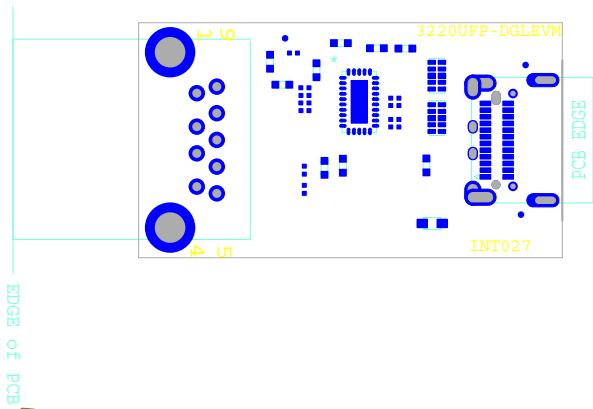
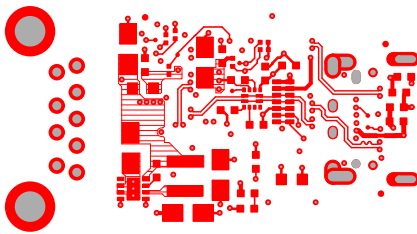


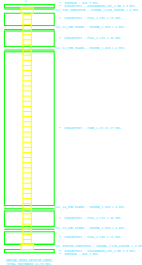
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						SILKSCREEN BOTTOM					
BOARD NO.				REV	DATE	PRJ#	SH	OF			
				A1	13 NOV 2015	TIDIB-23916-01			10		13



CUSTOMER NAME		TI				ASSMBLY TOP	
BOARD NAME			3220UFPDONGLEE				DESCRIPTION
							SILKSCREEN TOP
BOARD NO.		REV	DATE	PRJ#	SH	OF	
		A1	13 NOV 2015	TIDIB-23916-01			
					9	13	



CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 6 - BOTTOM					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	6			13		



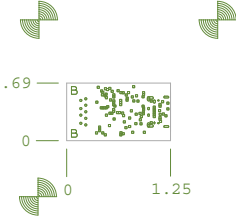
DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
B	91.0	+3.0/-3.0	PLATED	2
*	28.0	+3.0/-3.0	PLATED	9
*	17.72	+3.15/-3.15	PLATED	2
*	8.0	+3.0/-8.0	PLATED	100
*	27.56	+3.0/-3.94	NON-PLATED	1
o	72.83x27.56	+3.15/-3.15	PLATED	2
o	59.06x19.69	+3.15/-3.15	PLATED	2
o	51.18x27.56	+3.15/-3.15	PLATED	2
*	29.53x19.69	+3.15/-3.15	PLATED	2
*	39.37x23.62	+3.0/-3.94	NON-PLATED	1

CONTROLLED IMPEDANCE DESIGN

ALL 4.8 MIL LINES ON ALL LAYERS  
SHALL BE 50 OHM SINGLE ENDED IMPEDANCE +/-10%

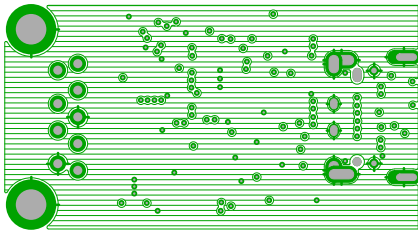
ALL 4.5 MIL LINES WITH 5.5 MIL SPACED ON LAYERS 1,3 AND 6  
SHALL BE 90 OHM DIFFERENTIAL IMPEDANCE +/-10%

STACK-UP	MINIMUM COPPER WEIGHT
LVI-SIGNAL	1/2 oz
LVI-SD PLANE	1 oz
LVI-SIGNAL	1/2 oz
LVI-PWR PLANE	1/2 oz
LVI-SD PLANE	1/2 oz
LVI-SIGNAL	1/2 oz

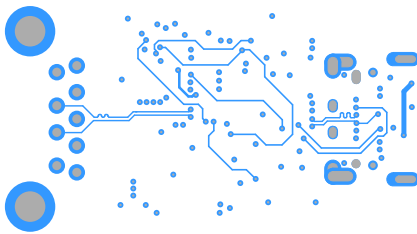


- FAB NOTES:**
- ALL DIMENSIONS ARE IN INCHES (UNLESS OTHERWISE NOTED). ALL BOARD OUTLINE DIMENSION TOLERANCES ARE +/- .010".
  - THE PWB SHALL BE FABRICATED TO IPC-6012, CLASS 2 AND WORKMANSHIP SHALL CONFORM TO IPC-A-609, CLASS 2, CURRENT EDITIONS.
  - BOARD MATERIAL SHALL BE 180 Tg/340 Tg ISOLA FR-370HR OR EQUIVALENT. ROHS COMPLIANT AND LEAD FREE ASSEMBLY CAPABLE. BOARD MATERIAL SHALL MEET OR EXCEED IPC-4101B. ROHS CERTIFICATE OF CONFORMANCE SHALL BE DELIVERED WITH EACH LOT.
  - BOARD MATERIAL & CONSTRUCTION TO BE U.S. APPROVED AND MARKED ON THE FINISHED BOARD.
  - MINIMUM COPPER WALL THICKNESS OF PLATED-THRU HOLES TO BE .001 INCH, WITH A MINIMUM ANGULAR RING OF .001 INCH.
  - OVERALL BOARD THICKNESS TO BE .062 +/- 10% AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
  - MAX. WARP & TWIST TO BE .0075 INCHES PER INCH.
  - BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-155 NETLIST.
- PROCESS NOTES:**
- PLATE ALL EXPOSED AREAS WITH ELECTROLESS IMMERSION GOLD, NICKEL 100 MIN MICROINCHES THK GOLD 2-4 MICROINCHES THK.
  - APPLY LPI SOLDERMASK OVER BARE COPPER (SBCBC). COLOR: BLACK. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H, CURRENT REV.
  - FABRICATION VENDOR IS ALLOWED TO INCREASE SOLDERMASK COMPONENT PAD BY A MAXIMUM 1 MIL ON EACH SIDE OVER THE COPPER PAD IN ORDER TO MEET TOOLING REQUIREMENTS WHILE MAINTAINING WEBSING BETWEEN ADJACENT PADS.
  - APPLY LPI SLACKSCREEN OR EQUIVALENT PER THE ARTWORK. COLOR: WHITE.

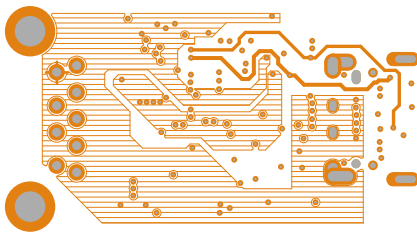
CUSTOMER NAME		TI	
BOARD NAME	3220UPPCOMPLER	DESCRIPTION	FABRICATION DRAWING
BOARD NO.	REV	DATE	FILE
	01	13 NOV 2015	TI-12B-23916-01
			SH 13 OF 13



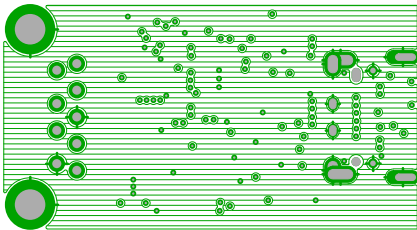
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 2 - GND					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	2			13		



CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 3 - SIGNAL					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	3			13		

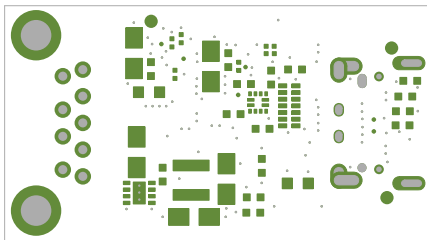


CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 4 - PWR					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	4			13		

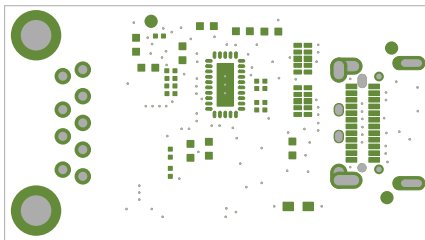


CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 5 - GND					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	5			13		

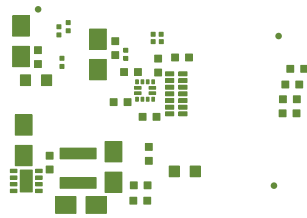




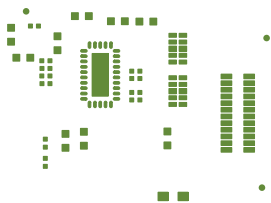
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						SOLDERMASK BOTTOM					
BOARD NO.				REV	DATE	PRJ#	SH	OF			
				A1	13 NOV 2015	TIDIB-23916-01			8	13	



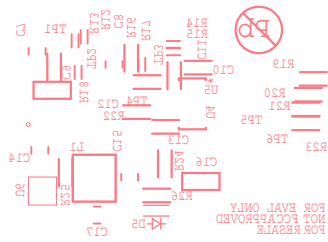
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						SOLDERMASK TOP					
BOARD NO.				REV	DATE	PRJ#	SH	OF			
				A1	13 NOV 2015	TIDIB-23916-01		7		13	



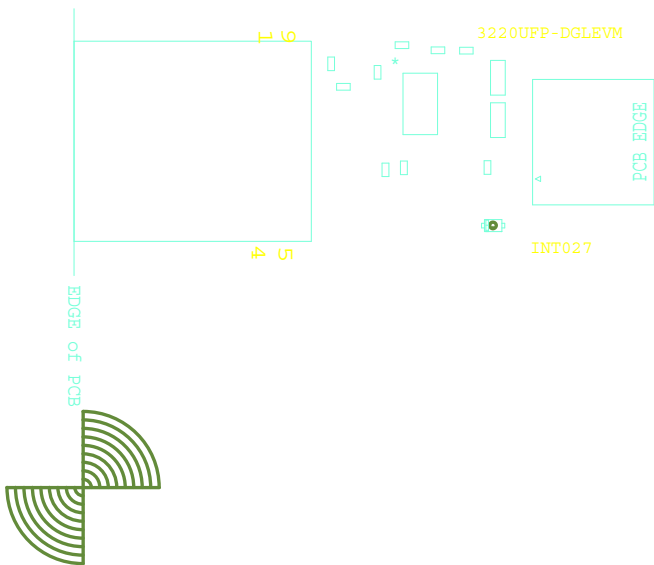
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						PASTEMASK BOTTOM					
BOARD NO.			REV	DATE		PRJ#	SH		OF		
			A1	13 NOV 2015		TIDIB-23916-01	12		13		



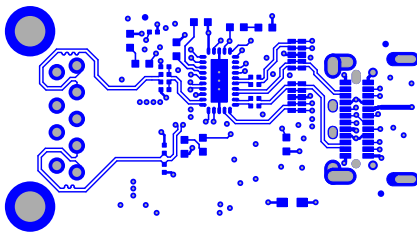
CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						PASTEMASK TOP					
BOARD NO.			REV	DATE		PRJ#	SH		OF		
			A1	13 NOV 2015		TIDIB-23916-01	11		13		



CUSTOMER NAME					TI	
BOARD NAME			3220UFPDONGLEE			DESCRIPTION
						SILKSCREEN BOTTOM
BOARD NO.		REV	DATE	PRJ#	SH	OF
		A1	13 NOV 2015	TIDIB-23916-01	10	13



CUSTOMER NAME		TI				ASSMBLY TOP	
BOARD NAME			3220UFPDONGLEE				DESCRIPTION
							SILKSCREEN TOP
BOARD NO.		REV	DATE	PRJ#	SH	OF	
		A1	13 NOV 2015	TIDIB-23916-01	9	13	



CUSTOMER NAME						TI					
BOARD NAME						3220UFPDONGLEE					
						DESCRIPTION					
						LAYER 1 - TOP					
BOARD NO.			REV	DATE	PRJ#	SH	OF				
			A1	13 NOV 2015	TIDIB-23916-01	1			13		