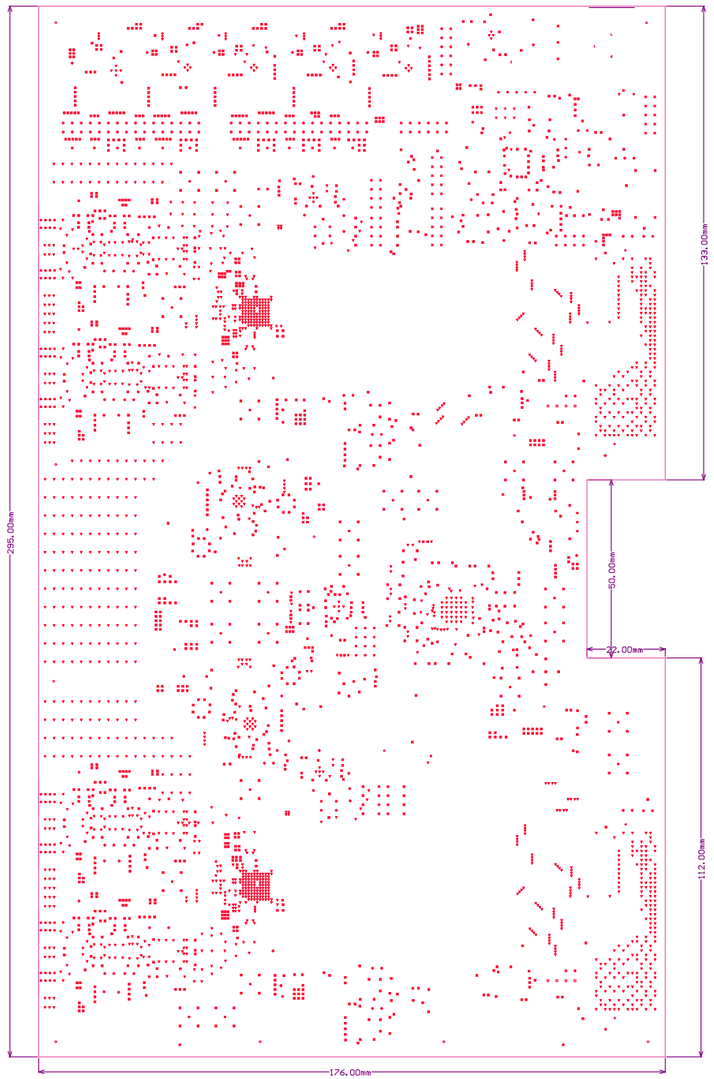

Symbol	Count	Hole Size	Hole Length	Routed Path Length	Plated	Hole Type
K	1	39.76mil (1.010mm)	140.16mil (3.560mm)	100.39mil (2.550mm)	PTH	Slot
J	1	63.00mil (1.600mm)	-	-	PTH	Round
L	2	29.92mil (0.760mm)	120.08mil (3.050mm)	90.16mil (2.290mm)	PTH	Slot
❂	3	40.16mil (1.020mm)	-	-	PTH	Round
✖	3	64.96mil (1.650mm)	-	-	PTH	Round
◇	4	50.00mil (1.270mm)	-	-	NPTH	Round
✖	5	62.99mil (1.600mm)	-	-	PTH	Round
▽	6	35.43mil (0.900mm)	-	-	PTH	Round
□	8	39.37mil (1.000mm)	-	-	PTH	Round
○	12	157.00mil (3.988mm)	-	-	NPTH	Round
✡	23	33.46mil (0.850mm)	-	-	PTH	Round
❂	25	62.00mil (1.575mm)	-	-	PTH	Round
⌘	30	45.28mil (1.150mm)	-	-	PTH	Round
✲	64	16.00mil (0.406mm)	-	-	PTH	Round
⊠	100	67.00mil (1.702mm)	-	-	PTH	Round
⌬	263	40.00mil (1.016mm)	-	-	PTH	Round
⊠	1501	12.00mil (0.305mm)	-	-	PTH	Round
▼	1699	8.00mil (0.203mm)	-	-	PTH	Round
	3750 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

Drill Table

FOR 8MIL DRILL +0/-8MIL
FOR 12MIL DRILL +0/-12MIL
FOR 16MIL DRILL +0/-16MIL
FOR PTH DRILL +/-3MIL
FOR NPTH DRILL +/-2MIL

NOTE:
Fill all on pad vias and flat the surface

STACKUP:-

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	L1_Top Layer	Copper	1.40mil		
4	Dielectric1	R-5670k	5.60mil	4.2	
5	L2_GND	Copper	0.60mil		
6	Dielectric 2	R-5775K	5.00mil	4.2	
7	L3_GND	Copper	0.60mil		
8	Dielectric 3	R-5670k	7.50mil	4.2	
9	L4_Signal Layer 1	Copper	0.60mil		
10	Dielectric 4	R-5775K	4.00mil	4.2	
11	L5_GND	Copper	0.60mil		
12	Dielectric 5	R-5670k	4.30mil	4.2	
13	L6_PWR	Copper	0.60mil		
14	Dielectric 6	R-5775K	3.00mil	4.2	
15	L7_GND/PWR	Copper	0.60mil		
16	Dielectric 7	R-5670k	4.30mil	4.2	
17	L8_PWR	Copper	0.60mil		
18	Dielectric 8	R-5775K	4.00mil	4.2	
19	L9_GND/PWR	Copper	0.60mil		
20	Dielectric 9	R-5670k	7.50mil	4.2	
21	L10_Signal Layer 2	Copper	0.60mil		
22	Dielectric 10	R-5775K	5.00mil	4.2	
23	L11_GND	Copper	0.60mil		
24	Dielectric 11	R-5670k	5.60mil	4.2	
25	L12_Bottom Layer	Copper	1.40mil		
26	Bottom Solder	Solder Resist	0.40mil	3.5	
27	Bottom Overlay				

IMPEDANCE TABLE:-

Layer	50 OHM SE	90 OHM DIFF	100 OHM DIFF TIGHTLY COUPLED	100 OHM DIFF LOOSELY COUPLED	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 Layer1	5.5mils	NIL	4.3mil trace/ 7.1mil space	NIL	L5_GND Layer
L10_SIGNAL Layer2	6.5mils	NIL	5.5mil trace/ 6.5mil space	6.3mil 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

BOARD SIZE: (REFER ALSO ARRAY/PANEL PROFILING INFORMATION)
176MM X 296MM
Number of Layers : 12
MIN. TRACK WIDTH: 3.5 MIL
MIN. CLEARANCE: 5 MIL
MIN. VIA PAD SIZE: 16 MIL
MINIMUM ANNULAR RING 4 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 [X] OTHER R-5670K AND R-5775K
THICKNESS: [X] 63 MIL (1.6mm) +/-10% [ ] OTHER
TOLERANCE: [X] ANSI IPC-6012 TYPE 3 CLASS 2
[ ] OTHER +/-
BOW & TWIST: [X] ANSI IPC-6012 TYPE 3 CLASS 2
[ ] OTHER +/-
COPPER THICKNESS (FINISHED):
OUTER: [X] 1.4MIL (1oz) [ ] 2MIL (1.4oz) [ ] 2.8MIL (2oz)
INNER SIGNAL: [X] 0.6MIL (1/2oz) [ ] 2.8MIL (2oz) [ ] N/A
DRILLING:
REFERENCE: [X] AS SHOWN [X] NC_DRILL FILES
PTH MIN COPPER THICKNESS: [X] 1MIL [ ] OTHER
BOARD FINISH:
SILKSCREEN: [X] TOP [X] BOTTOM
SILKSCREEN COLOR: [X] WHITE [ ] OTHER
SOLDER RESIST COLOR:
[X] GREEN [ ] BLUE [ ] OTHER
SURFACE FINISH: [X] 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
CERTIFICATION: MATERIALS AND WORKMANSHIP FOR ALL PCBS TO MEET OR EXCEED THE REQUIREMENTS OF:
[X] ANSI IPC-A-600F CLASS -> [ ] 1 [X] 2 [ ] 3
[X] UL 94V-0 [X] RoHS [ ] OTHER PER ORDER
ADDITIONAL REQUIREMENTS: VIA TENTING: YES [X] NO [ ]
MICROSECTION: [ ] YES IMPEDANCE CONTROL: YES [X] NO [ ]
BARE BOARD ELEC. TEST: [ ] NONE [X] REQUIRED [ ] PER ORDER
MANUFACTURER'S UL: [ ] RAIL [ ] METAL [X] SILK

1000 (mil)

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: TIDA-01022	REV: E2	SVN REV:
LAYER NAME = DRILL DRAWING	TID #:01022		
PLOT NAME = Fabrication Drawing	GENERATED : 10/24/2017 10:29:05 AM		TEXAS INSTRUMENTS

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TEXAS INSTRUMENTS

TIDA-01022

DESIGNED FOR: Public Release

FILE NAME: TIDA-01022-E2.PcbDoc

ENGINEER:	LAYOUT BY:
Anbu Mani	Avinash N
SCALE: 0.72	ALTIUM DESIGNER VERSION: 16.1.9.221