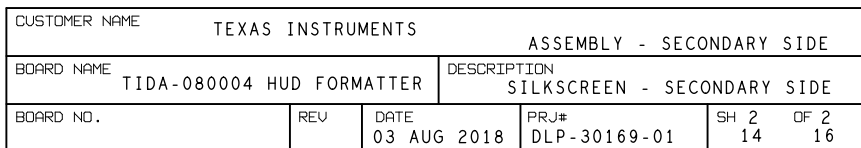
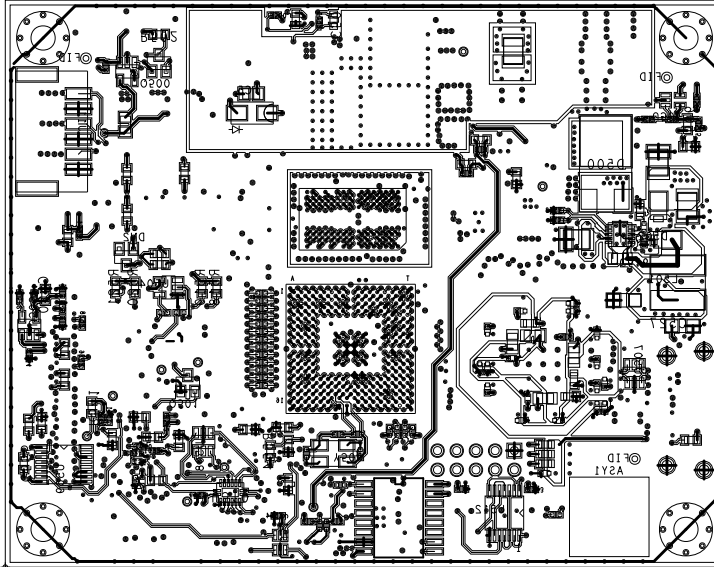
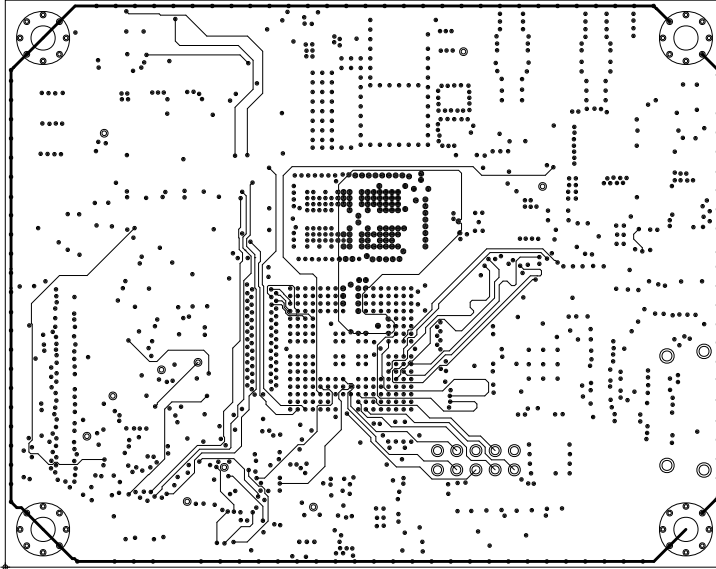


CUSTOMER NAME		TEXAS INSTRUMENTS		ASSEMBLY - PRIMARY SIDE	
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION SILKSCREEN - PRIMARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH 1	OF 2
		03 AUG 2018	DLP-30169-01	13	16

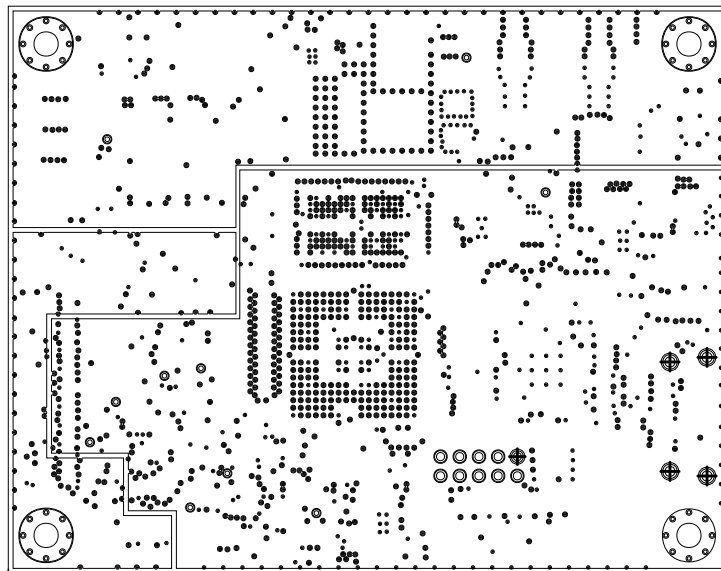




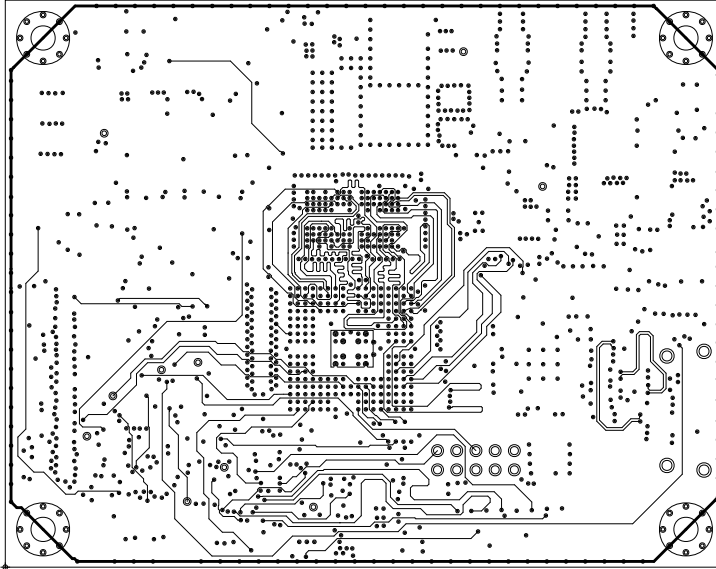
CUSTOMER NAME		TEXAS INSTRUMENTS		ASSEMBLY - SECONDARY SIDE	
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				LAYER 10 - SECONDARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	2	2
				10	16



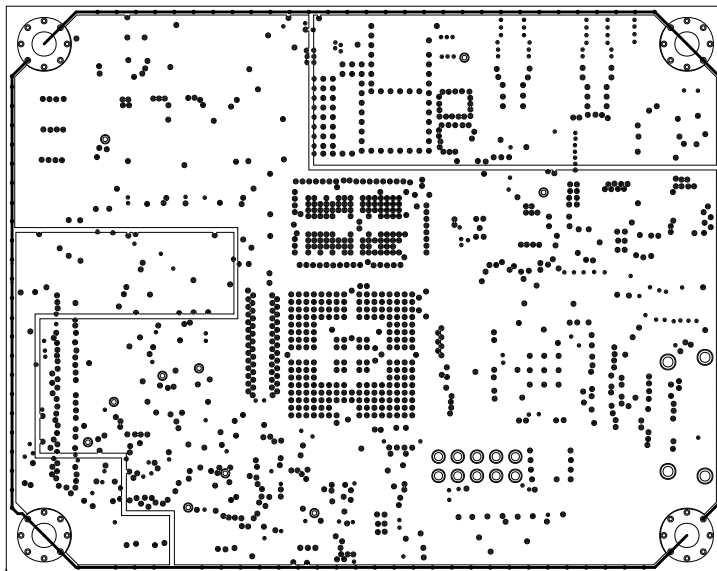
CUSTOMER NAME		TEXAS INSTRUMENTS					
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION			
				LAYER 2 - SIGNAL			
BOARD NO.		REV	DATE	PRJ#	SH	OF	
			03 AUG 2018	DLP-30169-01	2	16	



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		DESCRIPTION			
TIDA-080004 HUD FORMATTER		LAYER 3 - GND PLANE			
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	3	16



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				LAYER 4 - SIGNAL	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	4	16



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		DESCRIPTION			
TIDA-080004 HUD FORMATTER		LAYER 5 - PWR PLANE			
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	5	16

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
+	8.0	+3.0/-8.0	PLATED	1426
▪	9.0	+3.0/-9.0	PLATED	3
▣	18.0	+3.0/-3.0	PLATED	32
◦	24.0	+3.0/-3.0	PLATED	10
○	42.0	+3.0/-3.0	PLATED	10
◊	52.0	+3.0/-3.0	PLATED	4
⊕	126.0	+3.0/-3.0	PLATED	4

LAYER STACK:

LAYER 1 - PRIMARY SIDE - SIGNAL AND GND FILL
1.0 oz START PLATED UP TO 2 oz.
.0048

LAYER 2 - SIGNAL - 0.5oz - 50 OHMS - .0045 WIDTH
~~DIFFERENTIAL 100 OHMS - .004 WIDTH/.010 SPACE~~
.0035

LAYER 3 - GND PLANE - 1oz
.0052

LAYER 4 - SIGNAL - 0.5oz - 50 OHMS - .0045 WIDTH
DIFFERENTIAL 100 OHMS - .004 WIDTH/.010 SPACE
.0060

LAYER 5 - PWR PLANE - 1oz
.00101

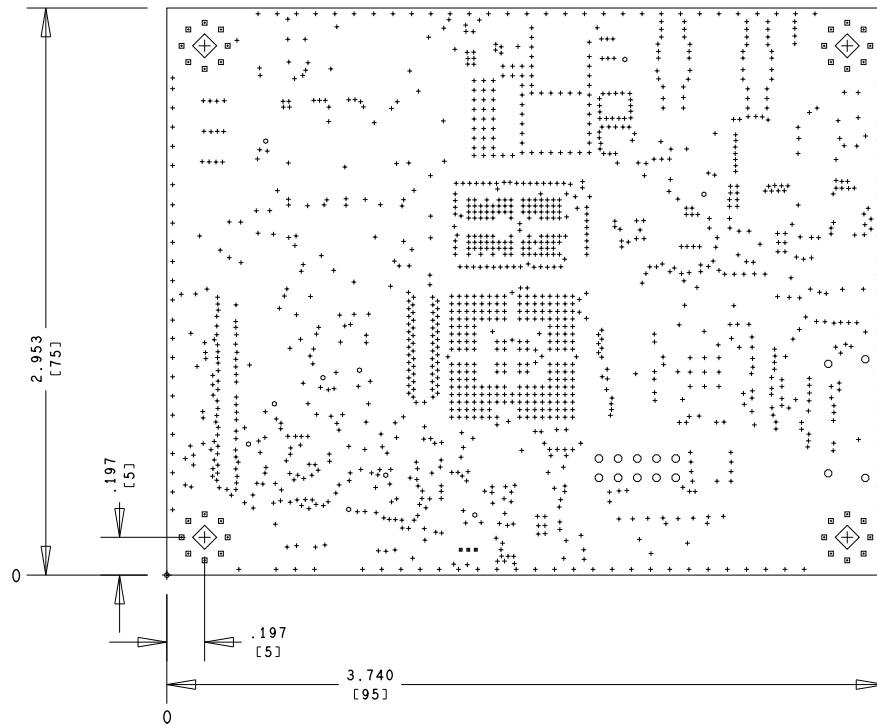
LAYER 6 - PWR PLANE - 1oz
.0060

LAYER 7 - SIGNAL - 0.5oz - 50 OHMS - .0045 WIDTH
DIFFERENTIAL 100 OHMS - .004 WIDTH/.010 SPACE
.0052

LAYER 8 - GND PLANE - 1oz
.0035

LAYER 9 - SIGNAL - 0.5oz - 50 OHMS - .0045 WIDTH
~~DIFFERENTIAL 100 OHMS - .004 WIDTH/.010 SPACE~~
.0049

LAYER 10 - SECONDARY SIDE - SIGNAL AND GND FILL
1.0 oz START PLATED UP TO 2 oz.



PRIMARY SIDE VIEW

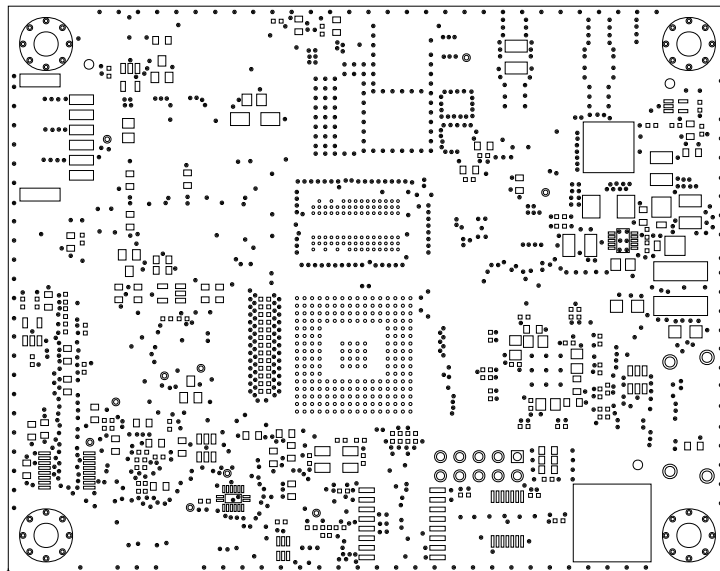
CUSTOMER NAME TEXAS INSTRUMENTS					
BOARD NAME TIDA-080004 HUD FORMATTER			DESCRIPTION FABRICATION DRAWING		
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	1	1

FAB NOTES:

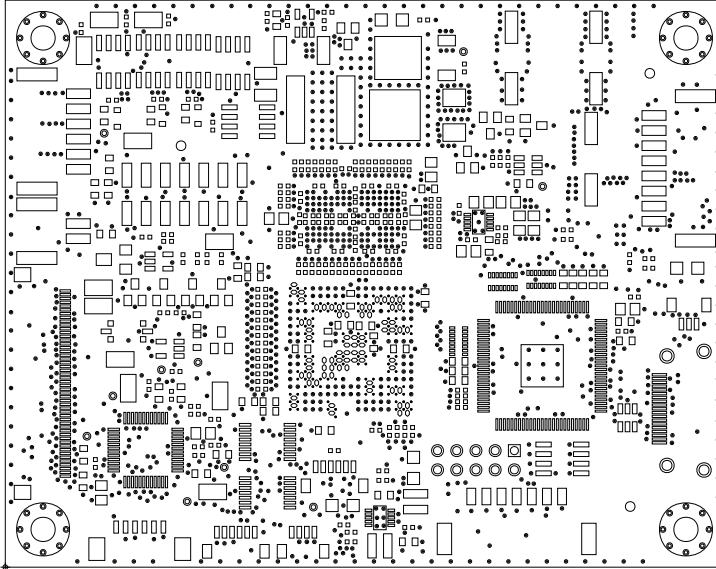
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. ALL BOARD OUTLINE DIMENSION TOLERANCES ARE +/- .010".
- THE PWB SHALL BE FABRICATED TO IPC-6012, CLASS 2 AND WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
- BOARD MATERIAL SHALL BE 180 Tg/340 Td ISOLA FR-370HR OR EQUIVALENT, ROHS AND REACH COMPLIANT AND LEAD FREE ASSEMBLY CAPABLE. BOARD MATERIAL SHALL MEET OR EXCEED IPC-4101B, ROHS AND REACH CERTIFICATE OF CONFORMANCE SHALL BE DELIVERED WITH EACH LOT.
- BOARD MATERIAL & CONSTRUCTION TO BE UL94V-0 APPROVED AND MARKED ON THE FINISHED BOARD.
- 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 .062 +/- .010% AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
- MAX. WARP & TWIST TO BE .0075 INCHES PER INCH.
- ANY DISCREPANCY BETWEEN FABRICATION PRINT AND THE ACTUAL FABRICATION DATA MUST BE REVIEWED AND APPROVED BY TI.

PROCESS NOTES:

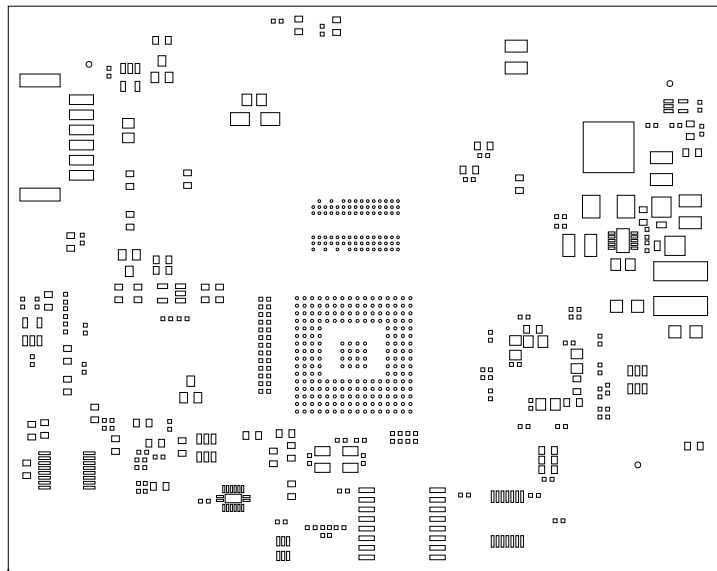
- PLATE ALL EXPOSED AREAS WITH ELECTROLESS IMMERSION GOLD, NICKEL 100 MIN MICROINCHES THK GOLD 2-6 MICROINCHES THK.
- APPLY LDI SOLDERMASK. COLOR: BLACK. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H, CURRENT REV. SOLDERMASK SHALL BE COMPATIBLE WITH SAC305 OR EQUIVALENT SOLDER ALLOY AND SOLDER FLOAT BATH TEMPERATURE OF 288°C.
- 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.
- SOLDERABILITY SHALL BE IN ACCORDANCE WITH IPC/EIA J-STD-003A, WITH SOLDER BATH TEMPERATURE OF 250°C +/-5 C FOR DIP OR ROTARY TEST.
- APPLY LPI SILKSCREEN OR EQUIVALENT PER THE ARTWORK. COLOR: WHITE.
- BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-D-356 NETLIST.
- VENDOR MUST SUPPLY PANELIZED PASTE LAYERS TO LIBRA FOR PASTEMASK STENCIL.



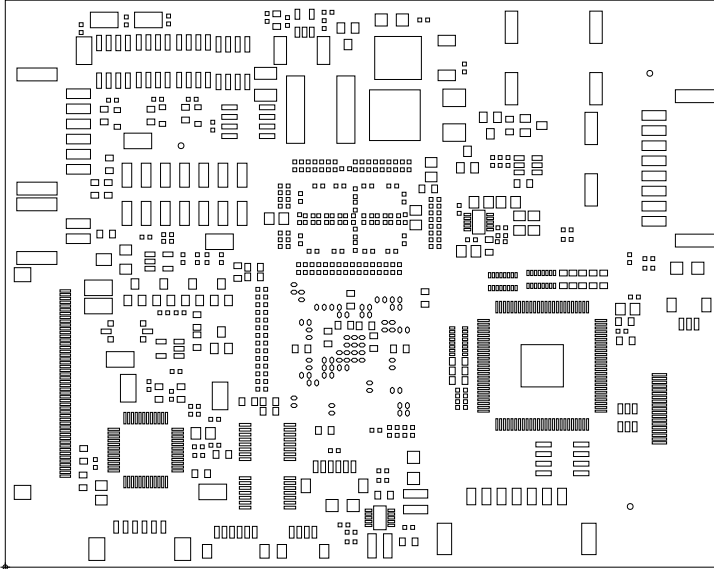
CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				SOLDERMASK - SECONDARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	12	16



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				SOLDERMASK - PRIMARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	11	16

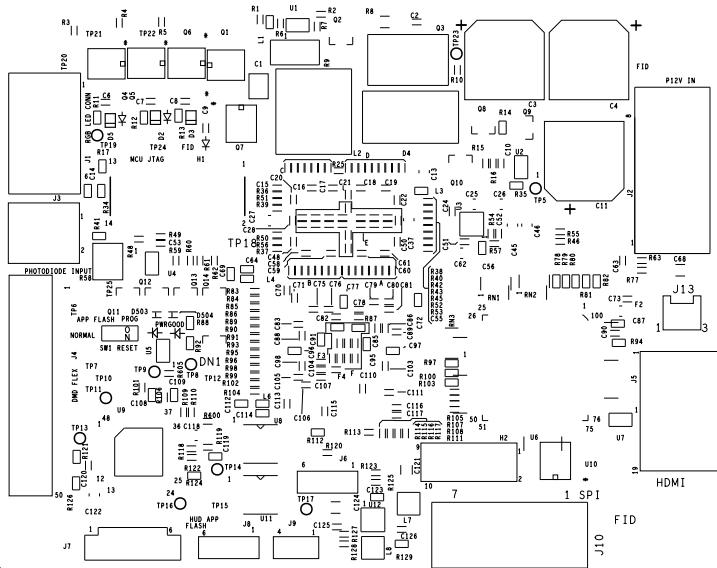


CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		DESCRIPTION			
TIDA-080004 HUD FORMATTER		SOLDERPASTE - SECONDARY SIDE			
BOARD NO.	REV	DATE	PRJ#	SH	QF
		03 AUG 2018	DLP-30169-01	16	16

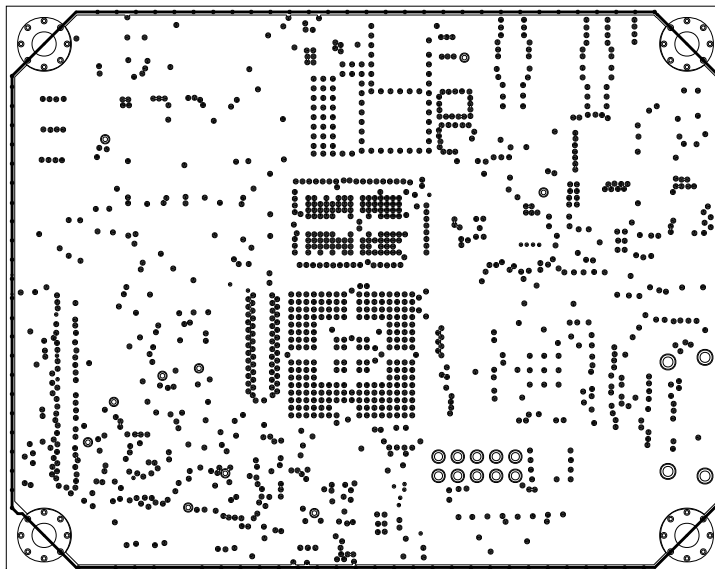


CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				SOLDERPASTE - PRIMARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	15	16

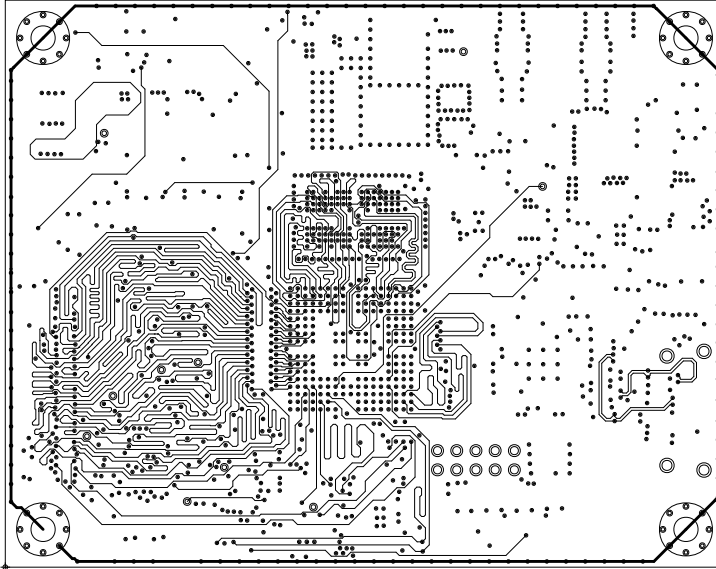
CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				SILKSCREEN - SECONDARY SIDE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	14	16



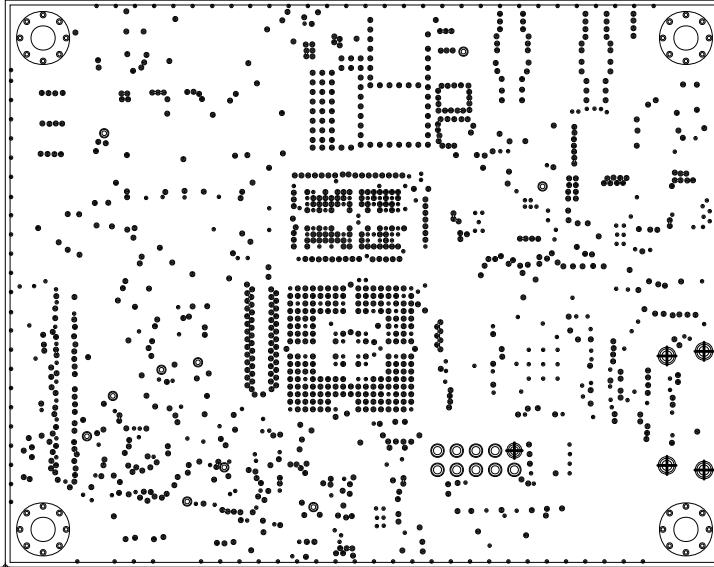
CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		DESCRIPTION			
TIDA-080004 HUD FORMATTER		SILKSCREEN - PRIMARY SIDE			
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	13	16



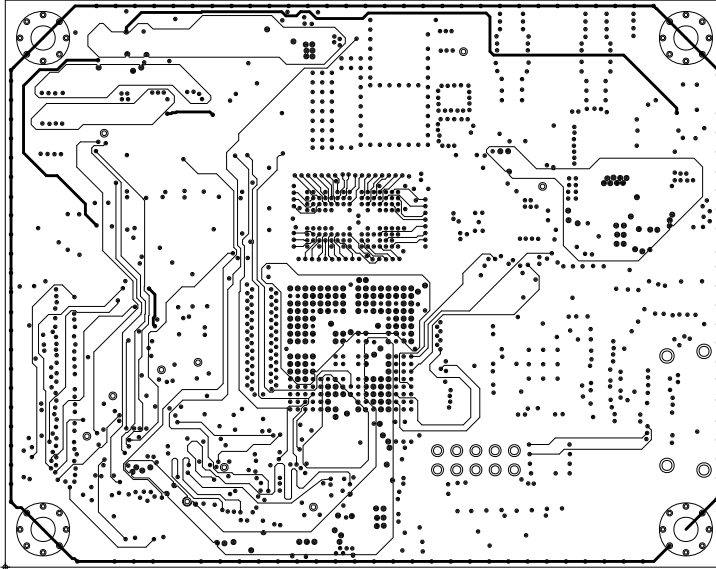
CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	LAYER 6 - PWR PLANE
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	6	16



CUSTOMER NAME		TEXAS INSTRUMENTS				
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION		
				LAYER 7 - SIGNAL		
BOARD NO.	REV	DATE	PRJ#	SH	OF	
		03 AUG 2018	DLP-30169-01	7	16	



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				LAYER 8 - GND PLANE	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	8	16



CUSTOMER NAME		TEXAS INSTRUMENTS			
BOARD NAME		TIDA-080004 HUD FORMATTER		DESCRIPTION	
				LAYER 9 - SIGNAL	
BOARD NO.	REV	DATE	PRJ#	SH	OF
		03 AUG 2018	DLP-30169-01	9	16