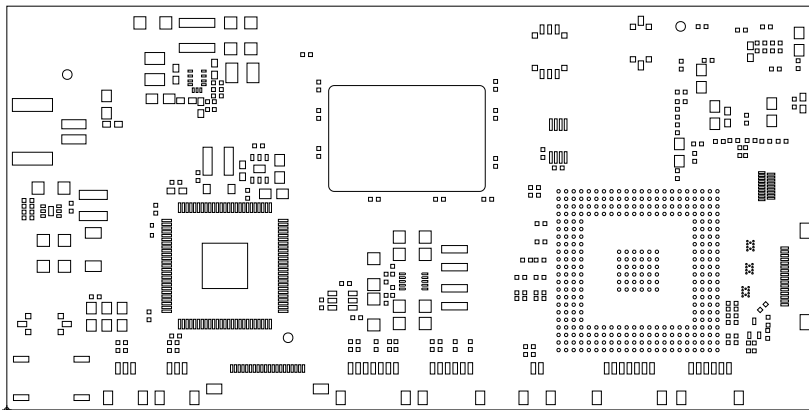
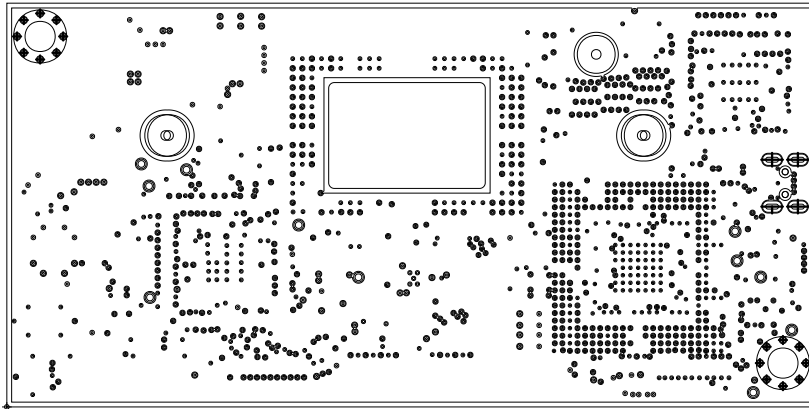


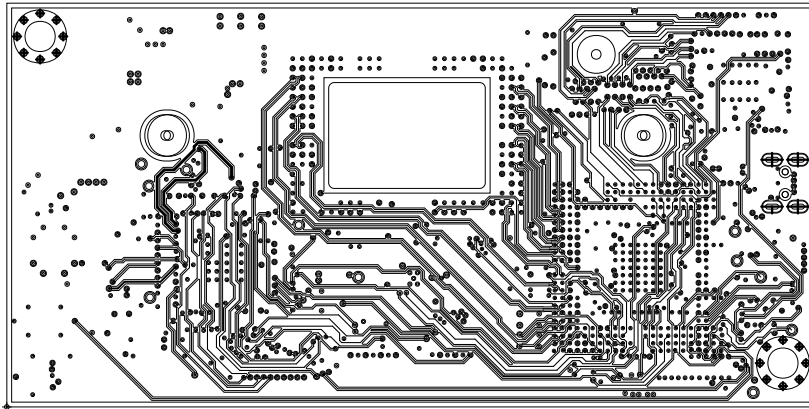
TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	SOLDERMASK - TOP SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



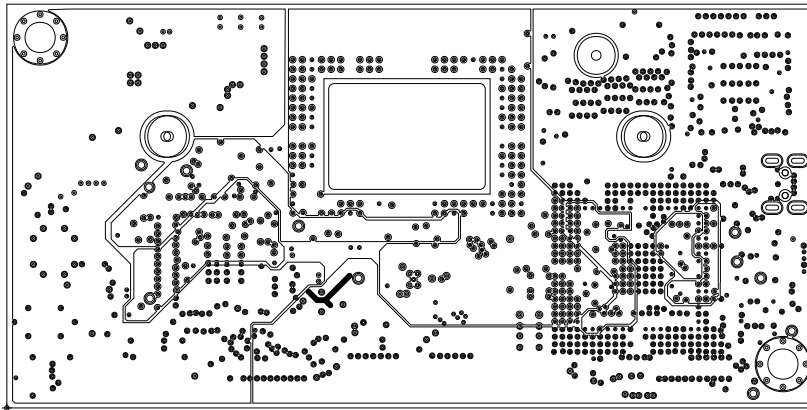
TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	SOLDERPASTE - TOP SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



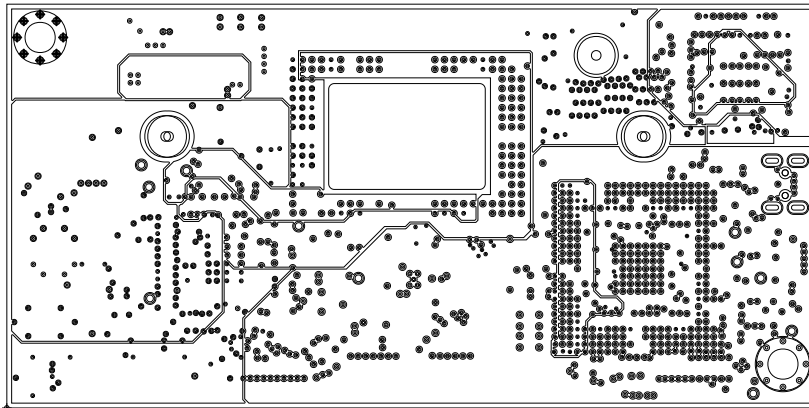
TEXAS INSTRUMENTS			
BOARD NAME:		DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller		LAYER 9 - GND PLANE	
PROJECT #:		DATE:	REVISION:
DLP553X-Q1 EVM Controller		27 JUNE 2019	B



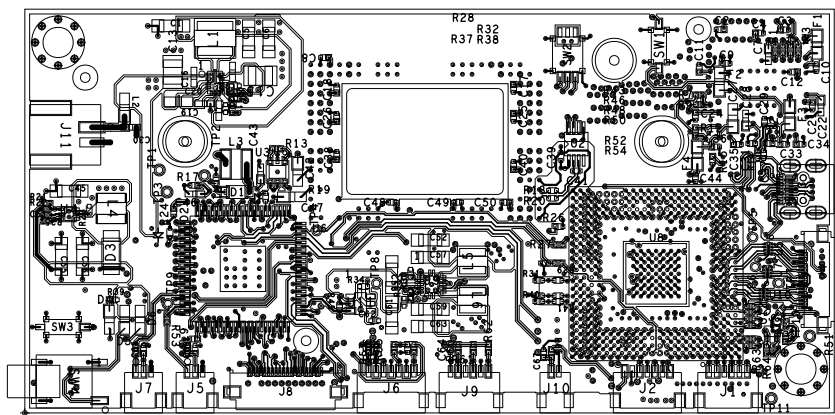
TEXAS INSTRUMENTS		
BOARD NAME:	DLP033 DLP553XQ1EVM Controller	
DESCRIPTION:	LAYER 8 - SIGNAL	
PROJECT #:	DLP553X-Q1 EVM Controller	
DATE:	27 JUNE 2019	REVISION: B



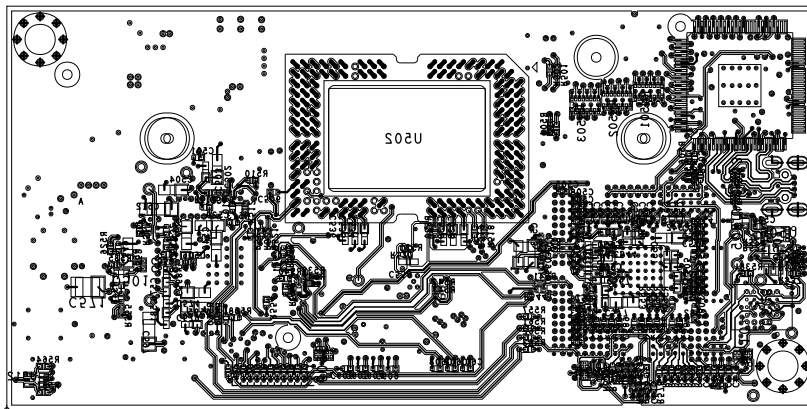
TEXAS INSTRUMENTS		
BOARD NAME:	DLP033 DLP553XQ1EVM Controller	
DESCRIPTION:	LAYER 5 - PWR PLANE	
PROJECT #:	DLP553X-Q1 EVM Controller	
DATE:	27 JUNE 2019	REVISION: B



TEXAS INSTRUMENTS		
BOARD NAME:	DLP033 DLP553XQ1EVM Controller	
DESCRIPTION:	LAYER 6 - PWR PLANE	
PROJECT #:	DLP553X-Q1 EVM Controller	
DATE:	27 JUNE 2019	REVISION: B

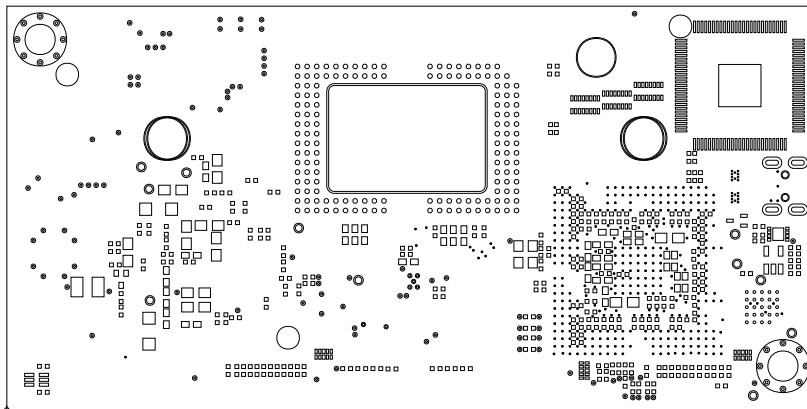


TEXAS INSTRUMENTS		
BOARD NAME: DLP033 DLP553XQ1EVM Controller	DESCRIPTION: LAYER ASSEMBLY TOP SIDE	
PROJECT #: DLP553X-Q1 EVM Controller	DATE: 27 JUNE 2019	REVISION: B

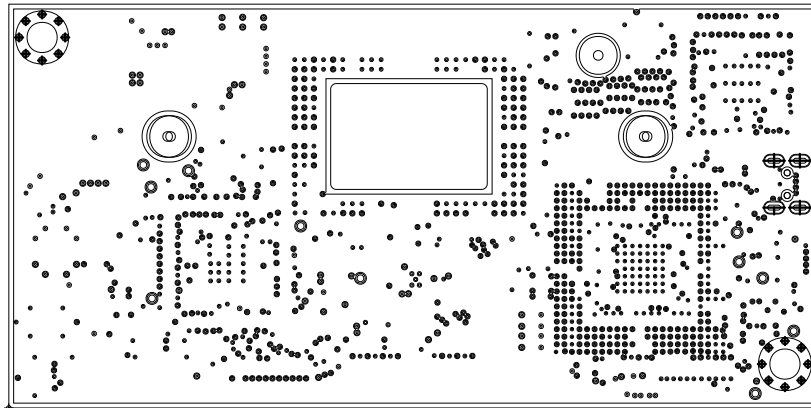


TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	ASSEMBLY BOTTOM BOTTOM SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B

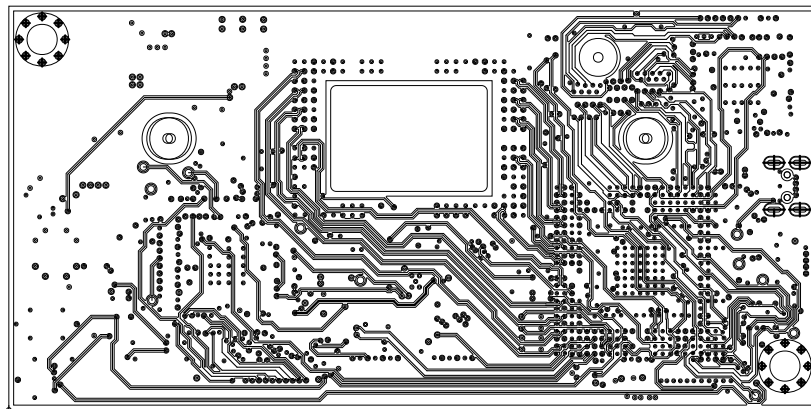




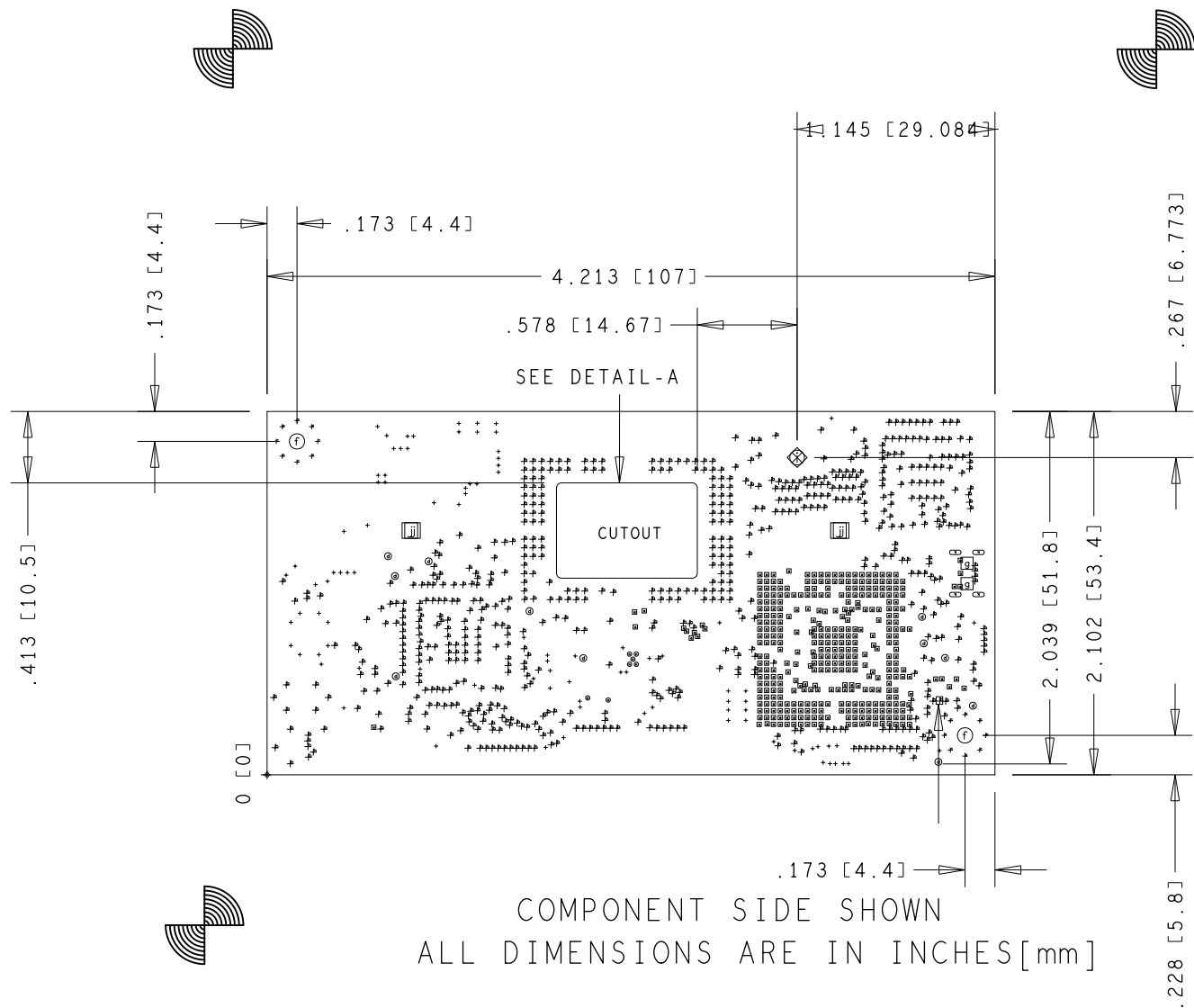
TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	SOLDERMASK - BOTTOM SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



TEXAS INSTRUMENTS		
BOARD NAME:	DLP033 DLP553XQ1EVM Controller	
DESCRIPTION:	LAYER 2 - GND PLANE	
PROJECT #:	DLP553X-Q1 EVM Controller	
DATE:	27 JUNE 2019	REVISION: B



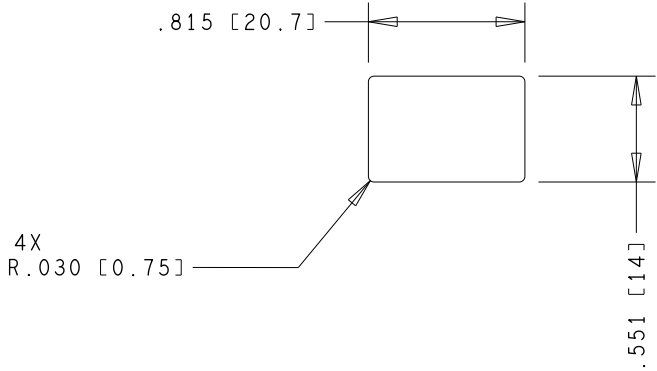
TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	LAYER 3 - SIGNAL	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



COMPONENT SIDE SHOWN  
ALL DIMENSIONS ARE IN INCHES [mm]

TEXAS INSTRUMENTS			
BOARD NAME: DLP033 DLP553XQ1EVM Controller		DESCRIPTION: FAB DRAWING	
PROJECT #: DLP553X-Q1 EVM Controller		DATE: 27 JUNE 2019	REVISION: B

DETAIL - A



FAB NOTES:

1. ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED. ALL BOARD OUTLINE DIMENSION TOLERANCES ARE +/- .010".
2. THE PWB SHALL BE FABRICATED TO IPC-6012, CLASS 2 AND 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 UL94V-0 APPROVED. FINISHED BOARD TO BE MARKED WITH UL94V-0 AND E-FILE NUMBER IN ETCH OR OTHER METHOD.
5. OVERALL BOARD THICKNESS TO BE .067" +/- 10% AND APPLIES AFTER ALL LAMINATION AND PLATING PROCESSES, MEASURED FROM COPPER TO COPPER.
6. MAX. WARP & TWIST TO BE .0075 INCHES PER INCH.
7. BOARD MUST BE ELECTRICALLY TESTED USING SUPPLIED IPC-D-356 NETLIST.
8. ALL HOLES ARE ON A 0.0001 GRID EXCEPT THOSE INDICATED.
9. MAXIMUM RATED VOLTAGE BETWEEN CONDUCTORS SHALL BE 65 VOLTS PEAK.
10. NO BREAKOUT ALLOWED ON PLATED THROUGH HOLES.
11. FOIL OUTER OPTIONAL.
12. INTERPRET DIMENSIONS IN ACCORDANCE WITH ASME Y14.5M-1994
13. TEARDROP VIAS AS NECESSARY.
14. 0.008" DRILL VIAS NEED TO BE TENTED FROM TOP SIDE. 0.010" DRILL VIAS NEED TO BE TENTED FROM BOTH SIDES.
15. SEE DETAIL-A FOR CUTOUT DETAILS

PROCESS NOTES:

1. PLATE ALL EXPOSED AREAS WITH ELECTROLESS IMMERSION GOLD, NICKEL 100 MIN MICROINCHES THK GOLD 2-6 MICROINCHES THK.
2. APPLY LPI SOLDERMASK, COLOR: GREEN. SOLDERMASK SHALL CONFORM TO IPC-SM-840, CLASS H. CURRENT REV.
3. 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.
4. APPLY LPI SILKSCREEN OR EQUIVALENT PER THE ARTWORK. COLOR: WHITE.

LAYER	CALC THICKNESS	COPPER WEIGHT
0.0008		
LAYER 1 - TOP SIDE	0.0016	1/2 oz+PLATING
	0.00466	
LAYER 2 - GND PLANE	0.0012	1 oz
	0.0060	
LAYER 3 - SIGNAL	0.0012	1 oz
	0.0086	
LAYER 4 - GND PLANE	0.0012	1 oz
	0.0040	
LAYER 5 - PWR PLANE	0.0012	1 oz
	0.0052	
LAYER 6 - PWR PLANE	0.0012	1 oz
	0.0040	
LAYER 7 - GND PLANE	0.0012	1 oz
	0.0086	
LAYER 8 - SIGNAL	0.0012	1 oz
	0.0060	
LAYER 9 - GND PLANE	0.0012	1 oz
	0.00466	
LAYER 10 - BOTTOM SIDE	0.0016	1/2 oz+PLATING
0.0008		

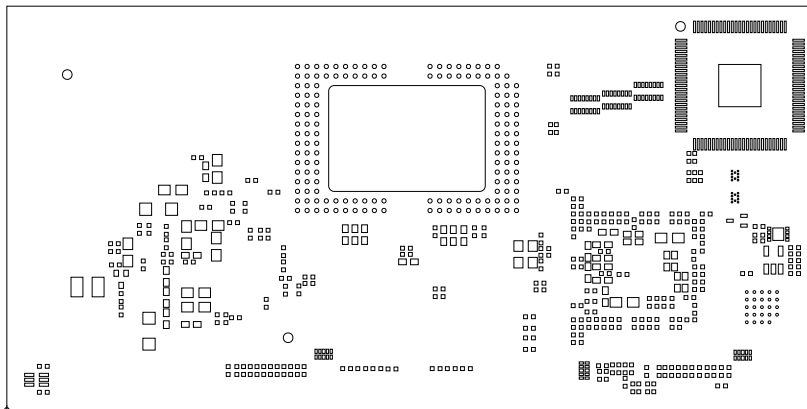
OVERAL BOARD THICKNESS: .067"  
TOLERANCE: +6.7/-6.7 (MILS)  
MIN/MAX BOARD THICKNESS: 60.3-73.7 (MILS)

IMPEDANCE CONTROL +/-10%

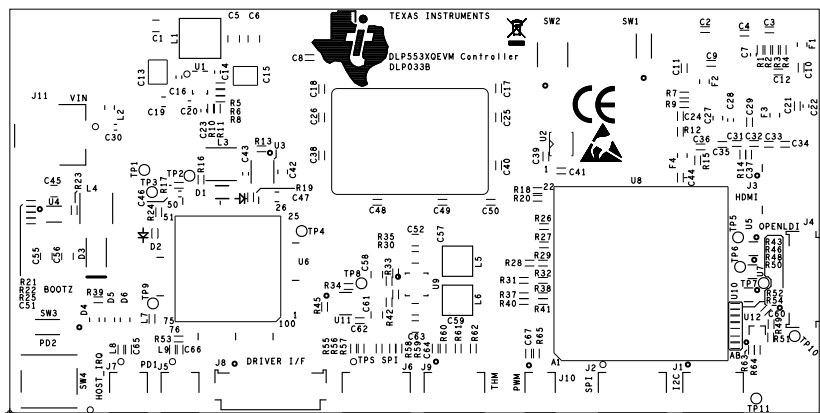
FABRICATION VENDOR IS ALLOWED TO ADJUST DIELECTRIC THICKNESS TO MEET SPECIFIED IMPEDANCE

8 MIL TRACES ON EXTERNAL LAYERS SHALL BE 50 OHM SINGLE ENDED IMPEDANCE  
5.6 MIL TRACES ON INTERNAL LAYERS SHALL BE 50 OHM SINGLE ENDED IMPEDANCE  
4 MIL TRACES WITH 6 MIL SPACES ON INTERNAL LAYERS SHALL BE 100 OHM DIFFERENTIAL IMPEDANCE

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	8.0	+3.0/-8.0	PLATED	368
•	10.0	+3.0/-10.0	PLATED	93
•	10.0	+3.0/-10.0	PLATED	670
•	12.0	+0.0/-12.008	PLATED	7
•	14.0	+3.0/-3.0	PLATED	16
•	35.0	+2.0/-2.0	PLATED	11
⊙	157.0	+3.0/-3.0	PLATED	2
⊞	31.89	+1.181/-1.181	NON-PLATED	2
◇	197.0	+3.0/-3.0	NON-PLATED	1
⊞	217.0	+3.0/-3.0	NON-PLATED	4
⊗	66.929x25.591	+3.0/-3.0	PLATED	4



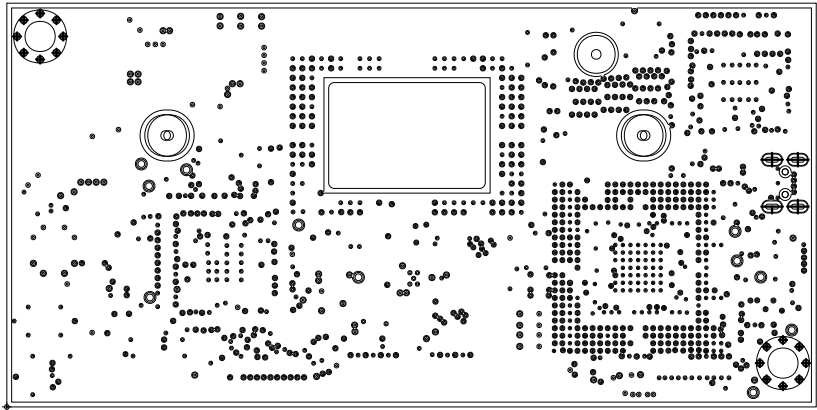
TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	SOLDERPASTE - BOTTOM SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	SILKSCREEN - TOP SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B

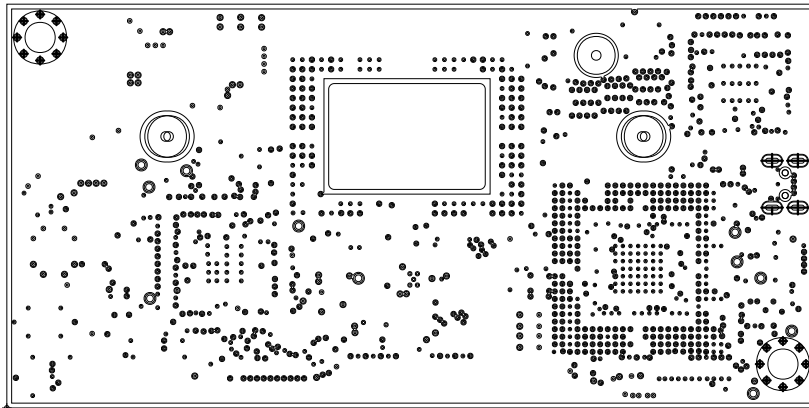


ART FILM - SSB



TEXAS INSTRUMENTS			
BOARD NAME:		DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller		LAYER 4 - GND PLANE	
PROJECT #:		DATE:	REVISION:
DLP553X-Q1 EVM Controller		27 JUNE 2019	B

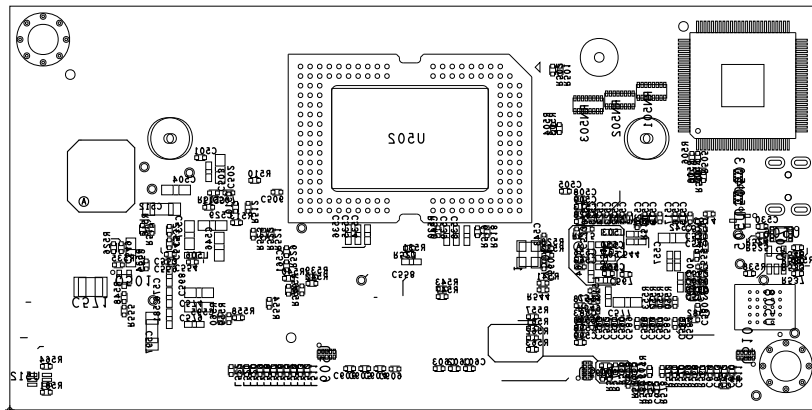




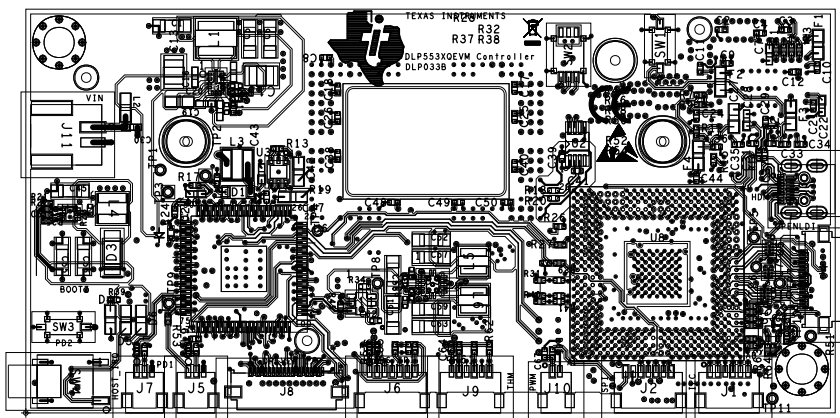
TEXAS INSTRUMENTS		
BOARD NAME:	DLP033 DLP553XQ1EVM Controller	
DESCRIPTION:	LAYER 7 - GND PLANE	
PROJECT #:	DLP553X-Q1 EVM Controller	
DATE:	27 JUNE 2019	REVISION: B



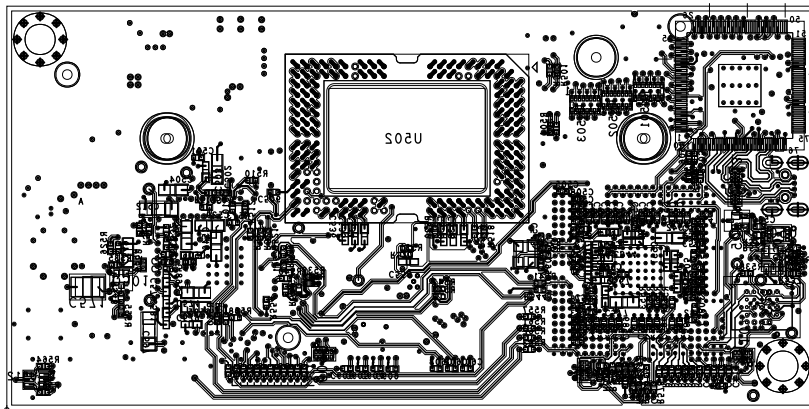
ART FILM - ASSY01



TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	ASSEMBLY BOTTOM	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



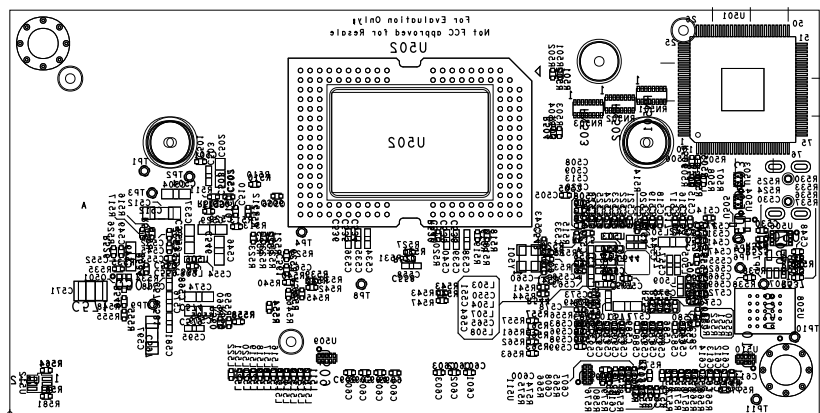
TEXAS INSTRUMENTS		
BOARD NAME: DLP033 DLP553XQ1EVM Controller	DESCRIPTION: LAYER 1 BOTTOM VIEW FROM TOP SIDE	
PROJECT #: DLP553X-Q1 EVM Controller	DATE: 27 JUNE 2019	REVISION: B



TEXAS INSTRUMENTS		
BOARD NAME:	DESCRIPTION:	
DLP033 DLP553XQ1EVM Controller	ASSEMBLY BOARD BOTTOM SIDE	
PROJECT #:	DATE:	REVISION:
DLP553X-Q1 EVM Controller	27 JUNE 2019	B



ART FILM - top\_silk



## TEXAS INSTRUMENTS

BOARD NAME: DLP033 DLP553XQ1EVM Controller		DESCRIPTION: ASSEMBLY BOTTOM SIDE	
PROJECT #:	DLP553X-Q1 EVM Controller	DATE: 27 JUNE 2019	REVISION: B