

STACKUP: 12 LAYERS

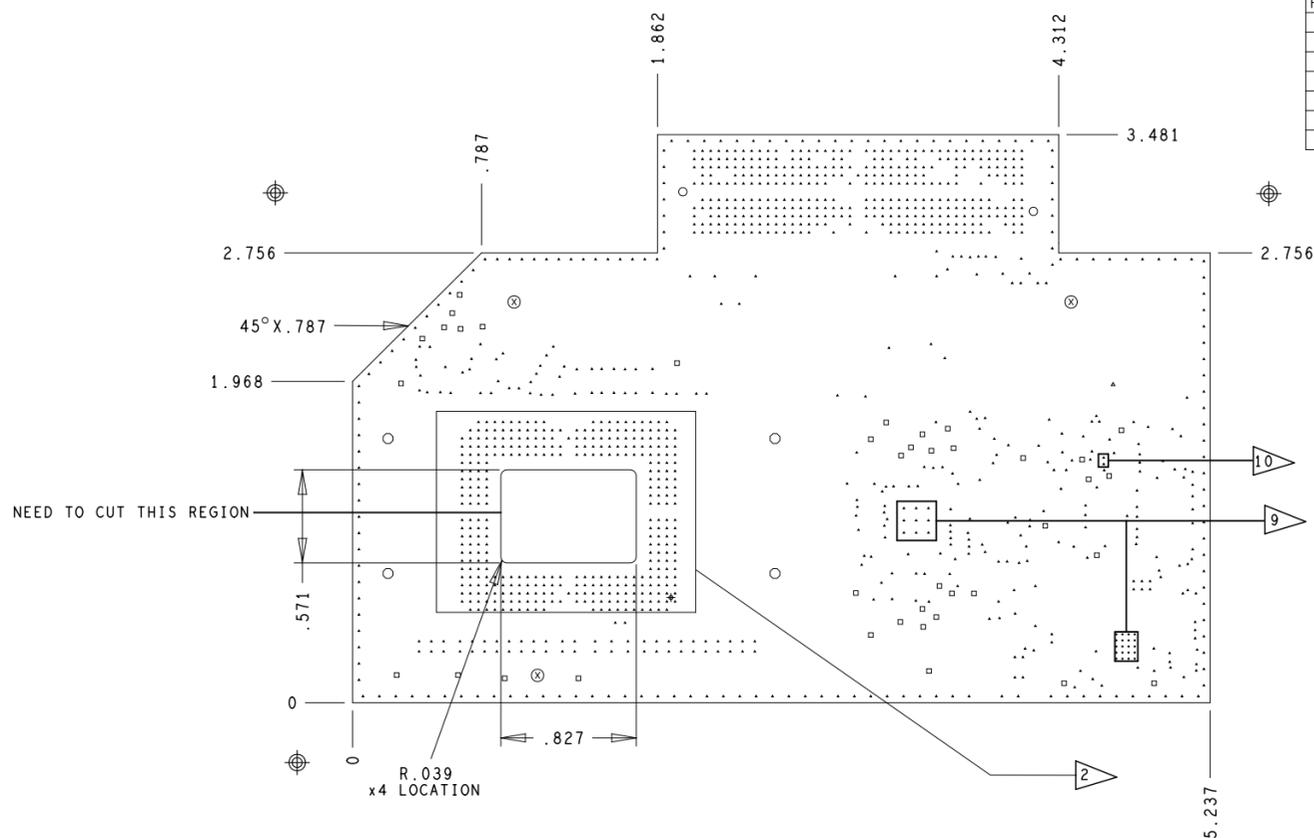
	TOP (0.5 oz + PLATING)
FR4-HTG	DIELECTRIC (4.529 mils)
	02_GND1 (1 oz)
FR4-HTG	DIELECTRIC (5.906 mils)
	03_SIG1 (0.5 oz)
FR4-HTG	DIELECTRIC (5.831 mils)
	04_GND2 (1 oz)
FR4-HTG	DIELECTRIC (5.906 mils)
	05_SIG2 (0.5 oz)
FR4-HTG	DIELECTRIC (5.831 mils)
	06_PWR1 (1 oz)
FR4-HTG	DIELECTRIC (2.992 mils)
	07_PWR2 (1 oz)
FR4-HTG	DIELECTRIC (5.831 mils)
	08_SIG3 (0.5 oz)
FR4-HTG	DIELECTRIC (5.906 mils)
	09_GND3 (1 oz)
FR4-HTG	DIELECTRIC (5.831 mils)
	10_SIG4 (0.5 oz)
FR4-HTG	DIELECTRIC (5.906 mils)
	11_GND4 (1 oz)
FR4-HTG	DIELECTRIC (4.529 mils)
	BOTTOM 0.5 oz + PLATING)
TOTAL THICKNESS: 67 mils +/-10%	

## \*\*\*CONTROLLED IMPEDANCE DESIGN\*\*\*

7.50 MIL LINES ON THE OUTER LAYERS = 50 OHMS SINGLE ENDED IMPEDANCE +/-10%  
 5.25 MIL LINES ON THE INNER LAYERS = 50 OHMS SINGLE ENDED IMPEDANCE +/-10%  
 4.25 MIL LINES WITH 5.75 MIL SPACES ON INNER LAYER = 100 OHMS DIFFERENTIAL IMPEDANCE +/-10%  
 4.2 MIL LINES WITH 5 MIL SPACES ON OUTER LAYER = 100 OHMS DIFFERENTIAL IMPEDANCE +/-10%

## DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	7.874	+3.0/-3.0	PLATED	20
•	12.0	+3.0/-3.0	PLATED	1186
□	28.0	+3.0/-3.0	PLATED	39
△	63.0	+3.0/-3.0	PLATED	1
○	165.402	+3.0/-3.0	PLATED	4
○	50.0	+2.0/-0.0	NON-PLATED	2
⊗	125.0	+3.0/-3.0	NON-PLATED	3



## FAB NOTES:

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- THE PWB SHALL BE FABRICATED TO IPC-6012, CLASS 2 AND WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2. CURRENT REVISIONS.
- BOARD MATERIAL SHALL BE FR4-HTG, OR EQUIVALENT, ROHS COMPLIANT AND LEAD FREE ASSEMBLY CAPABLE. BOARD MATERIAL SHALL MEET OR EXCEED IPC-4101B. COLOR: NATURAL.
- ALL BOARDS MUST MEET OR EXCEED UL94V-0 REQUIREMENTS PCB MUST BEAR THE UL94V-0 UL REGISTERED MATERIAL ID NUMBER.
- MINIMUM COPPER WALL THICKNESS OF PLATED-THRU HOLES TO BE .001 INCH, WITH A MINIMUM ANNULAR RING OF .001 INCH.
- OVERALL BOARD THICKNESS TO BE .067 +/- 10% AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
- MAX. WARP & TWIST TO BE .005 INCHES PER INCH.
- BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-D-356 NETLIST.
- ALL HOLES IN DRILL CHART ARE FINISHED HOLE SIZES (FHS).
- NO VENDOR LOGO, ART WORKS SHOULD NOT BE CHANGED WITHOUT PRIOR APPROVAL FROM TEXAS INSTRUMENTS

## PROCESS NOTES:

- EXCEPT AS NOTED IN NOTE 2, PLATE ALL EXPOSED AREAS WITH FLASH GOLD (5-15 MICROINCHES THK) OVER ELECTROLYTIC NICKEL MIN 150 MICROINCHES THK.
- PLATE INDICATED AREAS WITH A MIN 30 MICROINCHES ELECTROLYTIC GOLD OVER A MIN 150 MICROINCHES ELECTROLYTIC NICKEL.
- APPLY LPI SOLDERMASK OVER BARE COPPER (SMOBC), COLOR: BLUE. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H. CURRENT REV.
- FABRICATION VENDOR IS ALLOWED TO INCREASE SOLDERMASK COMPONENT PADS BY A MAXIMUM 1 MIL ON EACH SIDE OVER THE COPPER PAD IN ORDER TO MEET TOOLING REQUIREMENTS WHILE MAINTAINING WEBBING BETWEEN ADJACENT PADS.
- APPLY LPI SILKSCREEN OR EQUIVALENT BOTH SIDES PER THE ARTWORK. COLOR: WHITE. CLIP SILKSCREEN ON NO MASK AREA
- TEARDROPS SHOULD NOT BE ADDED ON ANY AREA WITHOUT PRIOR APPROVAL FROM TEXAS INSTRUMENTS
- DEBURR ALL SHARP EDGES
- REMOVE UNUSED PADS IN ALL INNER LAYERS
- MARKED REGION VIAS NEED TO BE SOLDERMASK PLUGGING ON BOTTOM SIDE
- MARKED REGION VIAS NEED TO BE SOLDERMASK PLUGGING ON TOP SIDE

CUSTOMER NAME : TEXAS INSTRUMENTS
DATE: FEB 2023
PAC NUMBER: 305-PD-22-1008
JOB NAME: DLP780NE_DLP800RE_DLP780TE      REV:1
FILM LAYER: FAB