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Layer	Name	Material	Thickness	Constant	EUM Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric1	R04003C	8.00mil	3.55	
5	GND1	Copper	1.40mil		
6	Dielectric 2	FR4 High TG	11.00mil	4.3	
7	GND2	Copper	2.80mil		
8	Dielectric 3	FR4 High TG	12.00mil	4.3	
9	GND3	Copper	2.80mil		
10	Dielectric 4	FR4 High TG	11.00mil	4.3	
11	GND4	Copper	1.40mil		
12	Dielectric 5	FR4 High TG	8.00mil	4.3	
13	Bottom Layer	Copper	1.40mil		
14	Bottom Solder	Solder Resist	0.40mil	3.5	
15	Bottom Overlay				

Impedance Control:

- Top layer contains 50 ohm impedance (+/- 10%) single ended using 16 MIL width and 10 MIL spacing

- Top layer contains 100 ohm impedance (+/- 10%) differential pairs using 10.5 MIL lines and 6.5 MIL spacing

- Bottom layer contains 100 ohm impedance (+/- 10%) differential pair using 8 MIL lines and 8 MIL spacing

Other Notes

-Connectors J1-J12 are board edge connectors. Please take care while cutting the board edge.

2309

1135

2005

1330

1000.00mil

DRILL TABLE

Symbol	Quantity	Finished Hole Size	Plated	Hole Type	Drill Layer Pair	Hole Tolerance
□	26	7.87mil (0.200mm)	PTH	Round	Top Layer - Bottom Layer	
○	28	10.00mil (0.254mm)	PTH	Round	Top Layer - Bottom Layer	
B	70	12.00mil (0.305mm)	PTH	Round	Top Layer - Bottom Layer	
▽	20	15.00mil (0.381mm)	PTH	Round	Top Layer - Bottom Layer	
✱	12	45.00mil (1.143mm)	PTH	Round	Top Layer - Bottom Layer	
	156 Total					

ALL ARTWORK VIEWED FROM TOP SIDE

LAYER NAME = Drill Drawing

PLOT NAME = Fabrication Drawing

BOARD #: HSDC020

TID #: .TID

GENERATED : 1/19/2018 11:36:42 AM

REV: E1

SUN REV: Not In VersionControl

TEXAS INSTRUMENTS

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DESIGN INFORMATION

MIN. TRACK WIDTH: 8 MIL

MIN. CLEARANCE: 5 MIL

MIN. VIA PAD SIZE: 20 MIL

MINIMUM ANNULAR RING 0.089mm (3.5MIL) 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 FR-4 High Tg OTHER See stackup chart

THICKNESS: 62 MIL (1.6mm) +/-10% OTHER

TOLERANCE: ANSI IPC-6012 TYPE 3 CLASS 2

OTHER +/-

BOW & TWIST: ANSI IPC-6012 TYPE 3 CLASS 2

OTHER +/-

DRILLING:

REFERENCE: AS SHOWN NC_DRILL FILES

PTH COPPER THICKNESS: 20-30 um OTHER

BOARD FINISH:

SILKSCREEN: TOP BOTTOM

SILKSCREEN COLOR: WHITE OTHER

SOLDER RESIST COLOR: GREEN OTHER

MATTE SEMI-GLOSS

SURFACE FINISH: IMMERSION GOLD (ENIG) ENEPIG

IMM. TIN/SILVER OR EQUIV OTHER

ARRAY/PANEL: CUT AND TRIM PER M1 BOARD OUTLINE

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

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 REQUIRED PER ORDER

TEXAS INSTRUMENTS

PROJECT TITLE: LMX8410LEUM

DESIGNED FOR: Public Release

FILE NAME: HSDC020E1.PcbDoc

ENGINEER: Brian Wang

LAYOUT BY: Derek Payne

SCALE: 1.00

ALTUM DESIGNER VERSION: 17.1.5.472

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