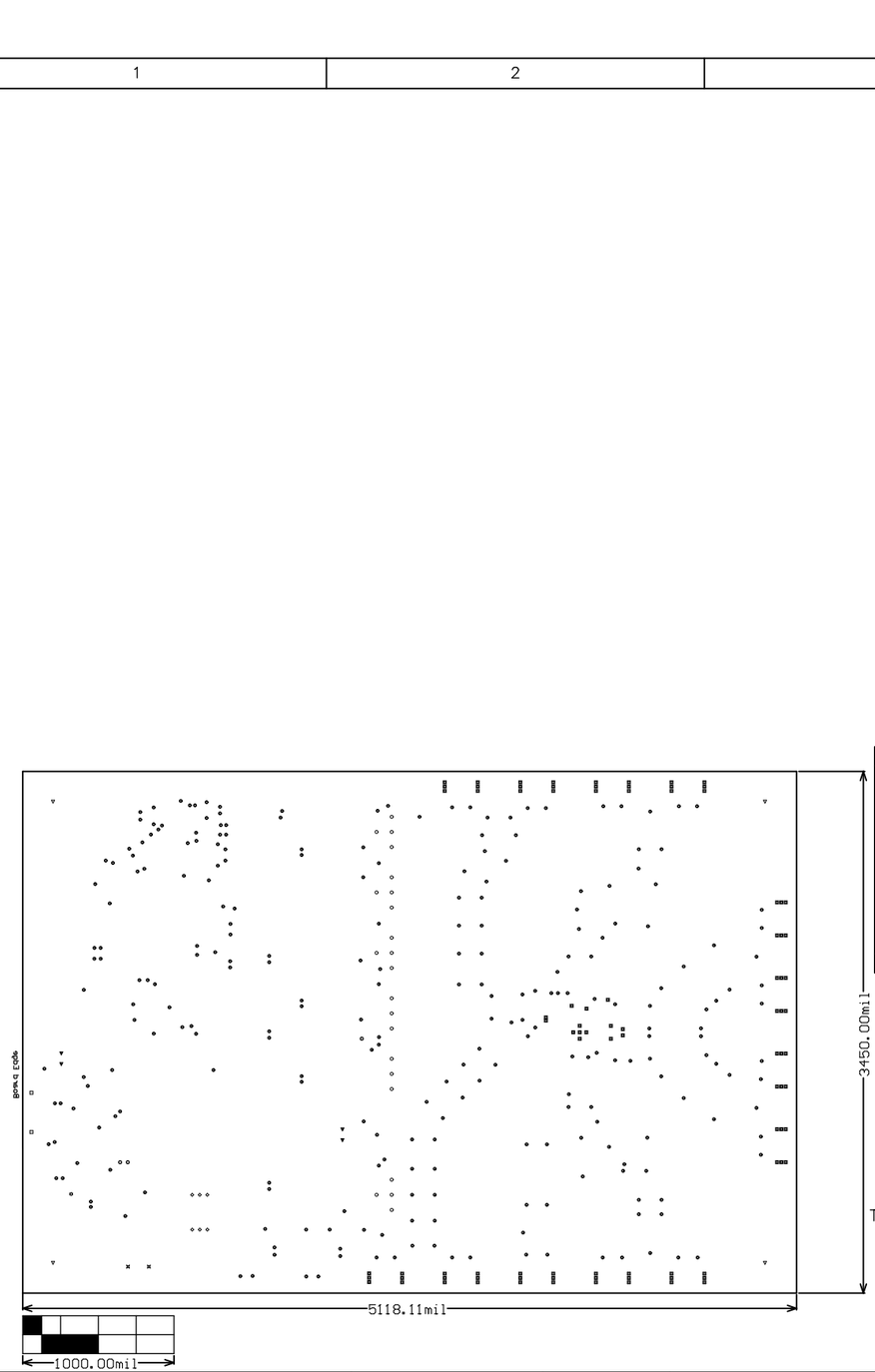
Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.79mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric1	FR-4 High TG	10.00mil	4.2	
5	MidLayer 1	Copper	1.38mil		
6	Dielectric 2	FR-4 High TG	35.00mil	4.2	
7	MidLayer 2	Copper	1.38mil		
8	Dielectric 3	FR-4 High TG	10.00mil	4.2	
9	Bottom Layer	Copper	1.40mil		
10	Bottom Solder	Solder Resist	0.79mil	3.5	
11	Bottom Overlay				



Symbol	Quantity	Finished Hole Size	Plated	Hole Type	Drill Layer Pair	Hole Tolerance
▽	4	31.50mil (0.800mm)	NPTH	Round	Top Layer - Bottom Layer	
■	92	7.87mil (0.200mm)	PTH	Round	Top Layer - Bottom Layer	
●	261	12.00mil (0.305mm)	PTH	Round	Top Layer - Bottom Layer	
◇	6	27.56mil (0.700mm)	PTH	Round	Top Layer - Bottom Layer	
✪	3	28.00mil (0.711mm)	PTH	Round	Top Layer - Bottom Layer	
✪	1	40.00mil (1.016mm)	PTH	Round	Top Layer - Bottom Layer	
○	22	45.28mil (1.150mm)	PTH	Round	Top Layer - Bottom Layer	
⌘	2	47.24mil (1.200mm)	PTH	Round	Top Layer - Bottom Layer	+7.87mil/-0.00mil
▽	4	125.98mil (3.200mm)	PTH	Round	Top Layer - Bottom Layer	
□	2	19.69mil (0.500mm)	PTH	Slot	Top Layer - Bottom Layer	
	397 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

Fab Notes

Copper pads for SMA connectors must extend as far to the board edge as processing allows to ensure proper circuit performance.

*** CONTROLLED IMPEDANCE ***

Top Layer contains 100 Ohm Differential Impedance traces:
13.7 Width with 16 MIL Spacing
Top Layer contains 50 Ohm Signal End Impedance traces:
16.7 Width

DESIGN INFORMATION

MIN. TRACK WIDTH: 10 MIL
MIN. CLEARANCE: 5.9 MIL
MIN. VIA PAD SIZE: 19.685 MIL
MINIMUM ANNULAR RING 0.05mm (2MIL) EXTERNAL
PER IPC-D-275 CLASS 2 LEVEL C
REGISTRATION TOLERANCES: METAL +/- 5 MIL, HOLES +/- 3 MIL
HOLE SIZE TOLERANCE (UNLESS OTHERWISE SPECIFIED): +/- 3 MIL

MATERIAL:
[ ] FR-408 [X] FR-4 High Tg [ ] OTHER _____
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 COPPER THICKNESS: [X] 20-30 um [ ] OTHER _____

BOARD FINISH:
SILKSCREEN: [X] TOP [X] BOTTOM
SILKSCREEN COLOR: [X] WHITE [ ] OTHER _____
SOLDER RESIST COLOR: [X] GREEN [ ] OTHER _____
[X] MATTE [ ] SEMI-GLOSS

SURFACE FINISH: [X] IMMERSION GOLD (ENIG) [ ] ENEPIG
[ ] IMM. TIN/SILVER OR EQUIV [ ] OTHER _____

ARRAY/PANEL: [ ] CUT AND TRIM PER M1 BOARD OUTLINE
[ ] 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] RoHS [ ] OTHER PER ORDER
ALL BOARDS MUST MEET OR EXCEED UL94-V0 REQUIREMENTS.
PCB MUST BEAR THE UL94V-0 UL REGISTERED MATERIAL ID NUMBER

ADDITIONAL REQUIREMENTS:
MICROSECTION: [ ] YES
BARE BOARD ELEC. TEST: [ ] NONE [X] REQUIRED [ ] PER ORDER

TEXAS INSTRUMENTS

PROJECT TITLE: CDCE6214-Q1EVM
DESIGNED FOR: Public Release
FILE NAME: HSDC063A_PCB.PcbDoc

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: HSDC063	REV: A	SVN REV: Not In VersionControl
LAYER NAME = [illegible]ions	TID #: N/A		
PLOT NAME = Fabrication Drawing	GENERATED : 7/8/2019 10:03:39 AM	TEXAS INSTRUMENTS	

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ENGINEER:	LAYOUT BY:
Shawn Han	Shawn Han / Krypton Solutions
SCALE: 1.00	ALTIUM DESIGNER VERSION: 17.1.5.472