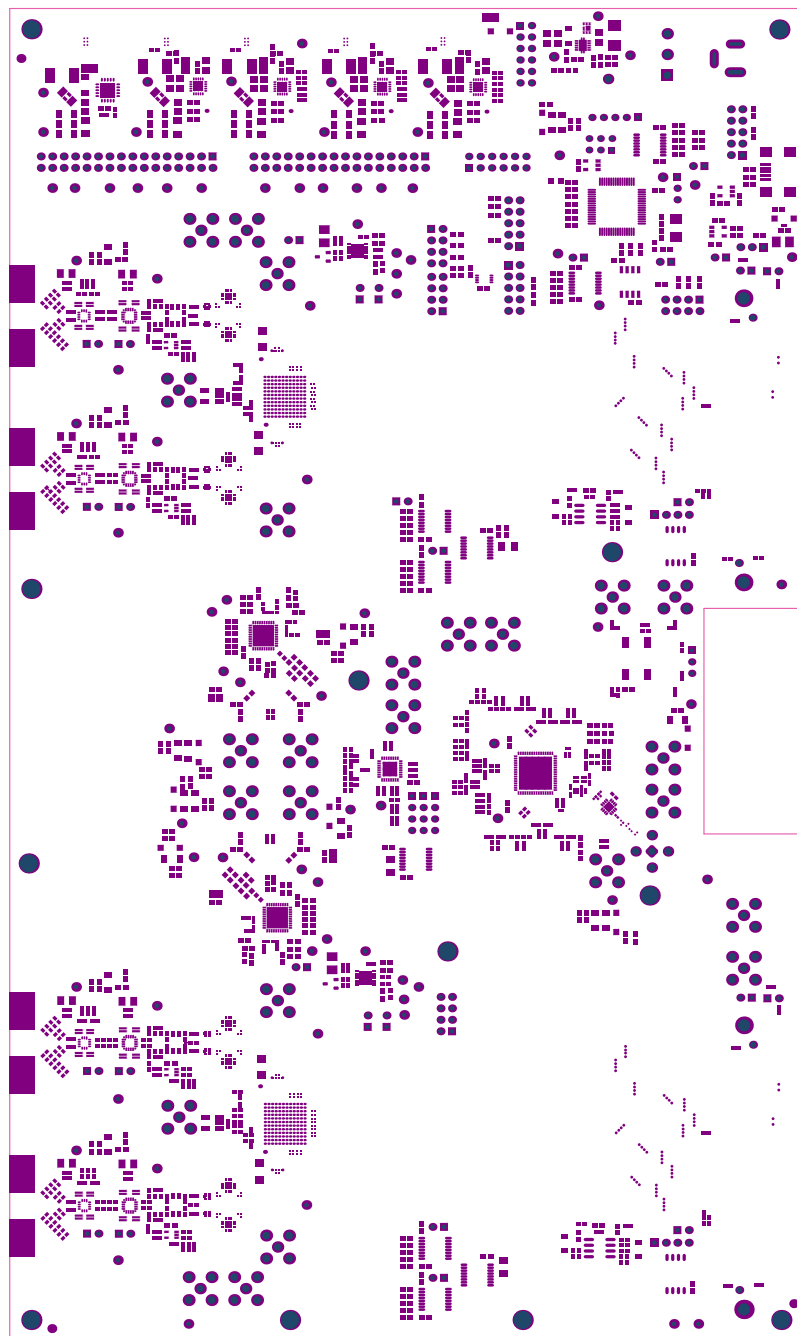
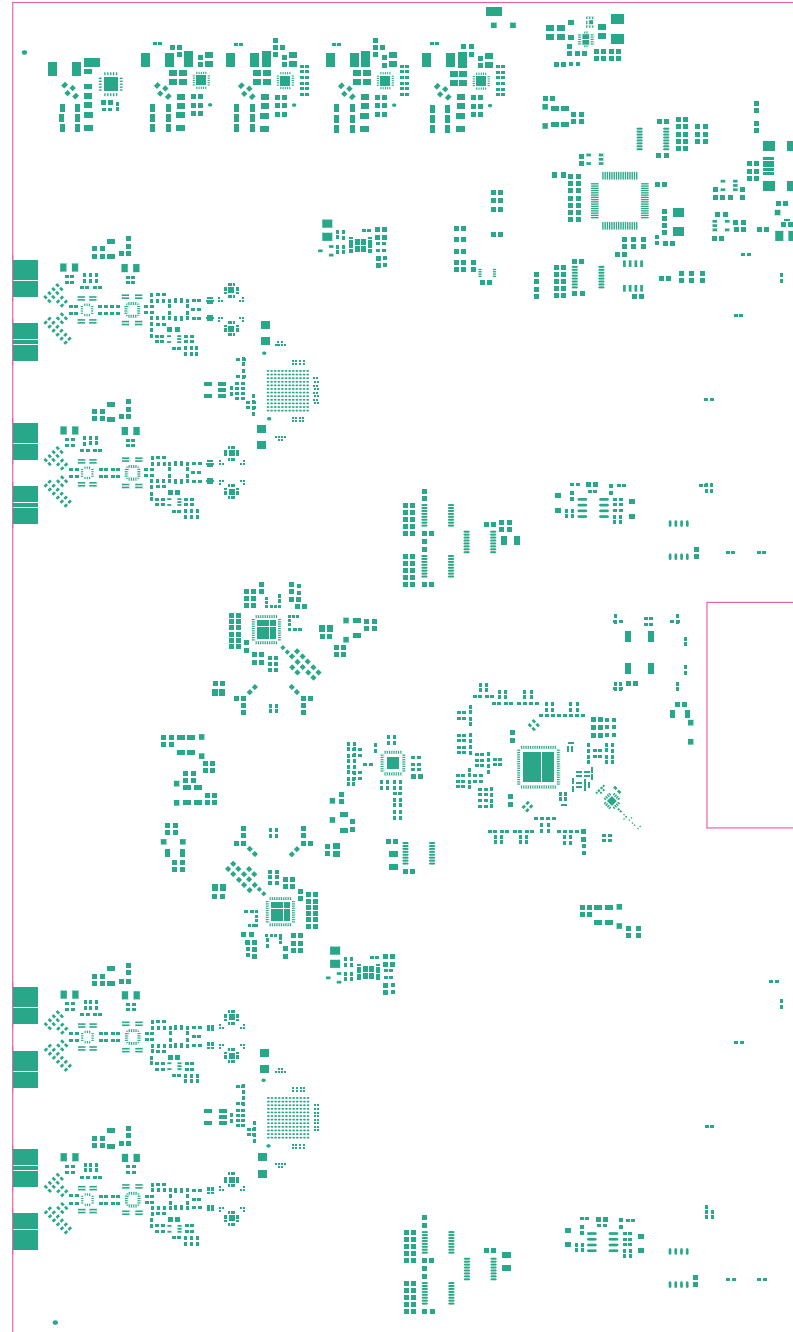


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: e3	SUN REV:
LAYER NAME = TOP OVERLAY	TID #: 01028		
PLOT NAME = Top Overlay	GENERATED : 3/5/2019 1:59:20 PM	TEXAS INSTRUMENTS	

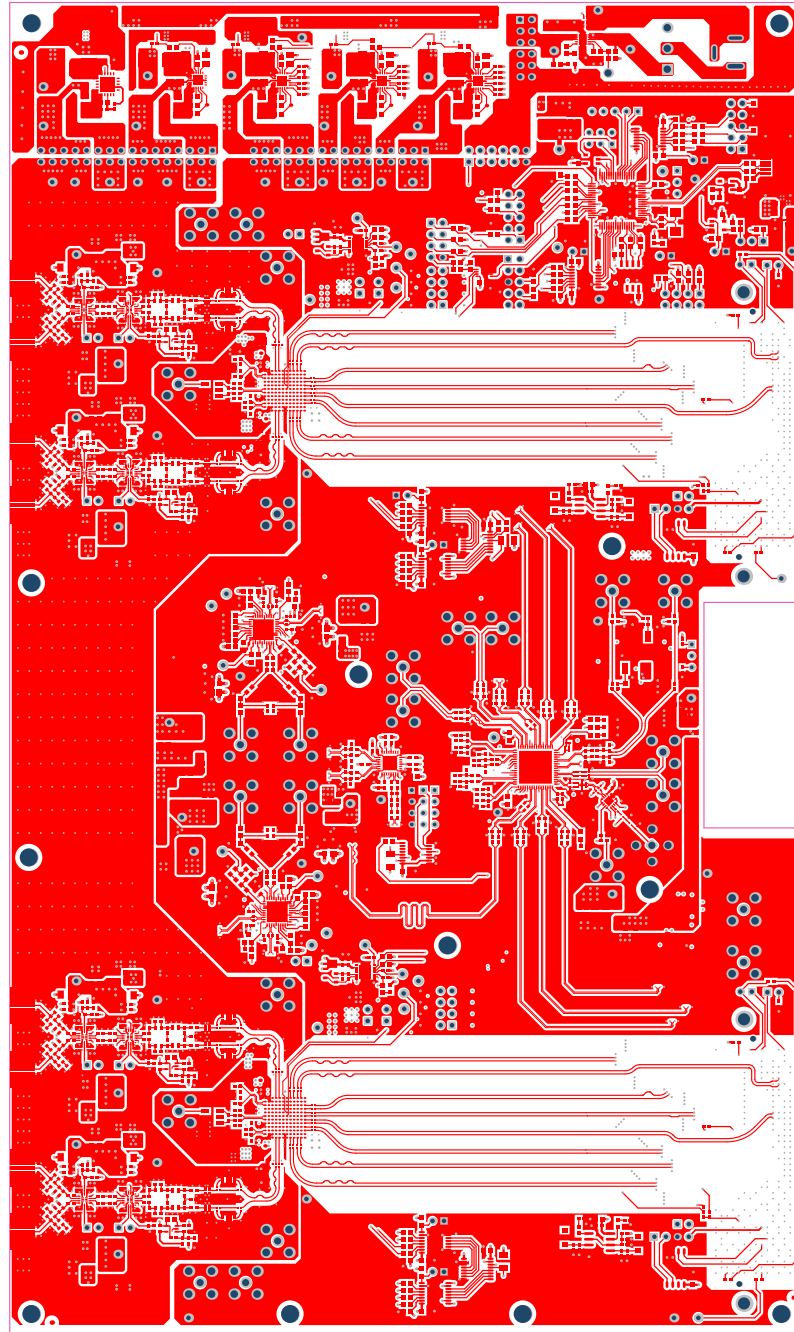


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = TOP SOLDER	TID #: 01028		
PLOT NAME = Top Solder Mask	GENERATED : 3/5/2019 1:59:23 PM		TEXAS INSTRUMENTS



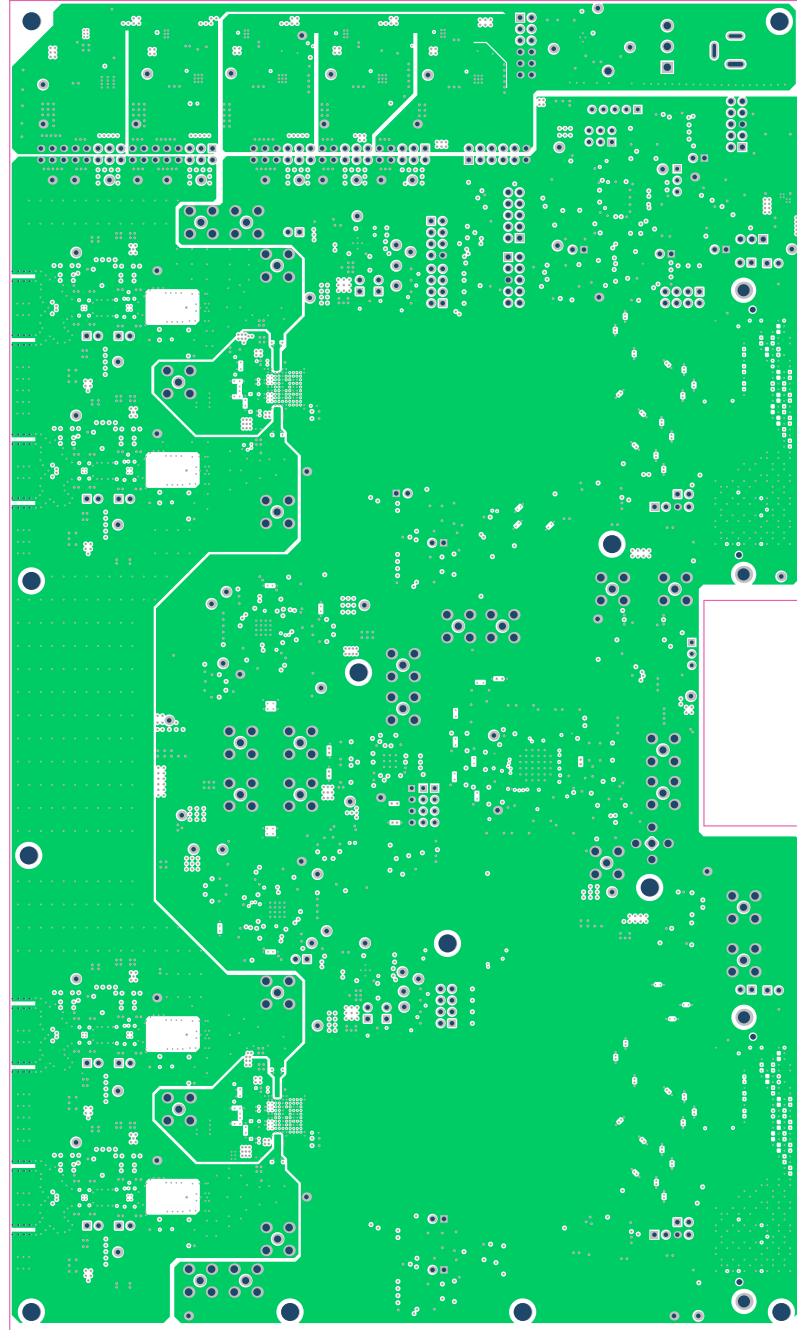
Subs on TIDA-01028 PCB

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = TOP PASTE	TID #: 01028		
PLOT NAME = TOP PASTE	GENERATED : 3/5/2019 1:59:25 PM		TEXAS INSTRUMENTS

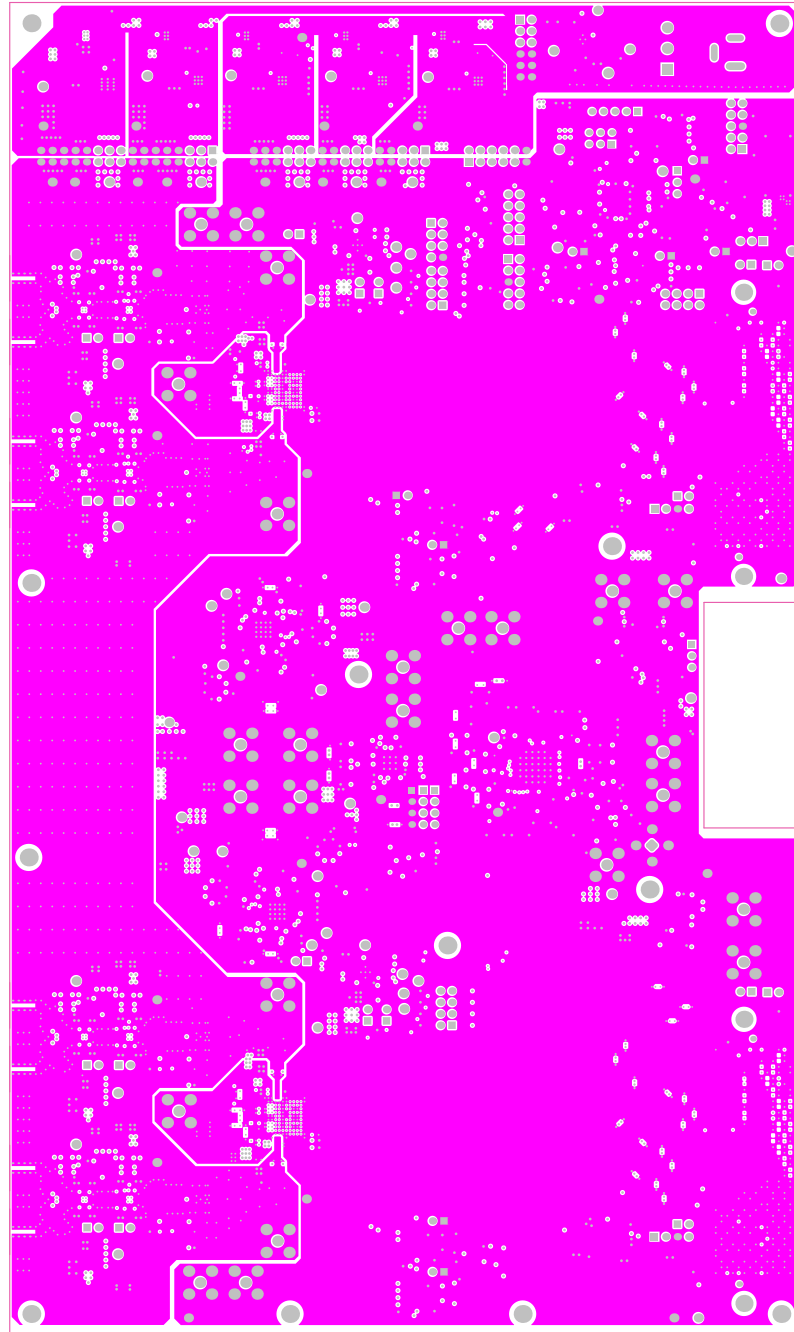


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L1_TOP LAYER	TID #: 01028		
PLOT NAME = L1_Top Layer	GENERATED : 3/5/2019 1:59:26 PM		TEXAS INSTRUMENTS



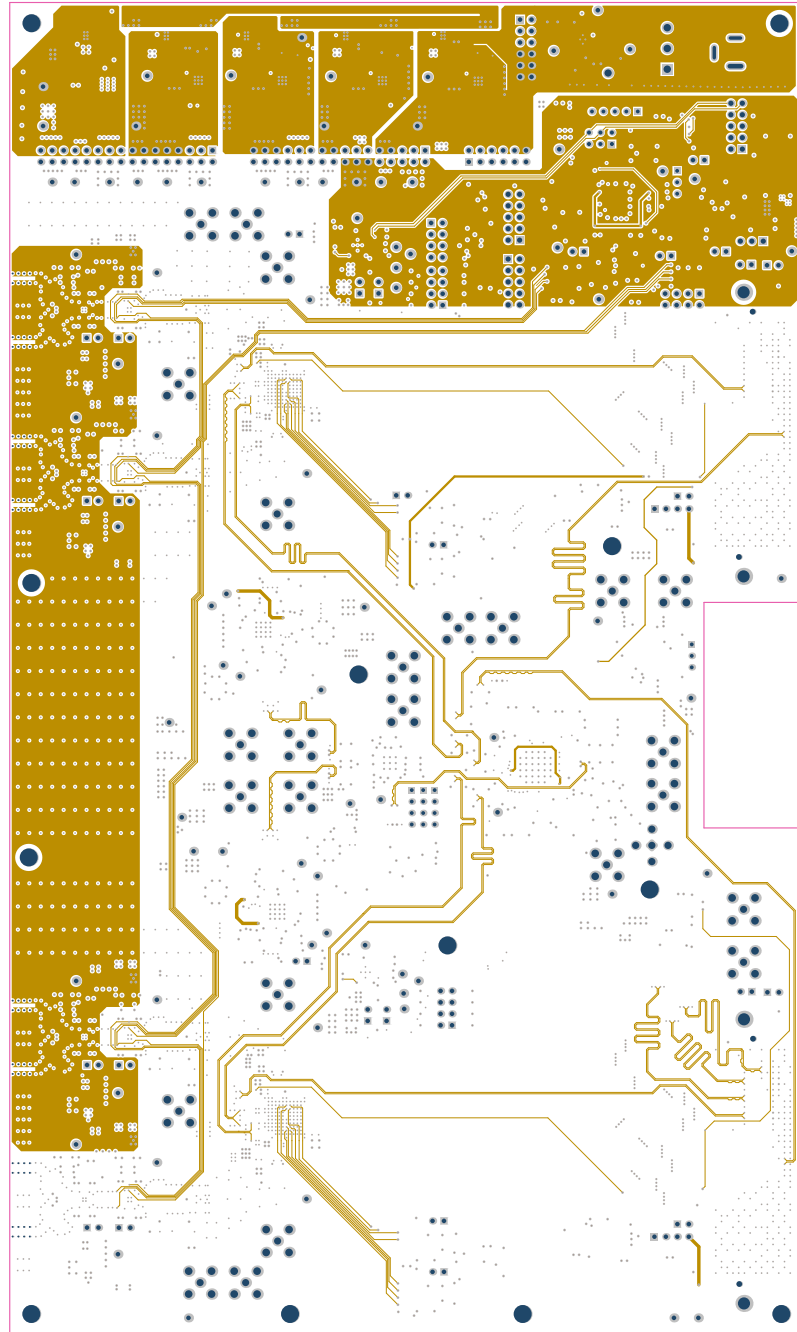


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L2_GND	TID #: 01028		
PLOT NAME = L2_GND	GENERATED : 3/5/2019 1:59:28 PM		TEXAS INSTRUMENTS

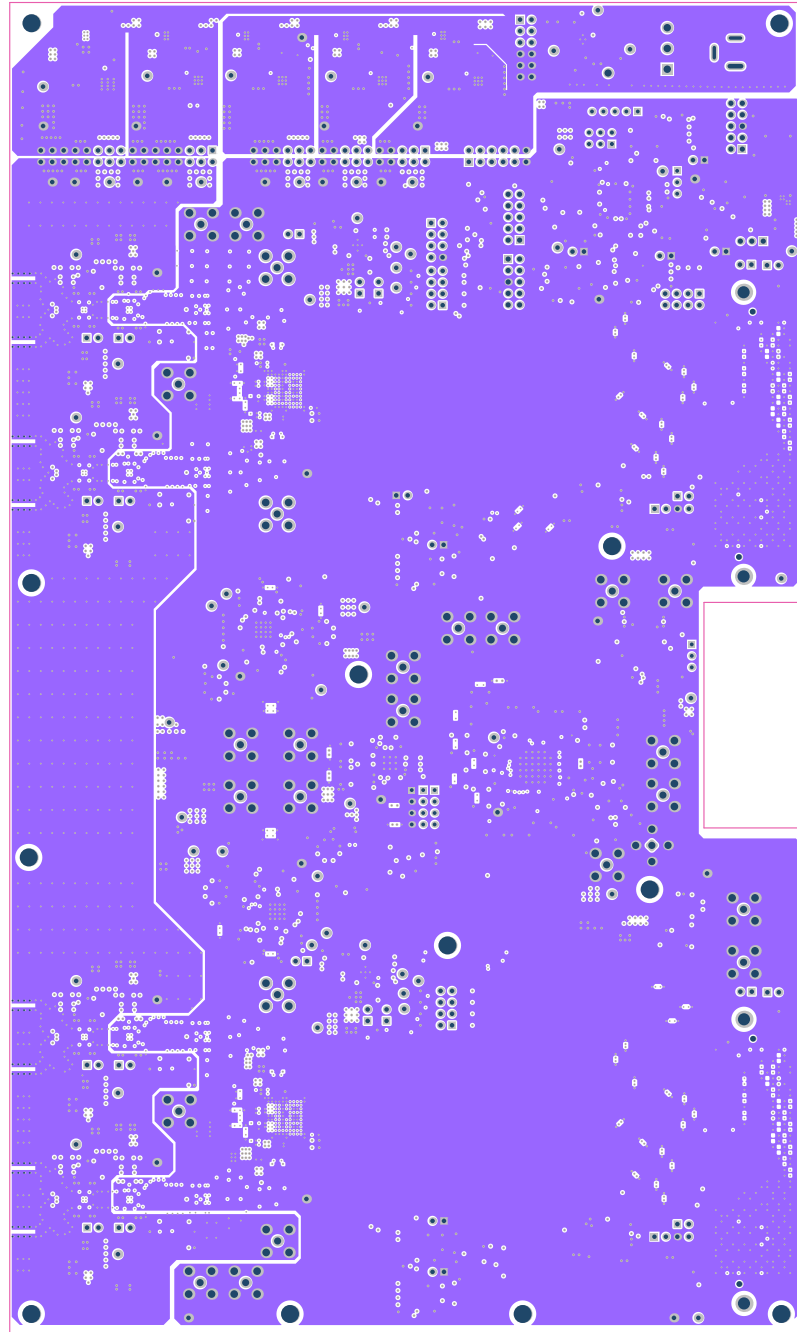


Build on TIDA-01028 PCB

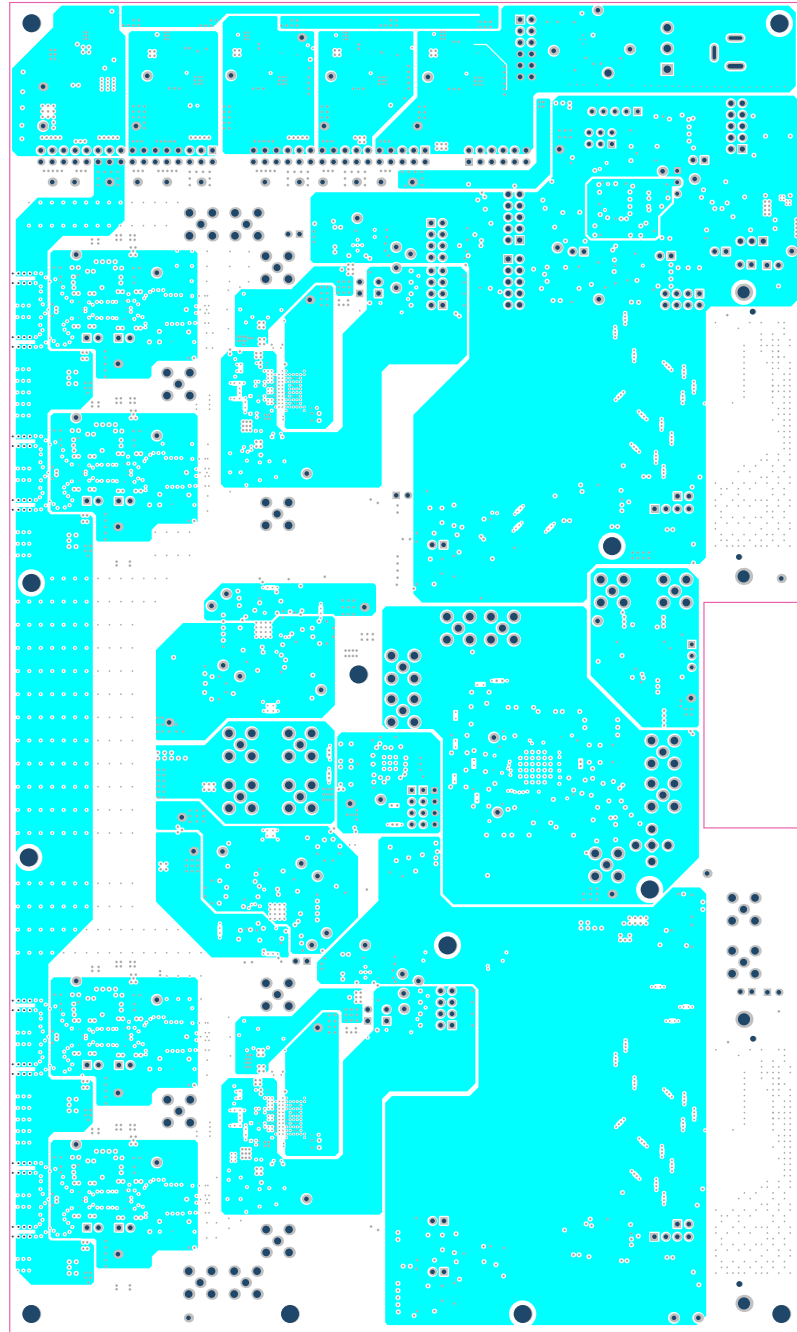
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L3_GND	TID #: 01028		
PLOT NAME = L3_GND	GENERATED : 3/5/2019 1:55:29 PM	TEXAS INSTRUMENTS	



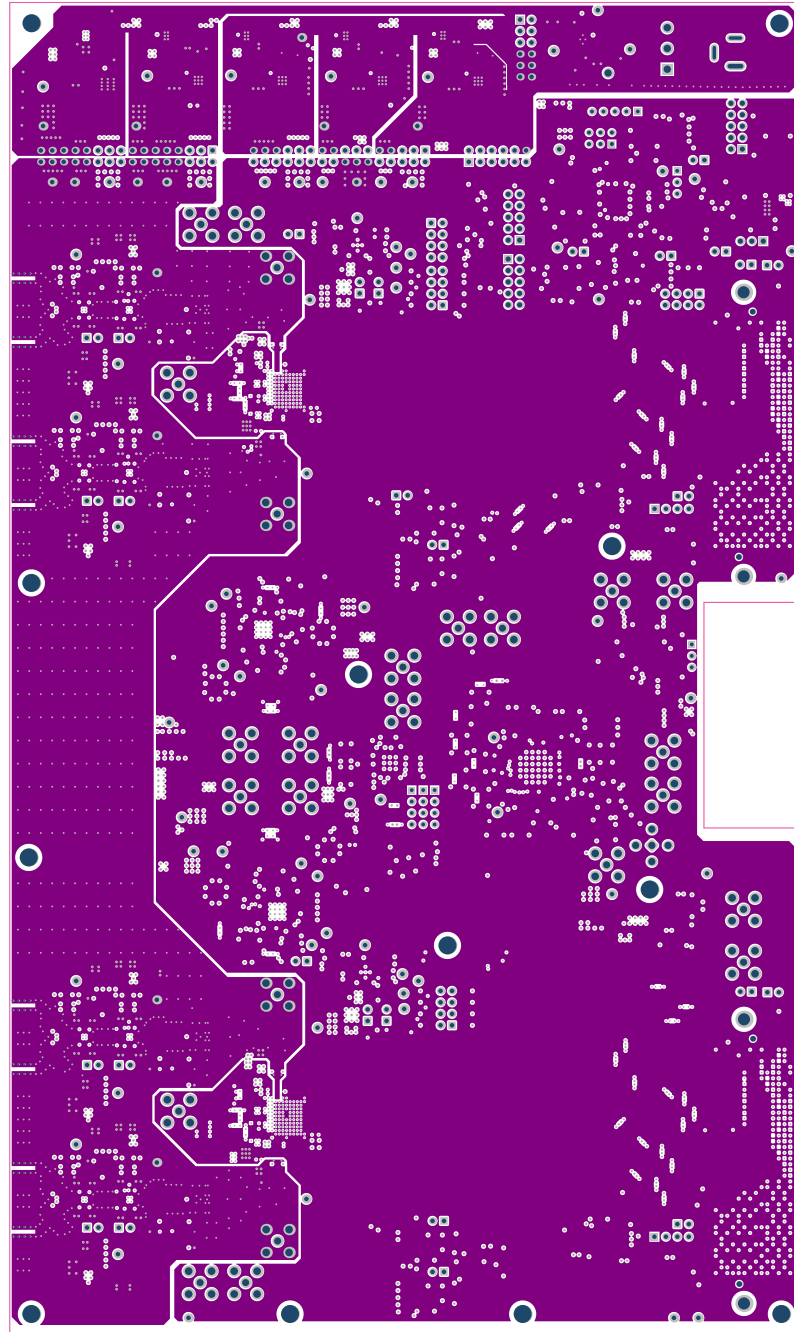
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L4_Signal Layer 1	TID #: 01028		
PLOT NAME = L4_Signal Layer 1	GENERATED : 3/5/2019 1:59:30 PM	TEXAS INSTRUMENTS	



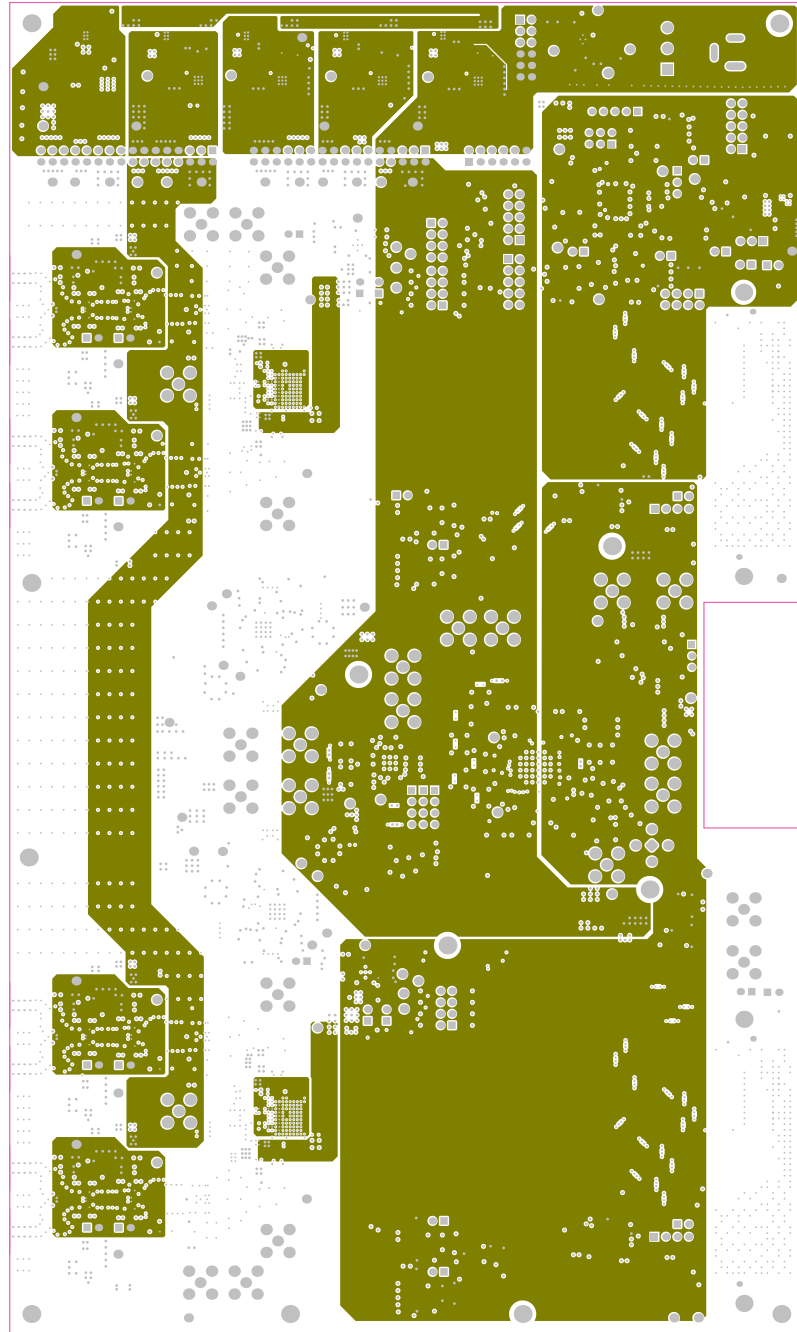
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L5_GND	TID #: 01028		
PLOT NAME = L5_GND	GENERATED : 3/5/2019 1:59:32 PM	TEXAS INSTRUMENTS	



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L6_PWR	TID #: 01028		
PLOT NAME = L6_PWR	GENERATED : 3/5/2019 1:59:33 PM	TEXAS INSTRUMENTS	

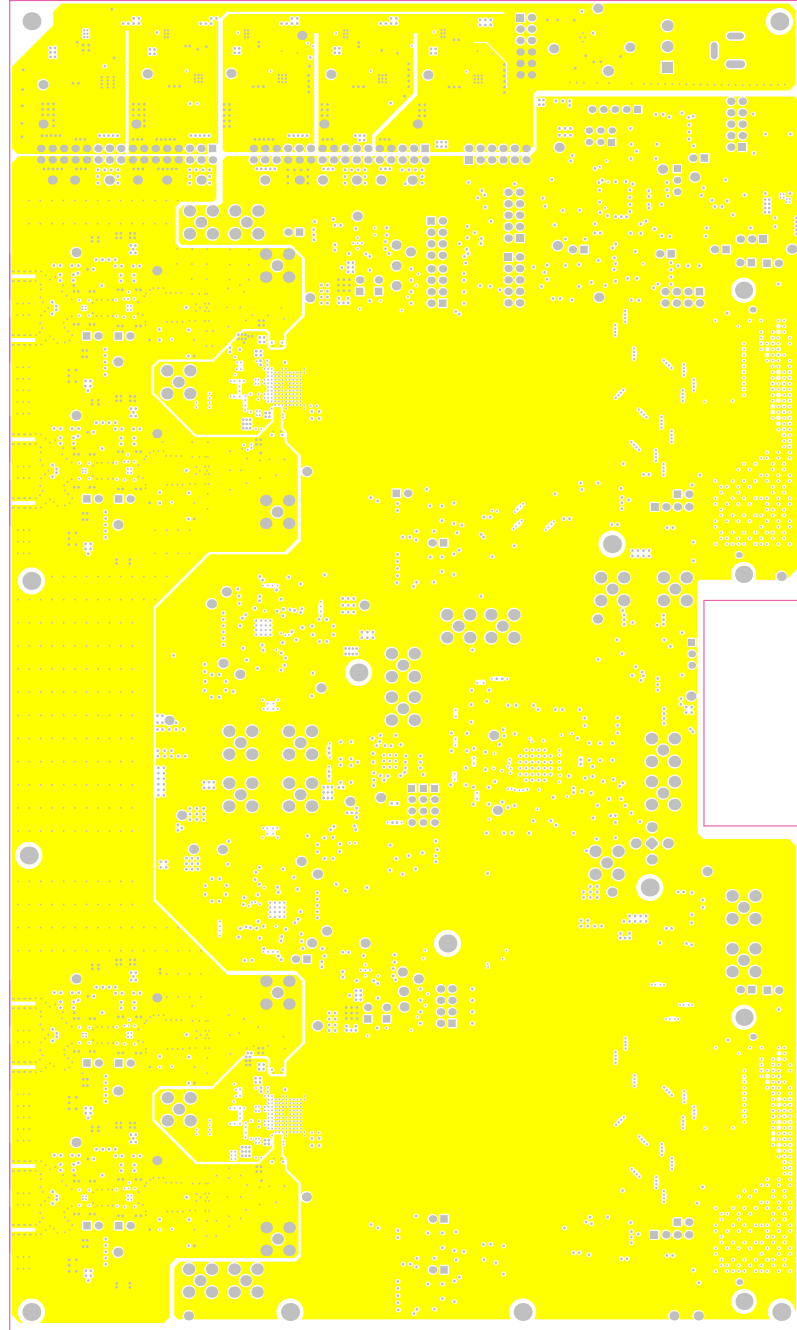


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L7_GND/PLR	TID #: 01028		
PLOT NAME = L7_GND	GENERATED : 3/5/2019 1:59:35 PM	TEXAS INSTRUMENTS	



Subs on TIDA-01022 PCB

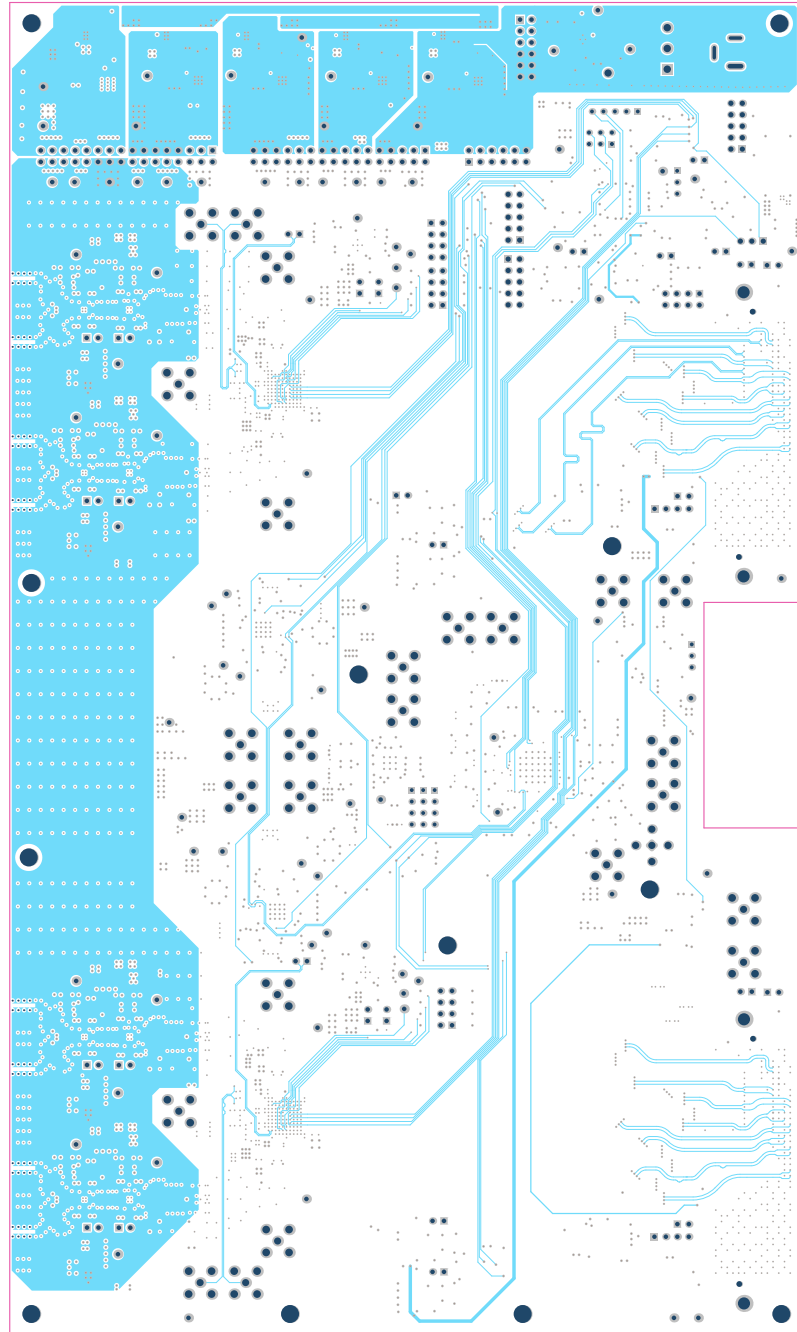
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L8_PWR	TID #: 01028		
PLOT NAME = L8_PWR	GENERATED : 3/5/2019 1:59:36 PM	TEXAS INSTRUMENTS	



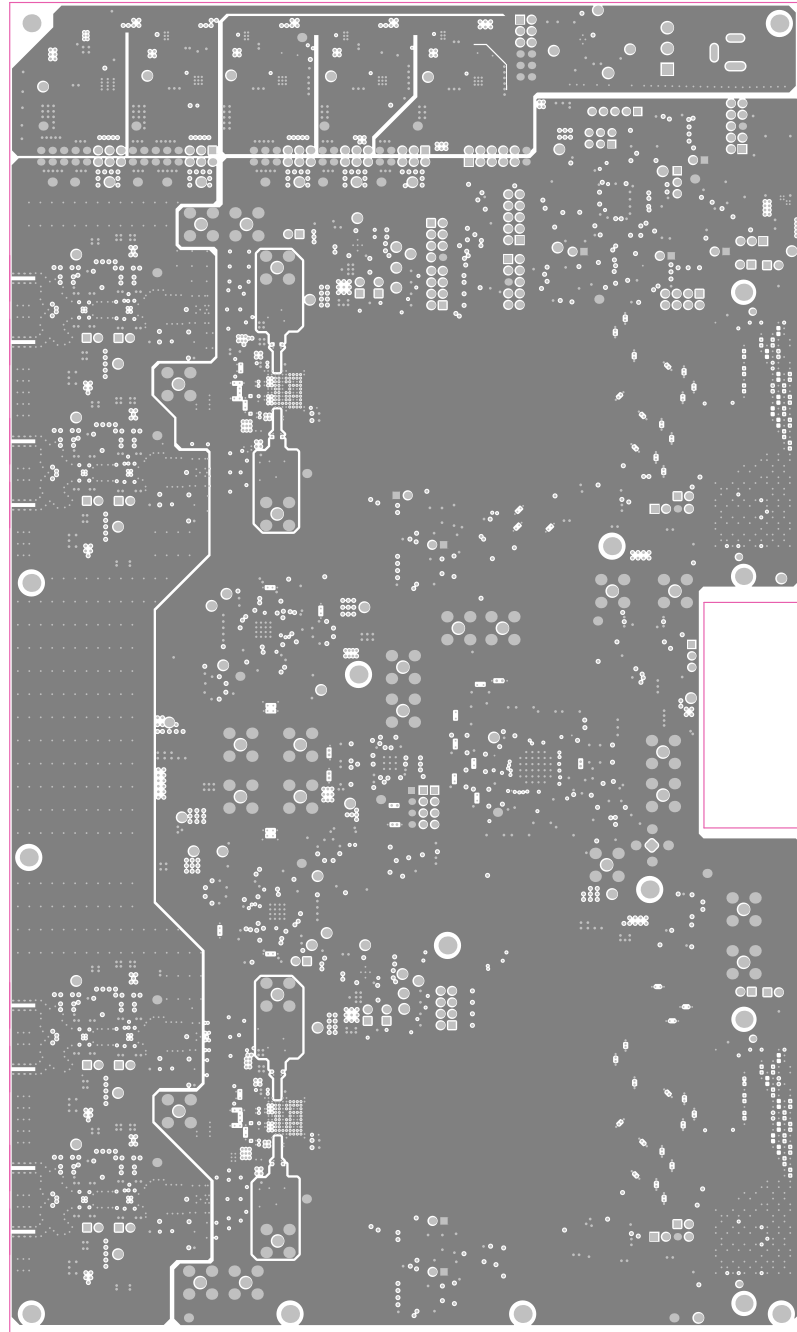
Subs on TIDA-01028 PCB

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = LS_GND/PWR	TID #: 01028		
PLOT NAME = LS_GND	GENERATED : 3/5/2019 1:59:37 PM	TEXAS INSTRUMENTS	



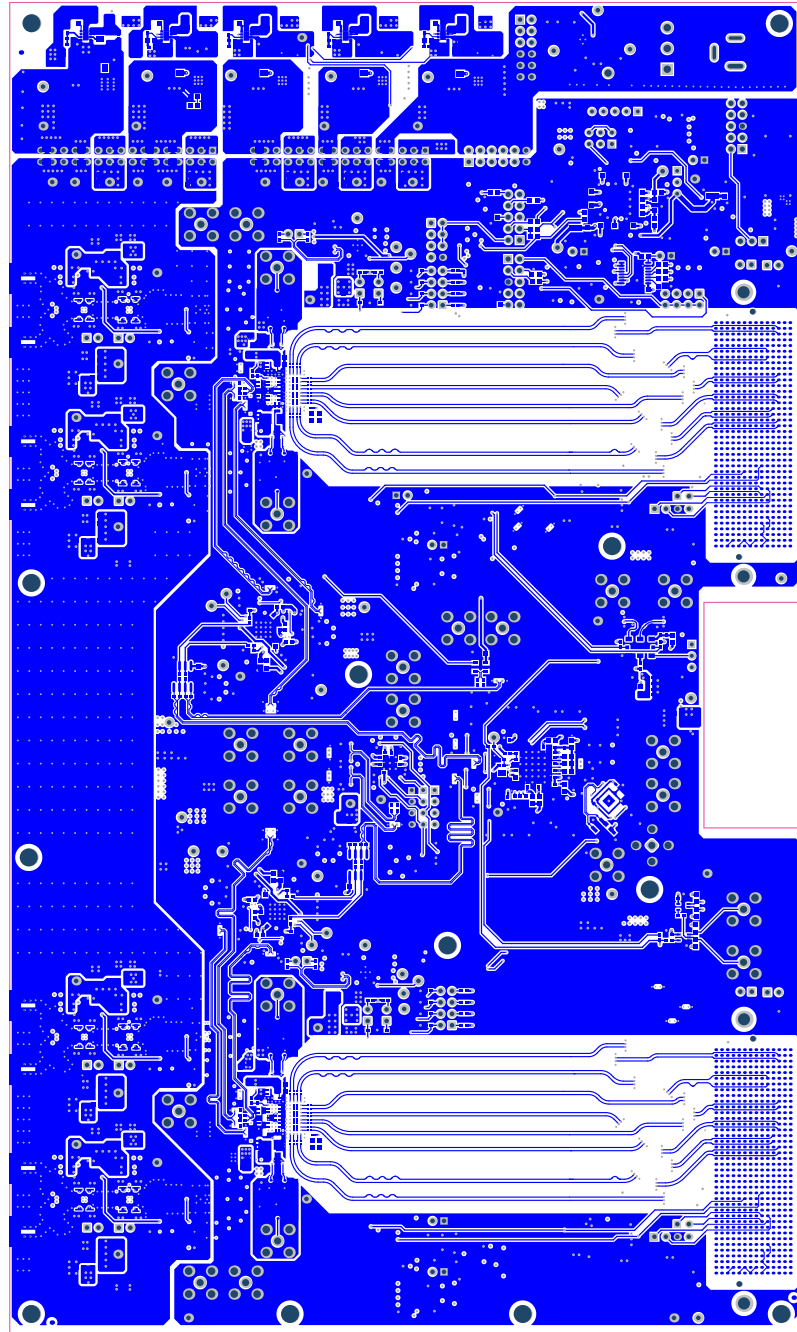


ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L10_Signal_Layer_2	TID #: 01028		
PLOT NAME = L10_Signal_Layer_2	GENERATED : 3/5/2019 1:55:39 PM	TEXAS INSTRUMENTS	

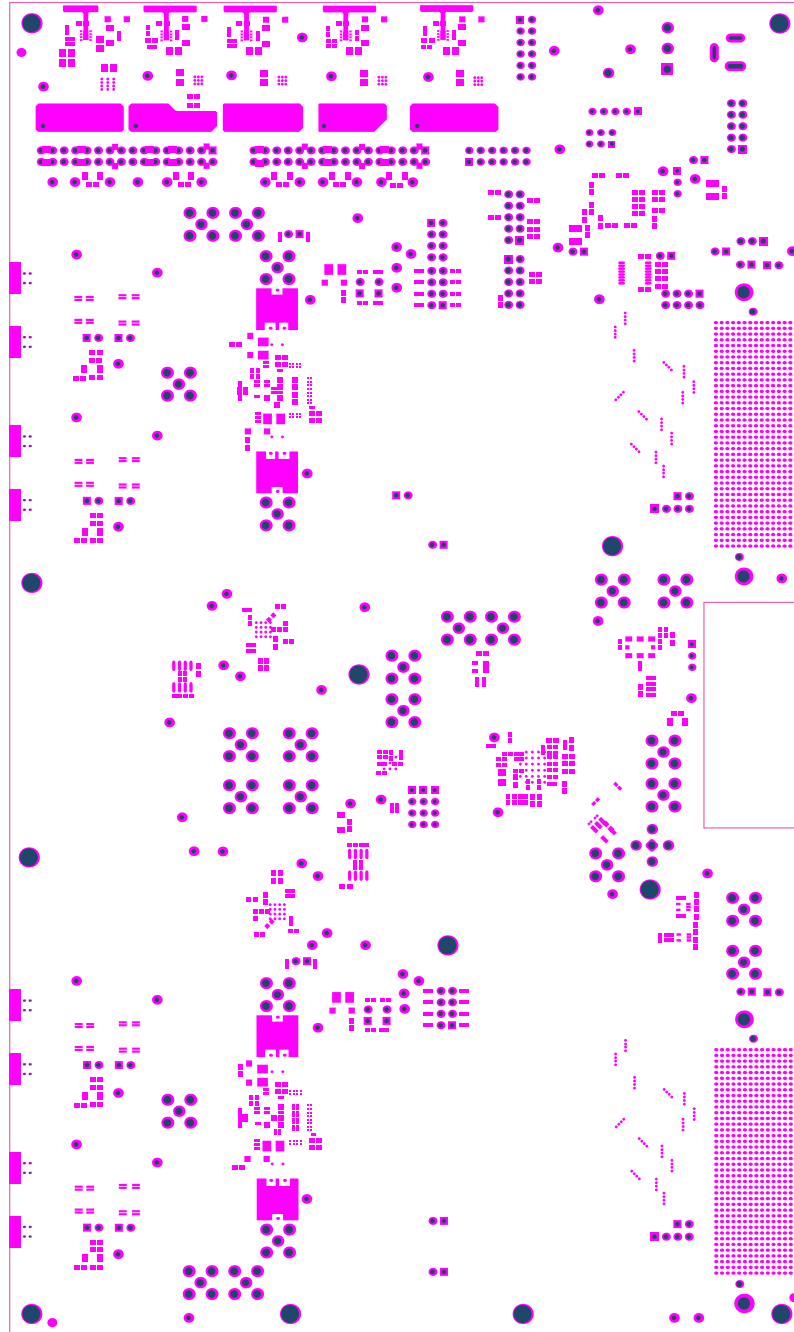


Subs on TIDA-01028 PCB

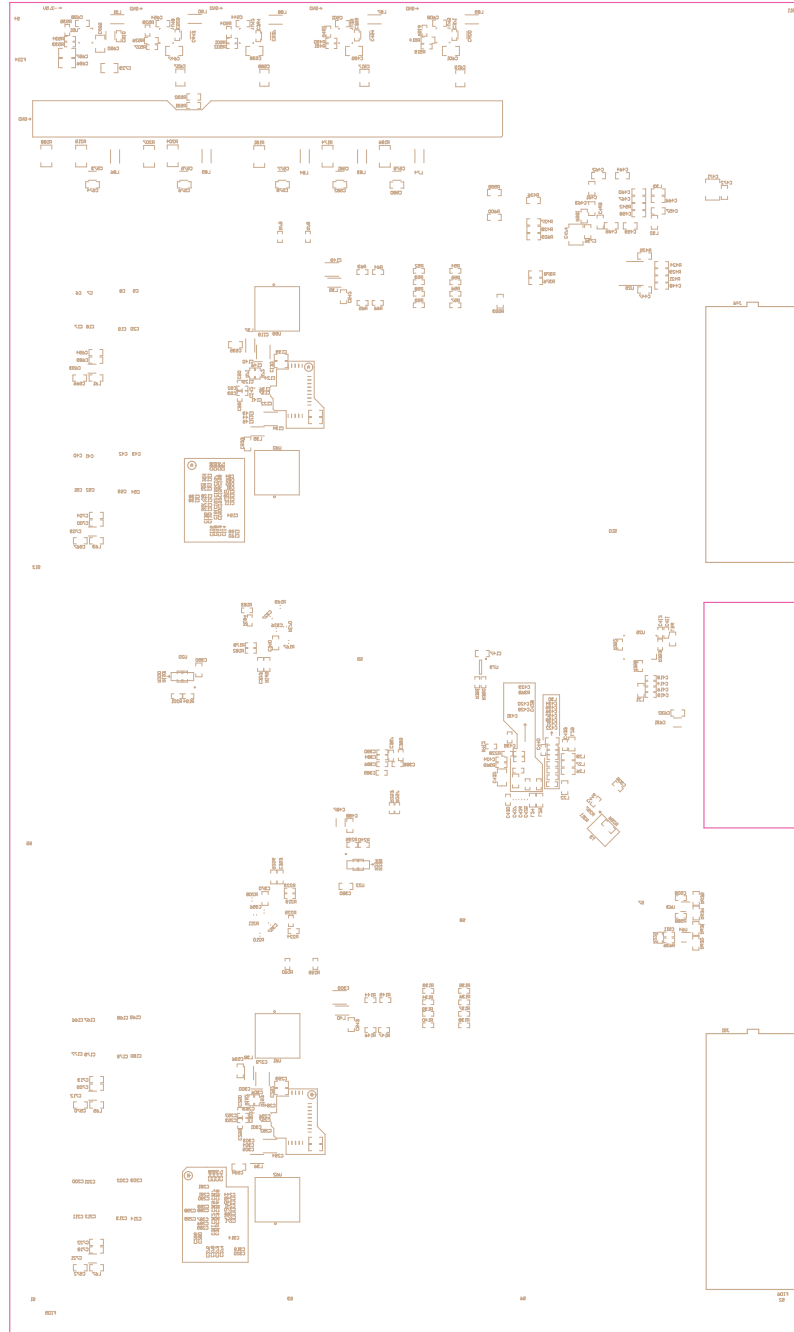
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L11_GND	TID #: 01028		
PLOT NAME = L11_GND	GENERATED : 3/5/2019 1:59:40 PM		TEXAS INSTRUMENTS



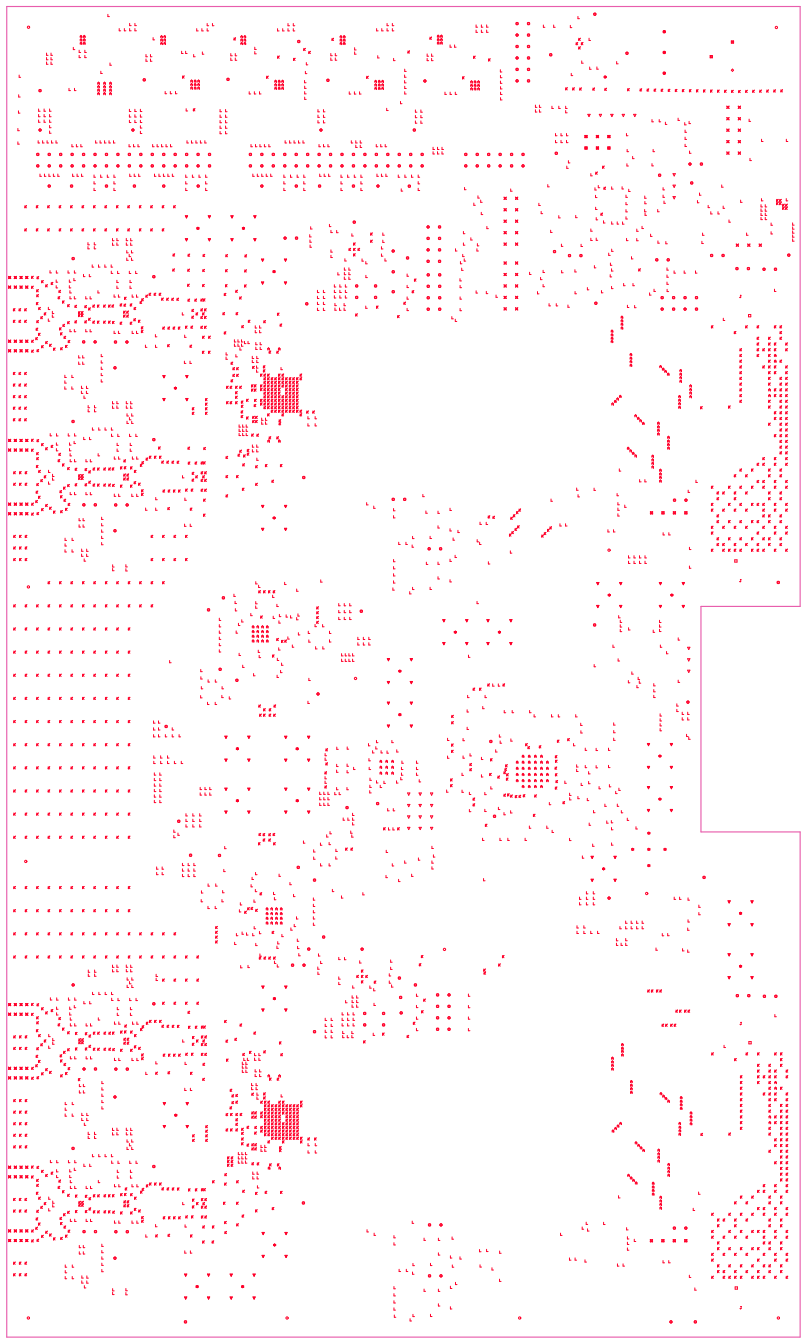
ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = L12_Bottom Layer	TID #: 01028		
PLOT NAME = L12_Bottom Layer	GENERATED : 3/5/2019 1:59:42 PM		TEXAS INSTRUMENTS



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = BOTTOM SOLDER	TID #: 01028		
PLOT NAME = Bottom Solder Mask	GENERATED : 3/5/2019 1:59:43 PM	TEXAS INSTRUMENTS	



ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01028	REV: 03	SUN REV:
LAYER NAME = BOTTOM OVERLAY	TID #: 01028		
PLOT NAME = Bottom Overlay	GENERATED : 3/5/2019 1:59:44 PM	TEXAS INSTRUMENTS	



Symbol	Count	Hole Size	Hole Length	Routed Path Length	Plated	Hole Type
⊘	89	89.76mil (2.278mm)	140.16mil (3.560mm)	100.39mil (2.550mm)	PTH	Slot
⊘	89	101mil (2.565mm)	-	-	PTH	Round
⊘	24	82mil (2.081mm)	120.08mil (3.050mm)	90.16mil (2.290mm)	PTH	Slot
⊘	24	82mil (2.081mm)	-	-	PTH	Round
⊘	64	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	35.43mil (0.900mm)	-	-	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	0.063mil	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	4.5mil trace/ 2.1mil space	NIL	L5_GND Layer
L10_Signal Layer 2	6.5mils	NIL	5.5mil 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. HOLE 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

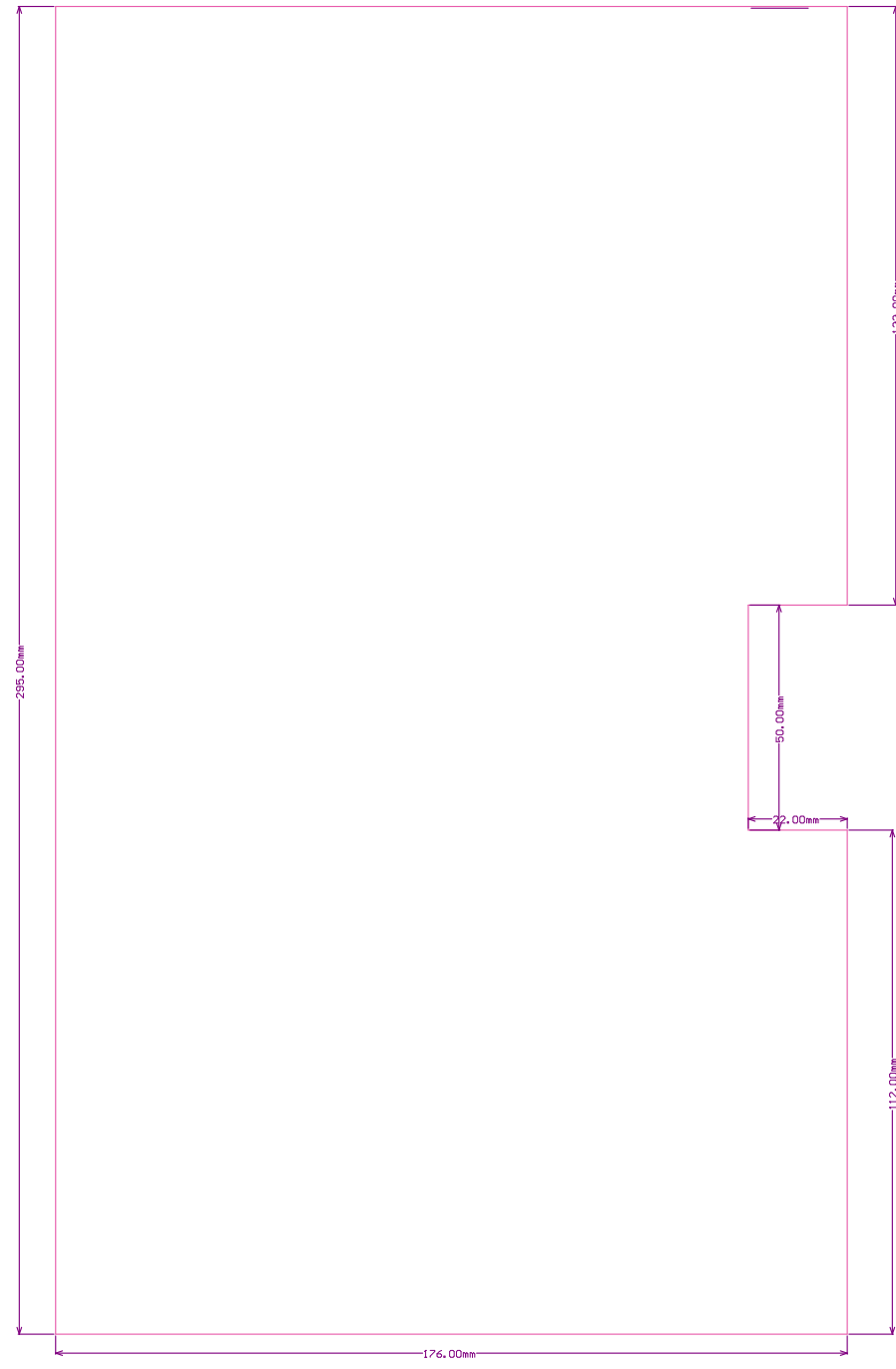
UL 94V-0  RoHS  OTHER PER ORDER

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-01028	REV: 03	SUN REV:
LAYER NAME =	TID #: 01028		
PLOT NAME = Board Dimensions	GENERATED : 3/5/2019 1:59:57 PM	TEXAS INSTRUMENTS	

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