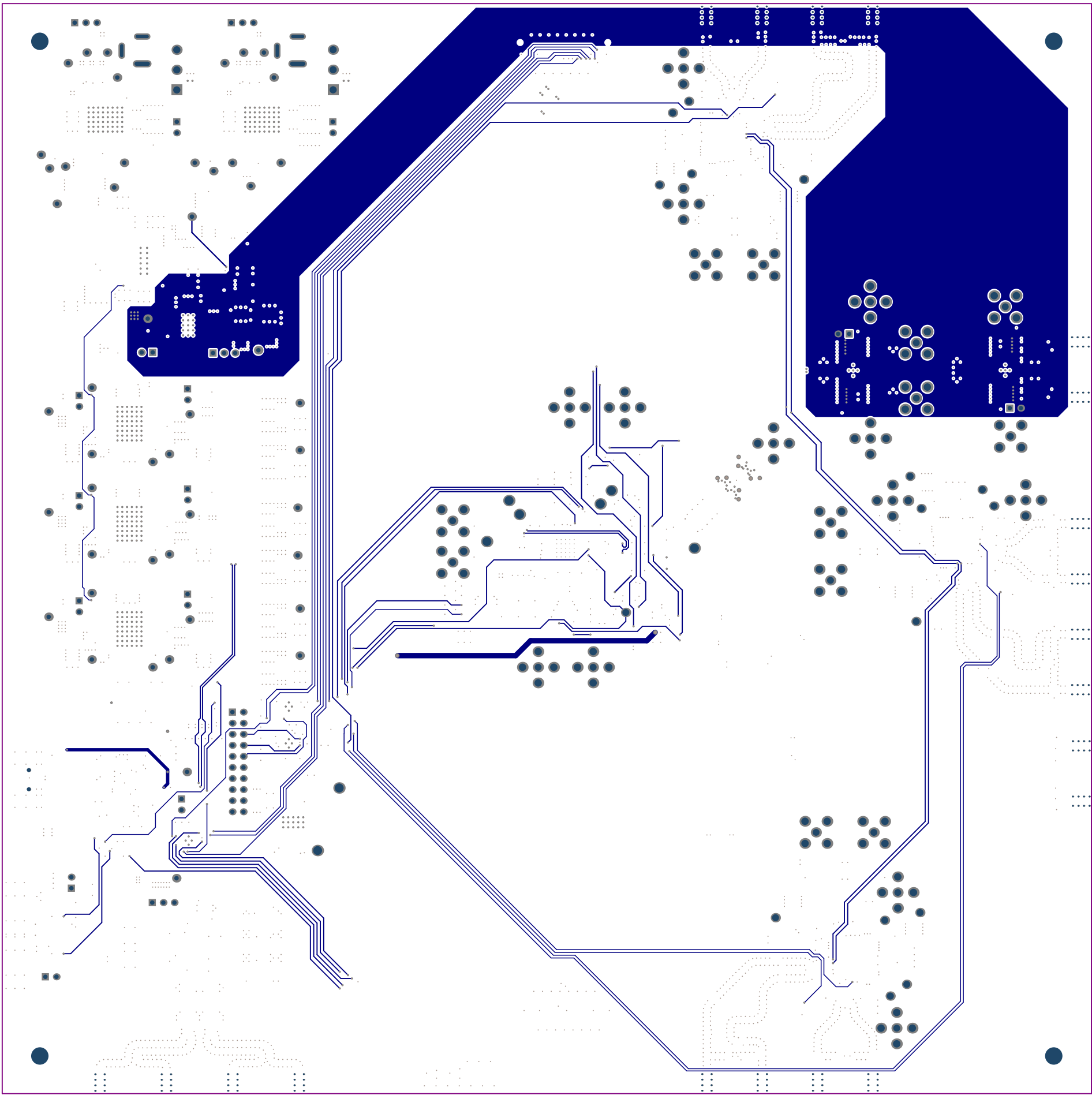
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = TOP LAYER	TID #:010131		
PLOT NAME = Top Layer	GENERATED : 10/5/2022 2:56:25 PM	TEXAS INSTRUMENTS	



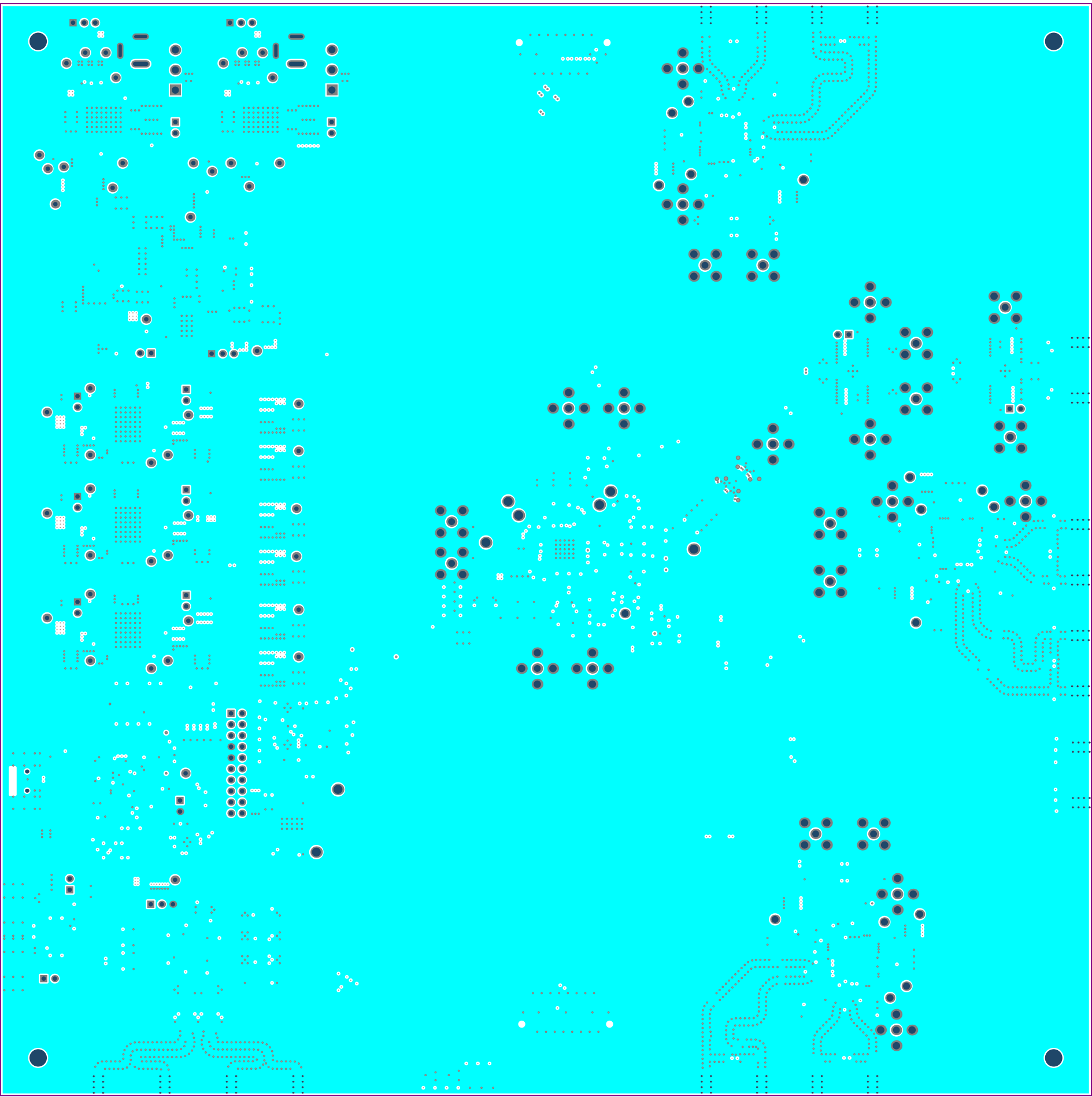
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = GND Layer	TID #:010131		
PLOT NAME = GND LAYER	GENERATED : 10/5/2022 2:56:25 PM	TEXAS INSTRUMENTS	



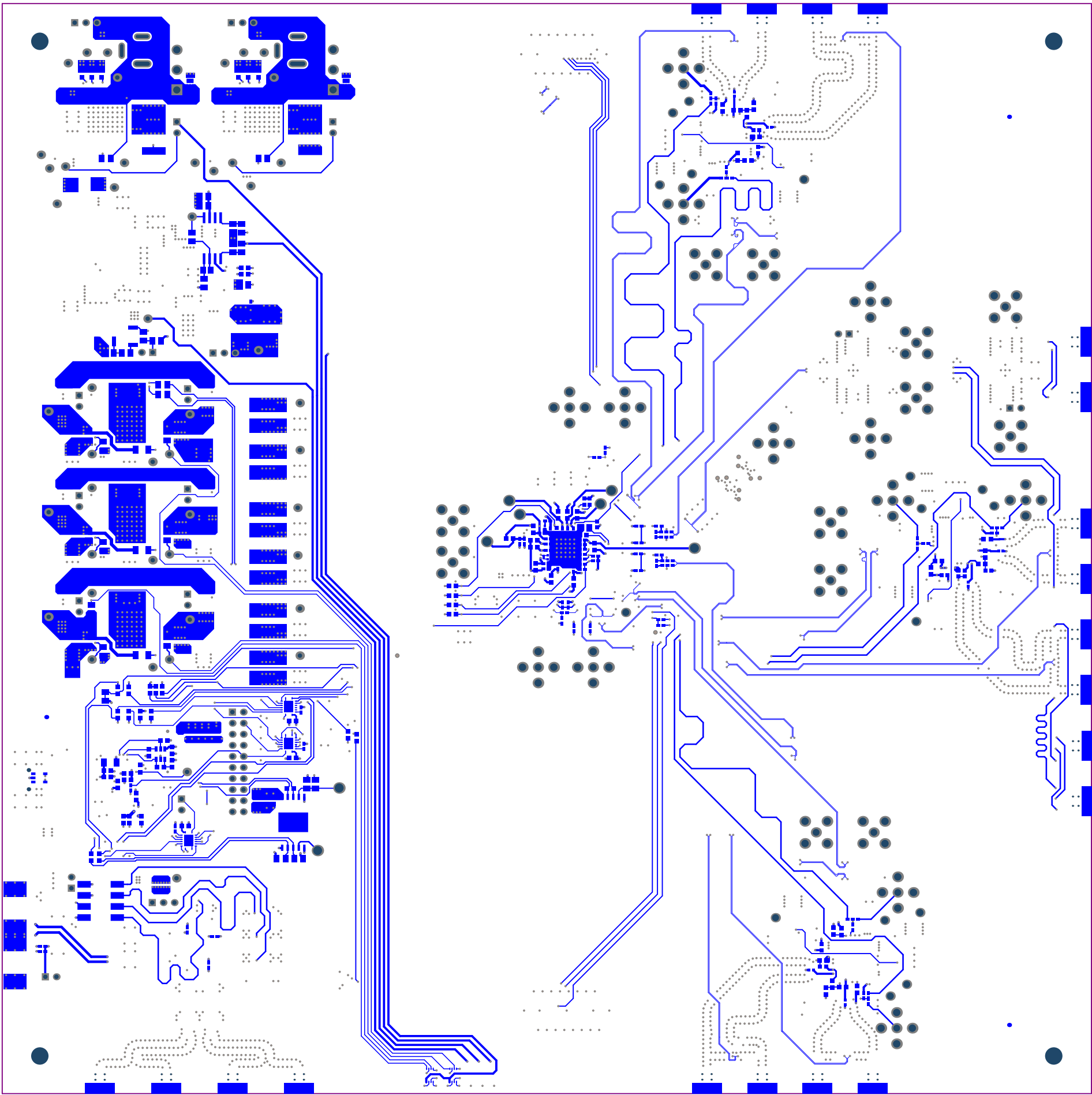
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = Signal Layer2	TID #:010131		
PLOT NAME = Signal Layer 2	GENERATED : 10/5/2022 2:56:26 PM	TEXAS INSTRUMENTS	



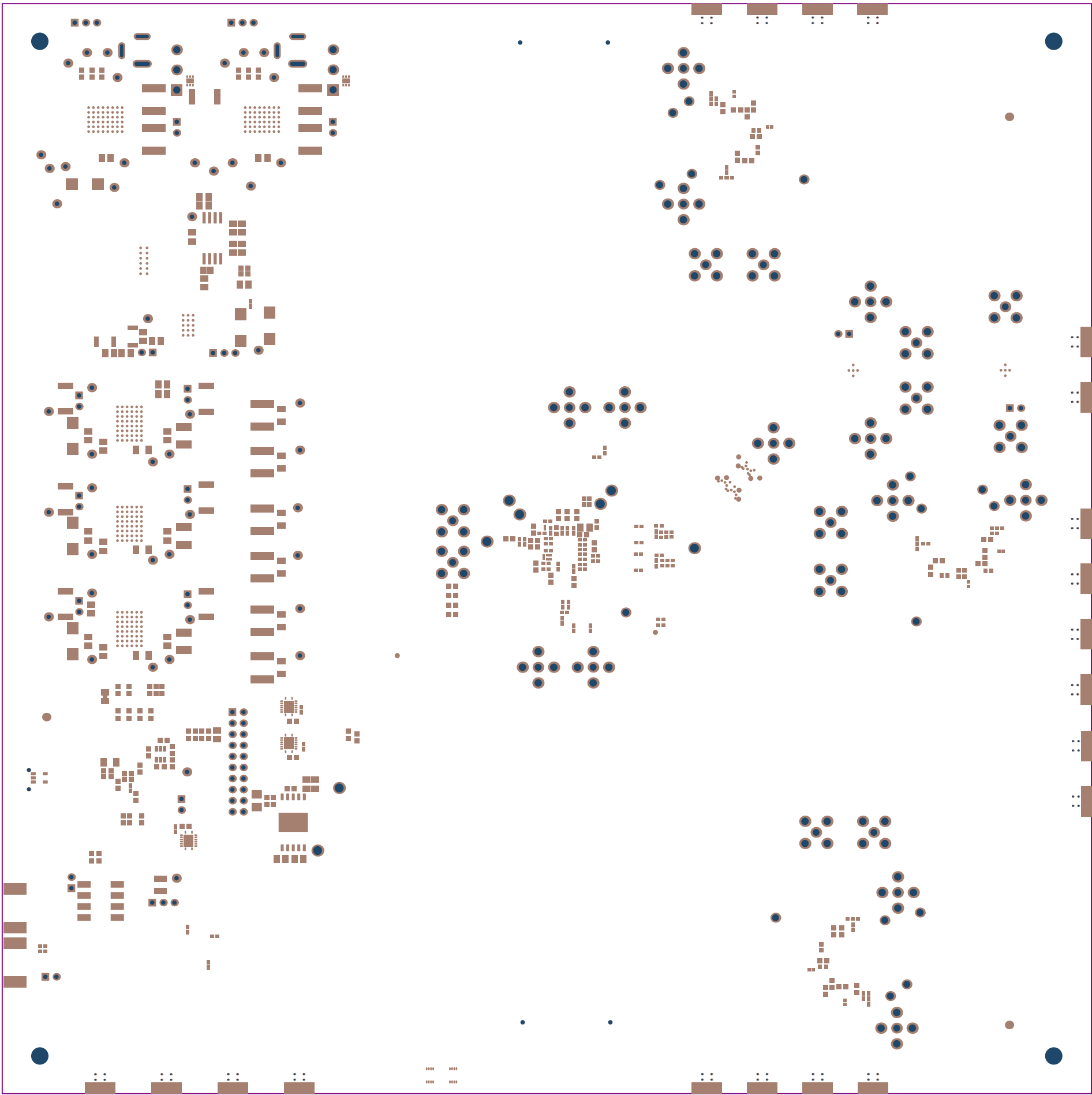
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = Signal Layer1	TID #:010131		
PLOT NAME = Signal Layer 3	GENERATED : 10/5/2022 2:56:26 PM	TEXAS INSTRUMENTS	



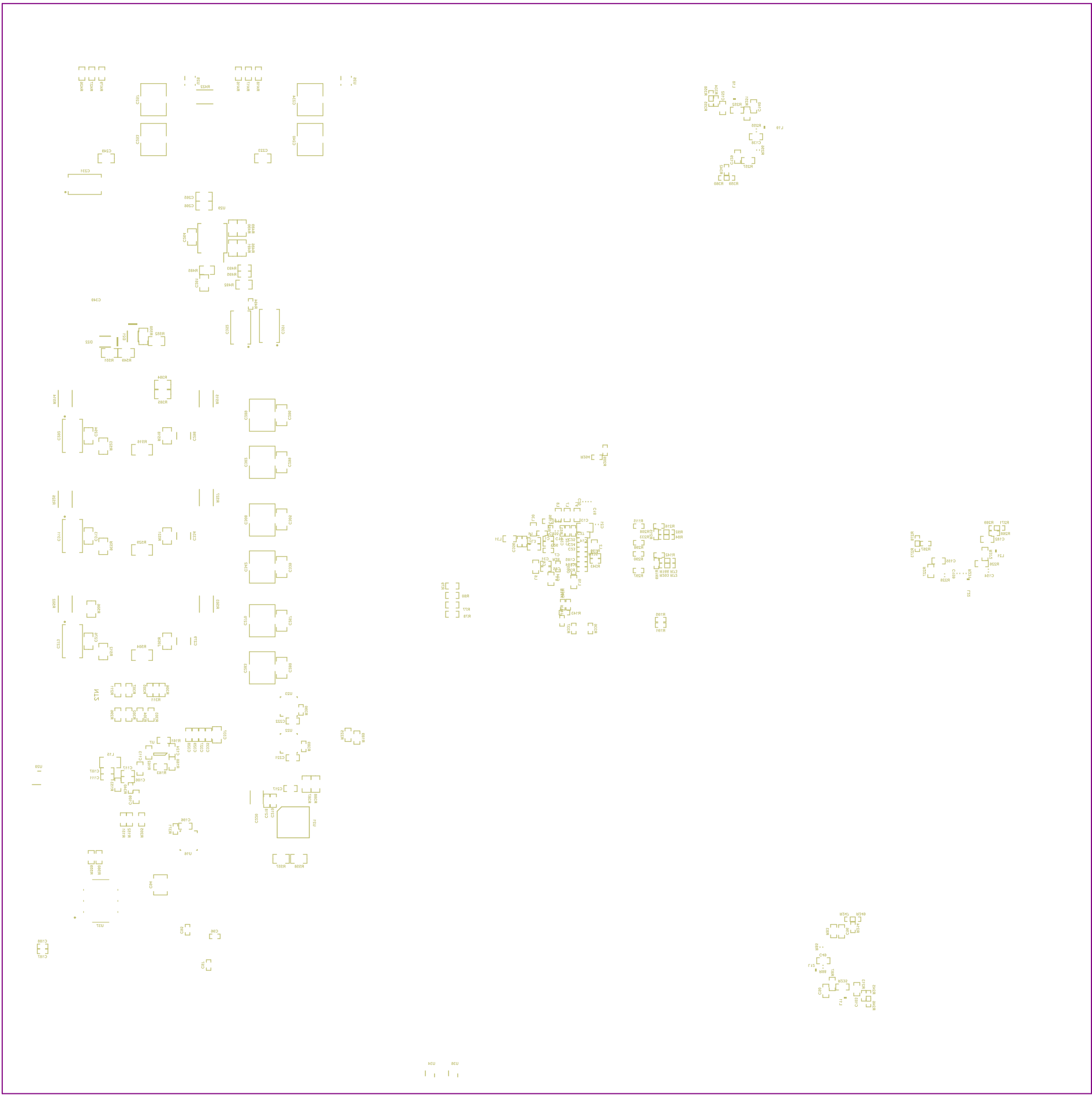
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = PWR Layer	TID #:010131		
PLOT NAME = PWR LAYER	GENERATED : 10/5/2022 2:56:26 PM	TEXAS INSTRUMENTS	



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = BOTTOM LAYER	TID #: 010131		
PLOT NAME = Bottom Layer	GENERATED : 10/5/2022 2:56:27 PM	TEXAS INSTRUMENTS	



ALL ARTWOK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = BOTTOM SOLDER	TID #:010131		
PLOT NAME = Bottom Solder Mask	GENERATED : 10/5/2022 2:56:27 PM	TEXAS INSTRUMENTS	



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME = BOTTOM OVERLAY	TID #:010131		
PLOT NAME = Bottom Overlay	GENERATED : 10/5/2022 2:56:27 PM	TEXAS INSTRUMENTS	

IMPEDANCE TABLE:-

Layer	SE IMP (OHM) +/-10%	SE TRACE WIDTH IN MILS	DIFF IMP (OHM) +/-10%	DIFF TRACE WIDTH/SPACING IN MILS	DIFF IMP (OHM) +/-10%	WIDTH/SPACING IN MILS	REFERENCE Layer
Top Layer	50(CPW) 50	22mil 24mil	90 ohms	15mil trace/ 7mil space	100 ohms	12mil trace/ 8mil space	GND Layer
SIGNAL Layer1	50	10.5 mil	90 ohms	-	100 ohms	5.5mil trace/ 6mil space	GND Layer
SIGNAL Layer2	50	10.5 mil	90 ohms	-	100 ohms	5.5mil trace/ 6mil space	PLD Layer
BOTTOM Layer	50	13.5 mil	90 ohms	-	100 ohms	4.25mil trace/ 4.25mil space	PLD Layer

22 mil (CPW) width on top layer should be controlled 50 ohms +/- 5%
ALL SMA CONNECTORS TO FLUSH TO THE EDGE OF THE BOARD, NO GAP ALLOWED.
This is especially critical for: RfOutAP, RfOutAM, RfOutBP, and RfOutBM SMA connectors

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.40mil	3.5	
1	Layer 1 - Top Layer		1.40mil		
	Dielectric 1	Rogers4003C	12.00mil	4.2	
2	Layer 2 - GND Layer		1.40mil		
	Dielectric 2	FR4 370	8.50mil	4.2	
3	Layer 3 - Signal		1.40mil		
	Dielectric 3	FR4 370	14.50mil	4.2	
4	Layer 4 - Signal		1.40mil		
	Dielectric 4	FR4 370	8.50mil	4.2	
5	Layer 5 - GND		1.40mil		
	Dielectric 5	FR4 370	8.00mil	4.2	
6	Bottom Layer		1.40mil		
	Bottom Solder	Solder Resist	0.40mil	3.5	
	Bottom Overlay				

Drill Table
FOR 7.874MIL DRILL +0/-7.874MIL
FOR 10MIL DRILL +0/-10MIL
FOR 12MIL DRILL +0/-12MIL
FOR 16MIL DRILL +0/-16MIL
FOR PTH DRILL +/-3MIL
FOR NPTH DRILL +/-2MIL

Symbol	Count	Hole Size	Plated	Hole Type	Via/Pad	Hole Length
I	338	7.87mil (0.200mm)	PTH	Round	Via	-
✕	2755	10.00mil (0.254mm)	PTH	Round	Via	-
▽	4	12.00mil (0.305mm)	PTH	Round	Via	-
F	160	16.00mil (0.406mm)	PTH	Round	Pad	-
★	8	25.00mil (0.635mm)	PTH	Round	Via	-
▼	4	29.92mil (0.760mm)	PTH	Slot	Pad	120.08mil (3.050mm)
☆	2	35.43mil (0.900mm)	NPTH	Round	Pad	-
⊙	2	39.76mil (1.010mm)	PTH	Slot	Pad	140.16mil (3.560mm)
⊗	111	40.00mil (1.016mm)	PTH	Round	Pad	-
□	4	40.16mil (1.020mm)	NPTH	Round	Pad	-
◇	25	62.00mil (1.575mm)	PTH	Round	Pad	-
J	16	63.00mil (1.600mm)	PTH	Round	Pad	-
○	6	64.96mil (1.650mm)	PTH	Round	Pad	-
⊗	100	67.00mil (1.702mm)	PTH	Round	Pad	-
■	8	80.71mil (2.050mm)	PTH	Round	Pad	-
	3543 Total					

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

DESIGN INFORMATION

BOARD SIZE (REFER ALSO ARRAY/PANEL PROFILING INFORMATION)
175MM X 130mm

Number of Layers : 6
MIN. TRACK WIDTH: 4.25_MIL
MIN. CLEARANCE: 4.25_MIL
MIN. VIA PAD SIZE: 16_MIL

MINIMUM ANNUULAR RING 5.90 MIL 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 Rogers4003C and FR4 370

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

TOLERANCE: ☒ 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: ☒ 1.4MIL (1oz) ☒ 0.7MIL (1/2oz) N/A

DRILLING:
REFERENCE: ☒ AS SHOWN ☒ NC_DRILL FILES
PTH MIN COPPER THICKNESS: ☒ 1MIL ☐ OTHER

BOARD FINISH:
SLKSCREEN: ☒ TOP ☒ BOTTOM
SLKSCREEN COLOR: ☒ WHITE ☐ OTHER

SOLDER RESIST COLOR:
☐ GREEN ☒ BLUE ☐ OTHER

SURFACE FINISH: ☒ IMMERSION GOLD (ENG) ☐ ENEPIG
☐ IMM. TIN/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 ☒ SLK



TIDA-010191

DESIGNED FOR:
Public Release

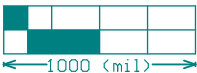
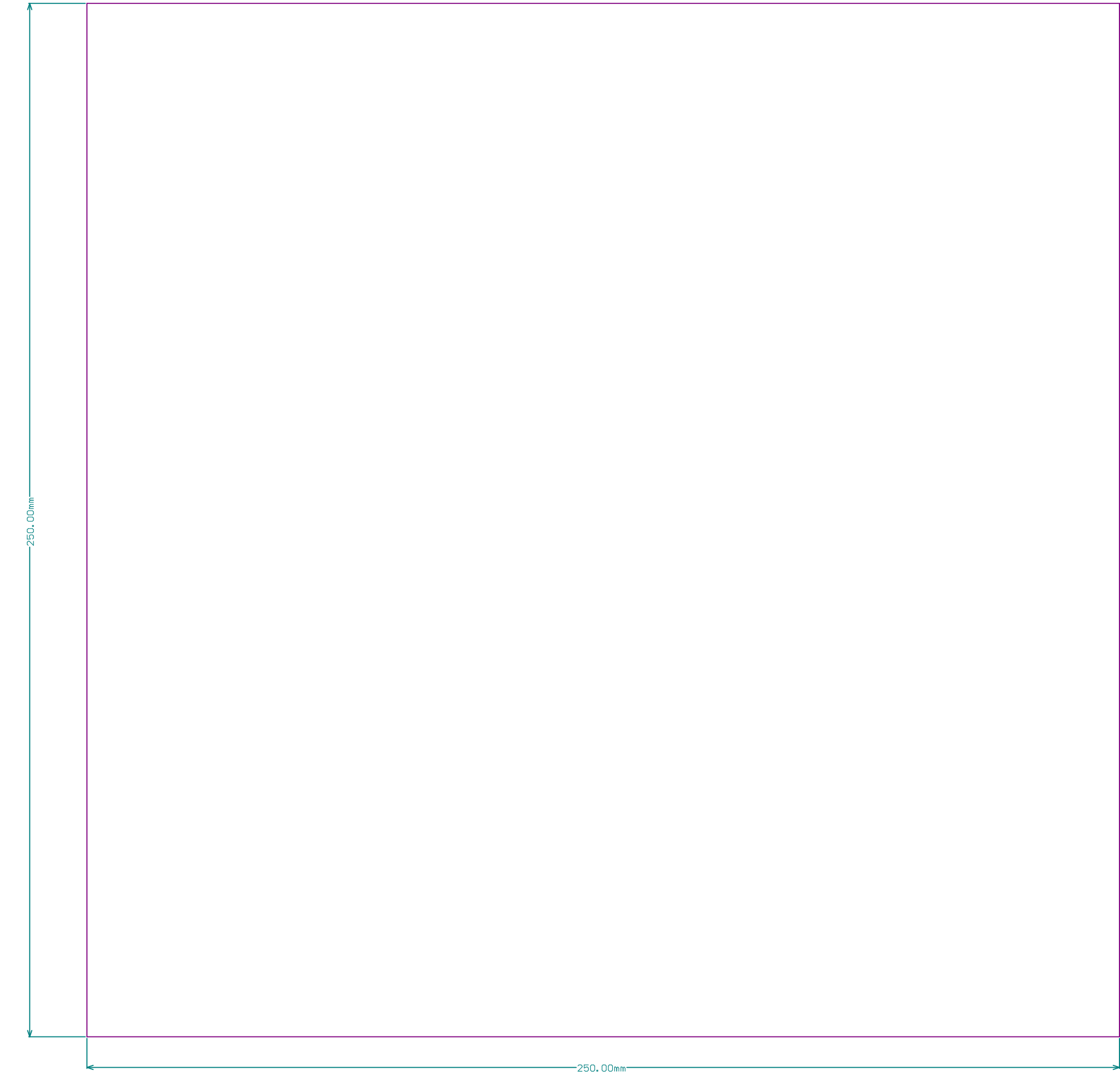
FILE NAME:
TIDA-010191-E2b3.PcbDoc

ENGINEER:
Victor Salomon

LAYOUT BY:
TBD

SCALE: 1.00

ALTIM DESIGNER VERSION:
22.9.1.49



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-010191	REV: E3	SUN REV:
LAYER NAME =	TID #: 010131		
PLOT NAME = Board Dimensions	GENERATED : 10/5/2022 2:57:17 PM	TEXAS INSTRUMENTS	

