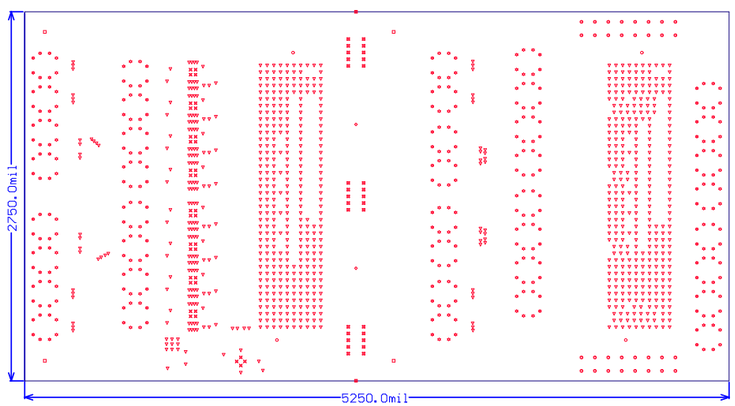
Symbol	Hit Count	Finished Hole Size	Plated	Hole Type	Physical Length	Rout Path Length
⧈	2	100.00mil (2.540mm)	NPTH	Slot	469.00mil (11.913mm)	369.00mil (9.373mm)
◇	2	100.00mil (2.540mm)	NPTH	Slot	933.50mil (23.711mm)	833.50mil (21.171mm)
○	4	50.00mil (1.270mm)	NPTH	Round	-	-
□	4	125.00mil (3.175mm)	PTH	Round	-	-
⊠	30	31.00mil (0.787mm)	NPTH	Round	-	-
⌖	32	39.37mil (1.000mm)	PTH	Round	-	-
⌑	36	7.87mil (0.200mm)	PTH	Round	-	-
✡	320	15.75mil (0.400mm)	PTH	Round	-	-
▽	869	8.00mil (0.203mm)	PTH	Round	-	-
	1299 Total					

Slot definitions : Rout Path Length = Calculated from tool start centre position to tool end centre position.
Physical Length = Rout 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-HFX	0.50mil	3.5		
3	Top Copper	Copper	2.00mil			COPPER +PLATING
4	Dielectric 1	MEG4-R-5725	6.00mil	3.59		
5	Layer 2 (GND1)	Copper	0.60mil			
6	Dielectric 2	MEG4-R-5620	3.70mil	3.46		
7	Layer 3 (SIG1)	Copper	0.60mil			
8	Dielectric 3	MEG4-R-5725	4.00mil	3.8		
9	Layer 4 (GND2	Copper	0.60mil			
10	Dielectric 4	MEG4-R-5620	8.00mil	3.4		
11	Dielectric 5	MEG4-R-5725	10.00mil	3.8		
12	Dielectric 6	MEG4-R-5620	8.00mil	3.4		
13	Layer 5 (GND3)	Copper	0.60mil			
14	Dielectric 7	MEG4-R-5725	4.00mil	3.8		
15	Layer 6 (SIG2)	Copper	0.60mil			
16	Dielectric 8	MEG4-R-5620	3.70mil	3.46		
17	Layer 7 (GND4)	Copper	0.60mil			
18	Dielectric 9	MEG4-R-5725	6.00mil	3.59		
19	Bottom Copper	Copper	2.00mil			COPPER + PLATING
20	Bottom Solder Mask	TAIYO-4000-HFX	0.50mil	3.5		
21	Bottom Silk					

1.ALL 11.2 MIL TRACES ON L01 LAYER NEED TO BE HAVE 50 OHM IMPEDANCE +/- 10%
2.ALL 3.8 MIL TRACE WIDTH WITH 8.2 MIL AIRGAP ON L03 AND L06 LAYERS NEED TO BE HAVE 100 OHM DIFFERENTAIL IMPEDANCE +/- 10%
3. NC route with mouse bites so board can be assembled as one PCB and singulated into 2 boards afterwards
4. HOLES LESS THAN 12 MIL ARE DRILL SIZES AND NOT FINISHED HOLE SIZES (FHS)
5. MINIMUM PLATING IN ALL THE THROUGH HOLE SHALL BE 0.001 INCH Cu
6. Through vias to be plugged on both sides



M2 Board Dimensions

M10 Fab Notes

DESIGN INFORMATION

MIN. TRACK WIDTH: 3.8 MIL
MIN. CLEARANCE: 4 MIL
MIN. VIA PAD SIZE: 15.7 MIL
MINIMUM ANNULAR 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 [X] OTHER TAIYO 4000/MEG4
THICKNESS: [X] 62 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 +/-
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:
[ ] GREEN [ ] BLUE [X] OTHER RED
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] SEE FAB NOTE 6
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:
MICROSECTION: [ ] YES
BARE BOARD ELEC. TEST: [ ] NONE [X] REQUIRED [ ] PER ORDER
MANUFACTURER'S UL: [ ] RAIL [ ] METAL [X] SILK

TEXAS INSTRUMENTS

PROJECT TITLE: ADC12QJ1600 LIDAR FE
DESIGNED FOR: TI
FILE NAME: ADC12QJ1600 LIDAR FE

ENGINEER: DWG	LAYOUT BY: DWG
print_Scale: 1:1	ALTIUM DESIGNER VERSION: 305-PD18-0843

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: N/A	REV: E1	SVN REV: Not In VersionControl
	LAYER NAME = ~~Drill Drawing~~		
Fabrication Drawing	PLOT NAME =		
	GENERATED : ~~12/17/2019 10:36:03~~ AM		TEXAS INSTRUMENTS

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