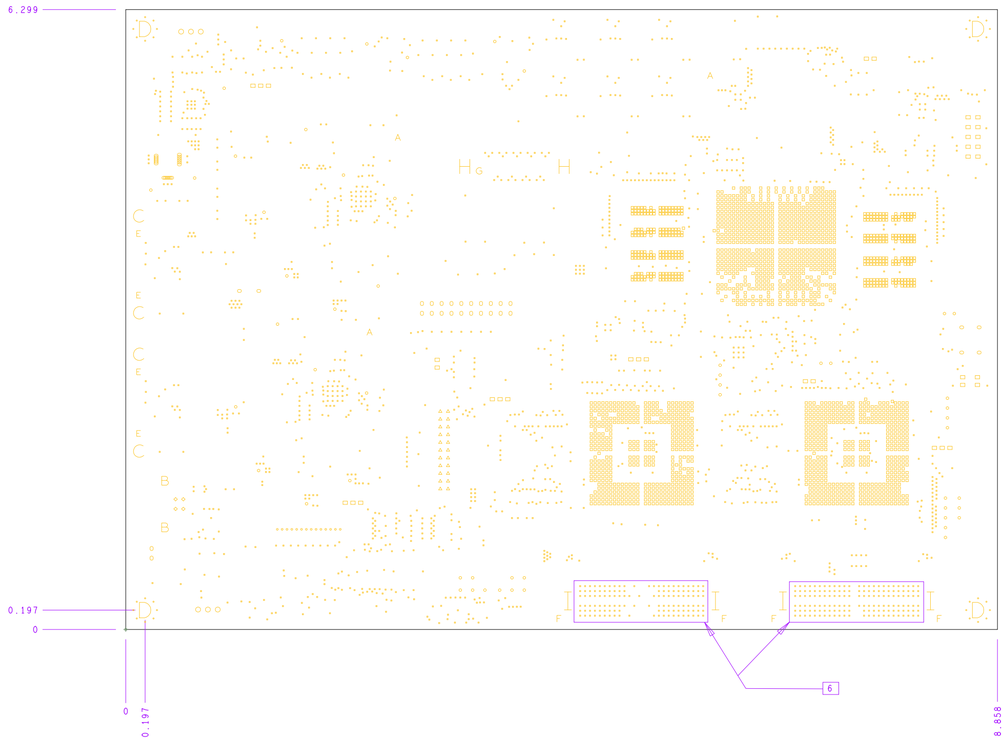
DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
▫	8.0	+3.0/-8.0	PLATED	2097
·	12.0	+3.0/-12.0	PLATED	1998
·	14.0	+3.0/-3.0	PLATED	32
·	20.0	+3.0/-3.0	PLATED	14
◦	28.0	+3.0/-3.0	PLATED	53
◦	36.0	+3.0/-3.0	PLATED	4
A	38.0	+3.0/-1.0	PLATED	22
◦	40.0	+2.0/-2.0	PLATED	24
◦	42.0	+3.0/-3.0	PLATED	22
▫	45.0	+3.0/-3.0	PLATED	35
○	50.0	+3.0/-3.0	PLATED	6
A	63.0	+3.0/-3.0	PLATED	3
B	90.0	+3.0/-3.0	PLATED	2
C	126.0	+3.0/-3.0	PLATED	4
D	157.0	+3.0/-3.0	PLATED	4
E	59.0	+3.0/-3.0	NON-PLATED	4
F	66.0	+3.0/-3.0	NON-PLATED	4
G	67.008	+3.0/-3.0	NON-PLATED	1
H	147.008	+3.0/-3.0	NON-PLATED	2
I	182.0	+3.0/-3.0	NON-PLATED	4



Primary Side Shown

FAB NOTES:

1. ALL DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, ALL BOARD OUTLINE DIMENSION TOLERANCES ARE +/- .010".
2. THE PWB SHALL BE FABRICATED TO IPC-6011 AND IPC-6012, CLASS 2, TYPE 3. WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2, CURRENT REVISIONS.
3. BOARD MATERIAL SHALL BE 180 Tg/340 Td 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.
4. BOARD MATERIAL & CONSTRUCTION TO BE U.L. APPROVED AND MARKED ON THE FINISHED BOARD.
5. MINIMUM COPPER WALL THICKNESS OF PLATED-THRU HOLES TO BE .001 INCH, WITH A MINIMUM ANNULAR RING OF .001 INCH.
6. OVERALL BOARD THICKNESS TO BE .070 +/- .005 AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
7. INNER PLANE LAYERS TO BE 1 OZ. COPPER. INNER SIGNAL LAYERS TO BE 1/2 OZ. COPPER. OUTER LAYERS TO BE 1/2 OZ. COPPER + PLATING.
8. MAX. WARP & TWIST TO BE .0075 INCHES PER INCH.
9. ALL HOLES ARE ON A 0.0001 GRID EXCEPT THOSE INDICATED.
10. MAXIMUM RATED VOLTAGE BETWEEN CONDUCTORS SHALL BE 65 VOLTS PEAK.
11. NO BREAKOUT ALLOWED ON PLATED THROUGH HOLES.
12. FOIL OUTER OPTIONAL.
13. INTERPRET DIMENSIONS IN ACCORDANCE WITH ASME Y14.5M-1994
14. TEARDROP VIAS AS NECESSARY.
15. THIEVING IS NOT ALLOWED.

PROCESS NOTES:

1. EXCEPT AS NOTED BELOW, ALL EXPOSED CONDUCTORS ON BOTH SIDES PWB SHALL BE ELECTROPLATED GOLD (5-15 MICROINCHES) OVER ELECTROPLATED NICKEL (150 MIN MICROINCHES).
2. APPLY LPI SOLDERMASK COLOR: BLUE. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H, CURRENT REV.
3. SOLDERMASK ARTWORK HAS ZERO (0) OVERSIZED PADS. FABRICATION VENDOR IS ALLOWED TO ADJUST THE COMPONENT SOLDERMASK PADS TO MEET THEIR TOOLING REQUIREMENTS WHILE MAINTAINING WEBBING BETWEEN ADJACENT PADS.
4. APPLY LPI SILKSCREEN OR EQUIVALENT PER THE ARTWORK. COLOR: WHITE.
5. BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-D-356 NETLIST.
6. PLATE INDICATED PAD AREAS WITH A MINIMUM OF 35 MAXIMUM OF 50 MICROINCHES ELECTROLLYTIC HARD GOLD OVER A MINIMUM OF 100 MICROINCHES OF ELECTROLYTIC NICKEL.

LAYER STACKUP

LAYER 1 - PRIMARY SIDE
LAYER 2 - GND PLANE
LAYER 3 - SIGNAL
LAYER 4 - GND PLANE
LAYER 5 - SIGNAL
LAYER 6 - GND PLANE
LAYER 7 - PWR PLANE
LAYER 8 - PWR PLANE
LAYER 9 - GND PLANE
LAYER 10 - SIGNAL
LAYER 11 - GND PLANE
LAYER 12 - SIGNAL
LAYER 13 - GND PLANE
LAYER 14 - SIGNAL

CONTROLLED IMPEDANCE

EXTERNAL LAYERS

0.005" WIDE 50 OHMS SINGLE ENDED +/-10%
0.0038" WIDE/0.0062" SPACING 100 OHMS DIFFERENTIAL +/-10%
0.0045" WIDE/0.0055" SPACING 90 OHMS DIFFERENTIAL +/-10%

INTERNAL LAYERS

0.004" WIDE 50 OHMS SINGLE ENDED +/-10%
0.0035" WIDE/0.0065" SPACING 100 OHMS DIFFERENTIAL +/-10%
0.00425" WIDE/0.00575" SPACING 90 OHMS DIFFERENTIAL +/-10%

design•fabrication•assembly•test

CUSTOMER NAME: TEXAS INSTRUMENTS				
BOARD NAME: DDP4422 DUAL ASIC FORMATTER		DESCRIPTION: FAB DRAWING		
BOARD NO.: 2514423	REV	DATE: 21 APR 2015	PRJ#: TIDLP-23791-01	SH: 21 OF: 21