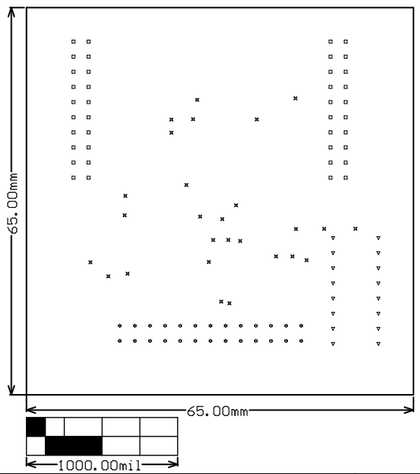
Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric1	FR-4	59.20mil	4.8	
5	Bottom Layer	Copper	1.40mil		
6	Bottom Solder	Solder Resist	0.40mil	3.5	
7	Bottom Overlay				

Symbol	Quantity	Finished Hole Size	Plated	Hole Type	Drill Layer Pair	Hole Tolerance
	27	16.00mil (0.406mm)	PTH	Round	Top Layer - Bottom Layer	
	16	35.43mil (0.900mm)	PTH	Round	Top Layer - Bottom Layer	
	26	40.00mil (1.016mm)	PTH	Round	Top Layer - Bottom Layer	
	40	40.16mil (1.020mm)	PTH	Round	Top Layer - Bottom Layer	
	109 Total					



DESIGN INFORMATION

MIN. TRACK WIDTH: 8 MIL
MIN. CLEARANCE: 0.2 mm
MIN. VIA PAD SIZE: 24 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: [ ] GREEN [X] OTHER Red
[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
[ ] XX MIL VIAS REQUIRE NON-CONDUCTIVE FILL AND PLANARIZE
[ ] XX MIL VIAS REQUIRE CONDUCTIVE FILL AND PLANARIZE
[ ] OUTER XX MIL TRACES REQUIRE 50 OHM SINGLE-ENDED IMPEDANCE
[ ] LAYER 2 & 3 (INNER LAYERS) XX MIL WIDE, XX MIL SPACE TRACES REQUIRE 100 OHM DIFFERENTIAL IMPEDANCE

TEXAS INSTRUMENTS

PROJECT TITLE: Change in menu Project|Project Options|Parameters
DESIGNED FOR:
FILE NAME: SPIExpander.PcbDoc

ALL ARTWORK VIEWED FROM TOP SIDE	BOARD #: XXX###	REV: E1	SVN REV: 1f1ab2639658cf339ccc745e4e0140fbae2034a2 [Locally Modified]
LAYER NAME = [illegible]ions	TID #: N/A		
PLOT NAME = Fabrication Drawing	GENERATED : 7/17/2020 4:40:20 PM	TEXAS INSTRUMENTS	

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ENGINEER:	LAYOUT BY:
Elizabeth Higgins	Elizabeth Higgins
SCALE: 1.00	ALTIUM DESIGNER VERSION: 18.1.9.240