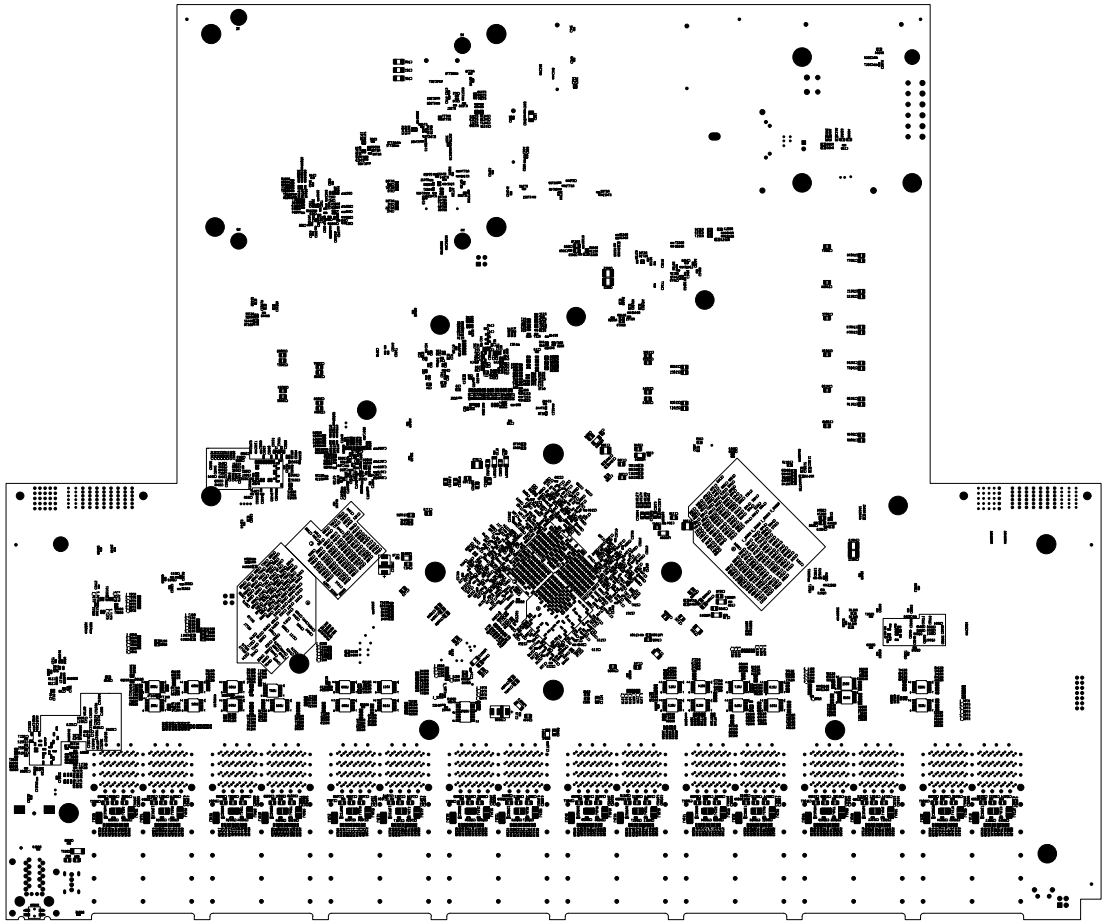
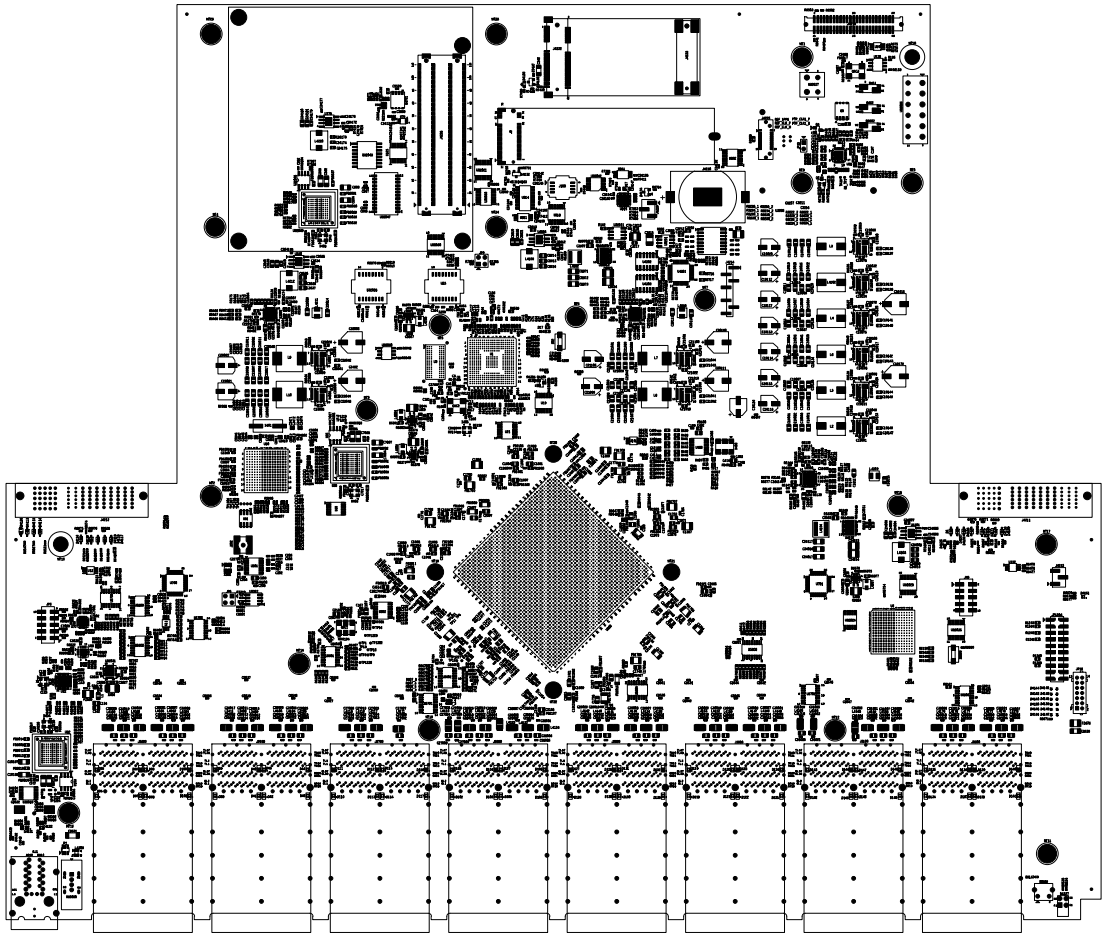
CAM350 V 9.5.1 : Mon Feb 01 19:04:34 2016 - (Untitled) : ASB.art



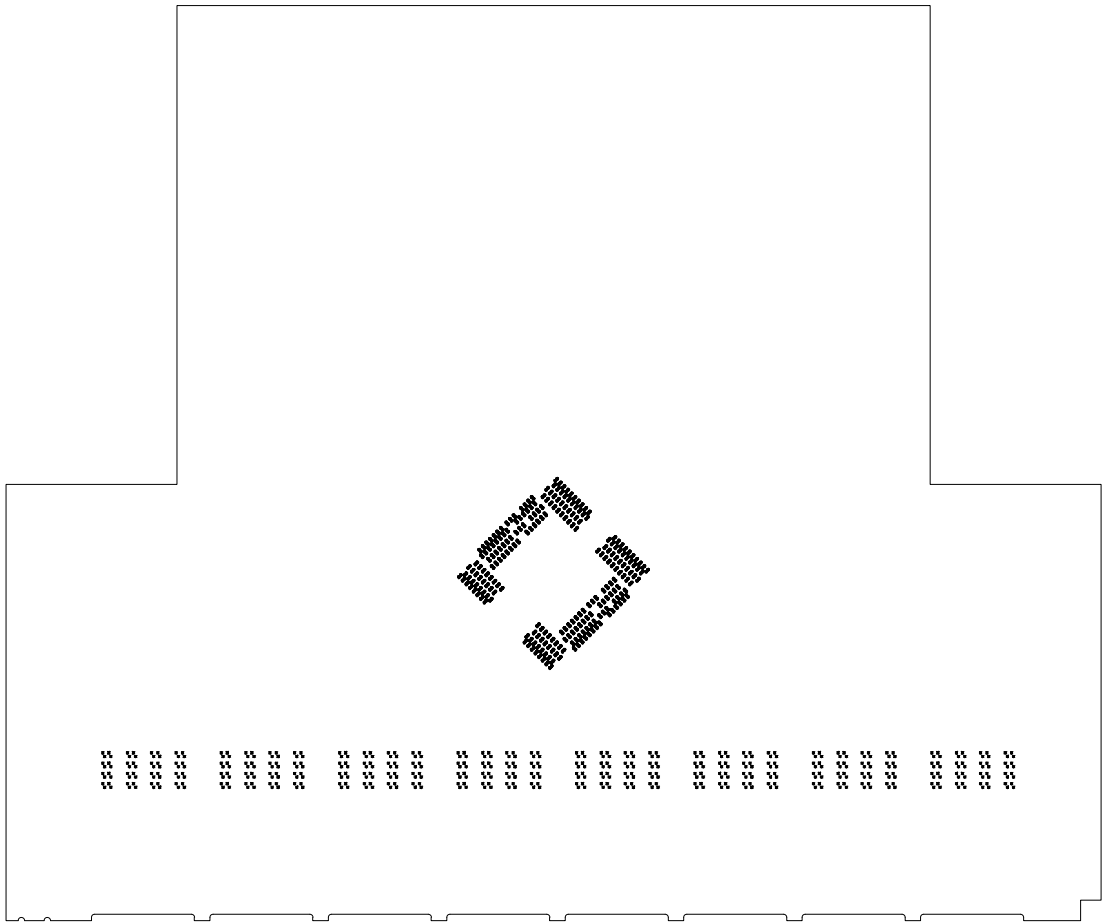
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:ASB_ASSEMBLY BOTTOM

CAM350 V 9.5.1 : Mon Feb 01 19:04:34 2016 - (Untitled) : AST.art



DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER: AST_ASSEMBLY TOP

CAM350 V 9.5.1 : Mon Feb 01 19:04:34 2016 - (Untitled) : BACK_DRILL.art



BACKDRILL: BOTTOM to L12_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	9.85	+3.0/-3.0	PLATED	128
•	15.0	+1.97/-1.97	PLATED	128

BACKDRILL: BOTTOM to L14_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	9.85	+3.0/-3.0	PLATED	128
•	15.0	+1.97/-1.97	PLATED	128

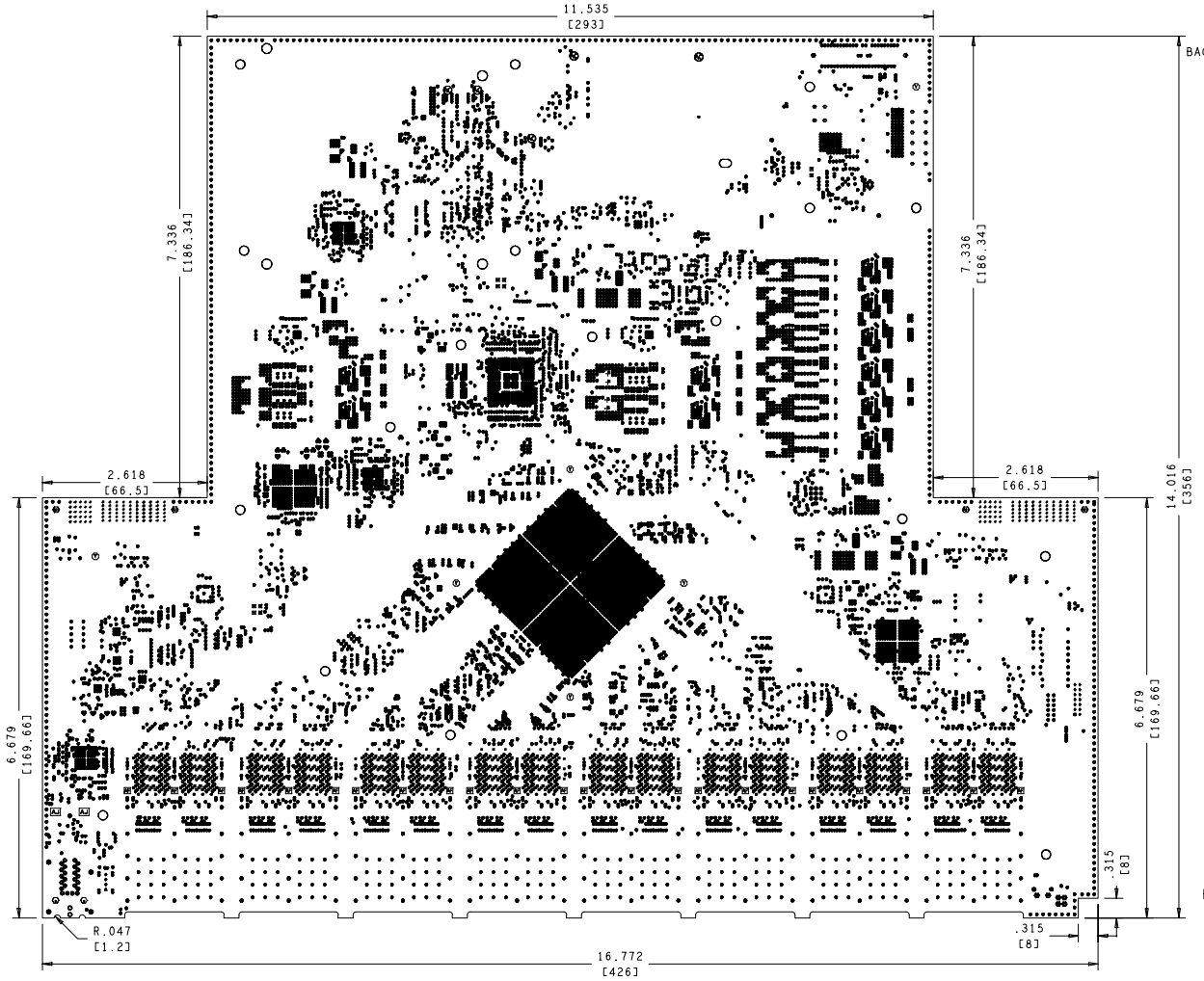
BACKDRILL: BOTTOM to L16_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	9.85	+3.0/-3.0	PLATED	128
•	15.0	+1.97/-1.97	PLATED	128

BACKDRILL: BOTTOM to L18_GND				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	9.85	+3.0/-3.0	PLATED	128
•	15.0	+1.97/-1.97	PLATED	128

NOTES:
- DRILL SIZES LISTED IN LEGEND ARE CONSIDERED FINISHED.
- VENDOR IS REQUIRED TO SELECT TOOLING FOR OVERDRILLING.
- LEGEND DOES NOT SPECIFY DEPTH INTO ADJACENT DIELECTRIC LAYER.

CAM350 V 9.5.1 : Mon Feb 01 19:04:35 2016 - (Untitled) : DRILL_DRAWING.a

REVISIONS						
ECO NO.	REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED



BACK DRILL

DRILL CHART: TOP to BOTTOM ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
•	9.85	+3.0/-3.0	PLATED	512
•	9.85	+3.0/-9.85	PLATED	14069
•	10.0	+3.0/-10.0	PLATED	46
•	12.0	+3.0/-12.0	PLATED	147
•	15.0	+1.97/-1.97	PLATED	1216
•	22.0	+3.0/-3.0	PLATED	120
•	23.6	+2.0/-2.0	PLATED	170
•	31.88	+3.0/-3.0	PLATED	64
•	32.0	+3.0/-3.0	PLATED	13
•	33.0	+3.0/-3.0	PLATED	2
•	35.2	+3.0/-3.0	PLATED	1
•	35.43	+3.0/-3.0	PLATED	21
•	36.0	+3.0/-3.0	PLATED	3
•	38.97	+3.0/-3.0	PLATED	3
•	39.37	+3.0/-3.0	PLATED	10
•	39.6	+3.0/-3.0	PLATED	1
•	40.0	+3.0/-3.0	PLATED	5
•	41.33	+3.0/-3.0	PLATED	120
•	44.0	+3.0/-3.0	PLATED	1
•	47.24	+3.0/-3.0	PLATED	4
•	51.0	+3.0/-3.0	PLATED	2
•	55.0	+3.0/-3.0	PLATED	10
•	60.5	+3.0/-3.0	PLATED	6
•	69.3	+3.0/-3.0	PLATED	4
•	125.98	+2.0/-2.0	PLATED	6
○	145.6	+2.0/-2.0	PLATED	19
○	29.5	+2.0/-2.0	NON-PLATED	2
•	35.43	+2.0/-2.0	NON-PLATED	2
•	43.3	+2.0/-2.0	NON-PLATED	3
•	55.0	+2.0/-2.0	NON-PLATED	1
•	57.0	+2.0/-2.0	NON-PLATED	2
⊗	63.0	+2.0/-2.0	NON-PLATED	5
•	63.0	+2.0/-2.0	NON-PLATED	2
•	86.61	+2.0/-2.0	NON-PLATED	3
▣	98.4	+2.0/-2.0	NON-PLATED	24
⊕	120.0	+2.0/-2.0	NON-PLATED	4
⊛	154.0	+2.0/-2.0	NON-PLATED	2
○	166.14	+3.15/-0.0	NON-PLATED	4
▮	60.0x30.0	+3.0/-3.0	PLATED	4
▣	157.48x118.11	+2.0/-2.0	NON-PLATED	2
⬭	188.98x125.98	+5.0/-5.0	NON-PLATED	1

DETAIL A:

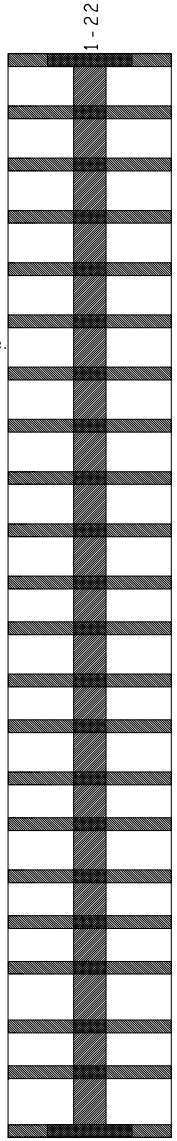
DRILL SYMBOLS 9.85 MIL AND 10 MIL 12 MIL NEEDS TO BE FILLED AND SURFACE SHOULD BE PLANAR.

SIZE	BOARD NAME:	PART NUMBER:	
D	WEDGE100	136-000025-04	
SCALE 1/1	CUSTOMER NAME: FACEBOOK	SHEET 1 OF 1	REV 0.4

REVISIONS						
ECO NO.	REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED

FAB NOTES: UNLESS OTHERWISE SPECIFIED

1. SPECIFICATIONS/TOLERANCES:
   A. FABRICATE PER IPC-6012, CLASS 2, USING PROVIDED DATA FILES
   B. ALL SPECIFICATIONS USED SHALL BE PER THEIR LATEST REVISIONS.
   C. REMOVE ALL BURRS
   D. REPAIR OF PCB DEFECTS IS NOT PERMITTED.
2. DIELECTRIC MATERIAL:
   A. TU883, VERY LOW PROFILE, HIGH SPREAD GLASS WEAVE TYPE.
   B. SEE LAYER STACK-UP FOR REQUIRED COPPER WEIGHTS AND THE FINISHED PCB
   C. FINISHED PCB THICKNESS SHALL BE MEASURED OVER LANDS AND/OR CONDUCTORS NOT COVERED BY SOLDER MASK.
3. DRILLING:
   A. LAYER-TO-LAYER MISREGISTRATION ACROSS THE CORE MAXIMUM:2 MILS, ACROSS THE PREPERG MAXIMUM :4 MILS.
   B. FILL SPECIFIED VIAS IN DRILL DRAWING(DETAIL A) USING NON-CONDUCTIVE EPOXY AND OVERPLATE WITH COPPER. .013 [.0005] MINIMUM THICKNESS. DIMPLE DEPTH SHALL BE .050 [.002] MAXIMUM. THE PRESENCE OF WRAP PLATING SHALL BE VISUALLY EVIDENT IN ALL QUALITY CONFORMANCE MICROSECTIONS; NO MINIMUM MEASUREMENT REQUIRED.
   C. BACK DRILL: MAX STUB LENGTH FOR DIFFERENTIAL SIGNALS ON LAYERS 11, 13, 15 AND 17 SHOULD BE LESS THAN 10MIL. (NETS PROPERTY ADDED: BACKDRILL_MAX_PTH_STUB = 10 MIL)
   BACKDRILL_MIN_PTH_STUB = 2 MIL
4. SOLDER MASK:
   A. APPLY LPI SOLDER MASK USING PROVIDED DATA.
   B. SOLDER MASK SHALL BE PER IPC-SM-840, CLASS T, COLOR GREEN.
   C. THE DIMENSIONS OF SOLDER MASK-DEFINED PADS ON PLANES AND/OR WIDE CONDUCTORS SHALL NOT BE MODIFIED.
   D. NO GAIN RELIEF ALLOWED IN SMT SOLDER MASK
5. SILKSCREEN/MARKING:
   A. SILKSCREEN PCB PER PROVIDED DATA USING PERMANENT, NON-CONDUCTIVE INK, COLOR WHITE.
   B. SUPPLIER ID AND TRACEABILITY INFORMATION SHALL BE APPLIED USING PERMANENT, NON-CONDUCTIVE INK, COLOR WHITE.
   C. INK SHALL NOT BE APPLIED TO ANY SOLDERABLE SURFACE.
   D. SILKSCREEN CAN BE CLIPPED TO MAKE SLODERBLE AREA CLEAN.
6. ELECTRICAL TEST:
   A. DESIGN VERIFICATION SHALL BE DONE PRIOR TO PCB FABRICATION USING SUPPLIED VALOR ODB++ DATABASE, OR GERBER DATA AND AN IPC-D-356 NETLIST.
   B. ALL PCBS SHALL BE 100% ELECTRICALLY TESTED FOR OPENS AND SHORTS USING PROVIDED DATA.
   C. APPLY TEST STAMP IN NON-LEGEND AREA ON REAR SIDE OF PCB; OK TO APPLY TO PANEL RAILS IF SPACE DOES NOT PERMIT.
7. FINAL FINISH:
   A. FINAL FINISH ON ALL EXPOSED CONDUCTORS SHALL BE HT OSP COATING.OSP COATING THICKNESS MAXIMUM 0.6um
8. IMPEDANCE:
   A. IMPEDANCE TOLERANCE SHALL BE +/- 10%.
   B. SEE LAYER STACK-UP FOR IMPEDANCE REQUIREMENTS.
9. IF PANELIZATION SPECIFICATIONS ARE PROVIDED, THE PCBS SHALL BE DELIVERED IN PANEL FORM. HOWEVER, THESE SPECIFICATIONS MAY BE REPLACED BY SUPPLIER PREFERRED SPECIFICATIONS AS APPROVED BY facebook.
10. VENDOR TO PROVIDE BOARD STACK UP FOR APPROVAL PRIOR TO FABRICATION. STACK UP SHOULD INCLUDE PLATING THICKNESS ON OUTER LAYERS. FAB DRAWING STACK UP DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY. VENDOR TO PROVIDE TDR IMPEDANCE TEST RESULTS AND COUPON.
11. TEAR DROPS MAY BE ADDED ON INTERNAL OR EXTERNAL LAYERS TO ACHIEVE MINIMUM ANNULAR RING REQUIREMENTS AND STRENGTHEN THE TRACE TO PAD INTERSECTION. RUN DRC TO CHECK SPACE VIOLATION.
12. COPPER THIEVING: 200MIL SPACING FROM ANY METAL ON SAME LAYER OR ADJACENT LAYER
13. NON-FUNCTIONAL PADS: DROP NON FUNCTIONAL PADS.
14. GERBER DATA FORMAT. RS274X.
15. FABRICATE USING MASTER ARTWORK FOR CIRCUIT PATTERN. NO DEVIATION FROM MASTER ARTWORK PERMITTED WITHOUT PERMISSION
16. BOARD DIMENSIONS ARE IN INCHES [MM]. BOARD TOLERENCE +/-0.005.
17. BACKDRILL SIZE = PRIMARY DHS+6 MIL.



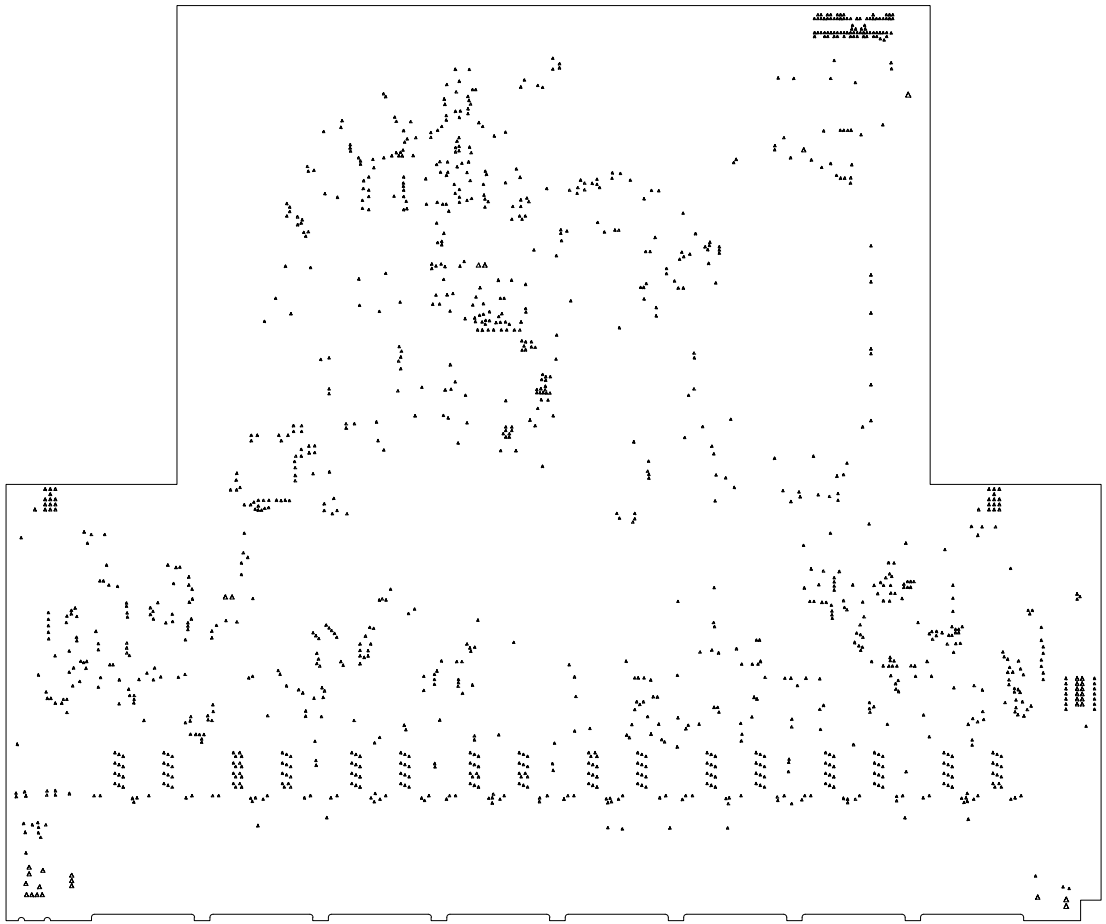
	50E IMPEDENCE VALUES	100E IMPEDENCE VALUES	85E IMPEDENCE VALUES
* SURFACE - CONFORMAL COAT 0 MIL			
L1: TOP CONDUCTOR - COPPER 2.61 MIL	6.5 MILS	4.2MILS/6.4 MILS	5.8 MILS/5.5 MILS
* DIELECTRIC - TU883 3.86 MILS			
L2: L2_GND PLANE -COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 2.00 MILS			
L3: L3_PWR PLANE -COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 7.30 MILS			
L4: L4_PWR PLANE -COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 2.00 MILS			
L5: L5_GND PLANE -COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.48 MILS			
L6: L6_SIG CONDUCTOR -COPPER 0.6 MILS	4.3 MILS	3.8MILS/6.2 MILS	5.7 MILS/5.0 MILS
* DIELECTRIC - TU883 4.00 MILS			
L7: L7_GND PLANE -COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.40 MILS			
L8: L8_SIG CONDUCTOR -COPPER 0.6 MILS	4.3 MILS	----------	----------
* DIELECTRIC - TU883 4.00 MILS			
L9: L9_GND PLANE -COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.76 MILS			
L10:L10_GND PLANE-COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.00 MILS			
L11:L11_SIG CONDUCTOR-COPPER 0.6 MILS	4.3 MILS	3.8MILS/6.2 MILS	5.7 MILS/5.0 MILS
* DIELECTRIC - TU883 4.4 MILS			
L12:L12_GND PLANE-COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.00 MILS			
L13:L13_SIG CONDUCTOR-COPPER 0.6 MILS	4.3 MILS	3.8MILS/6.2 MILS	5.7 MILS/5.0 MILS
* DIELECTRIC - TU883 4.4 MILS			
L14 L14_GND PLANE-COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.00 MILS			
L15:L15_SIG CONDUCTOR-COPPER 0.6 MILS	4.3 MILS	3.8MILS/6.2 MILS	5.7 MILS/5.0 MILS
* DIELECTRIC - TU883 4.4 MILS			
L16:L16_GND PLANE-COPPER 0.6 MILS	--------	----------	----------
* DIELECTRIC - TU883 4.00 MILS			
L17:L17_SIG CONDUCTOR-COPPER 0.6 MILS	4.3 MILS	3.8MILS/6.2 MILS	5.7 MILS/5.0 MILS
* DIELECTRIC - TU883 4.36 MILS			
L18:L18_GND PLANE-COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 2.00 MILS			
L19:L19_PWR PLANE-COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 7.94 MILS			
L20:L20_PWR PLANE-COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 2.00 MILS			
L21:L21_GND PLANE-COPPER 2.4 MILS	--------	----------	----------
* DIELECTRIC - TU883 3.86 MILS			
L22:BOT CONDUCTOR - COPPER 2.61 MIL	6.5 MILS	4.2MILS/6.4 MILS	5.8 MILS/5.5 MILS
* SURFACE - CONFORMAL COAT 0 MIL			

DESIGN CROSS SECTION CHART

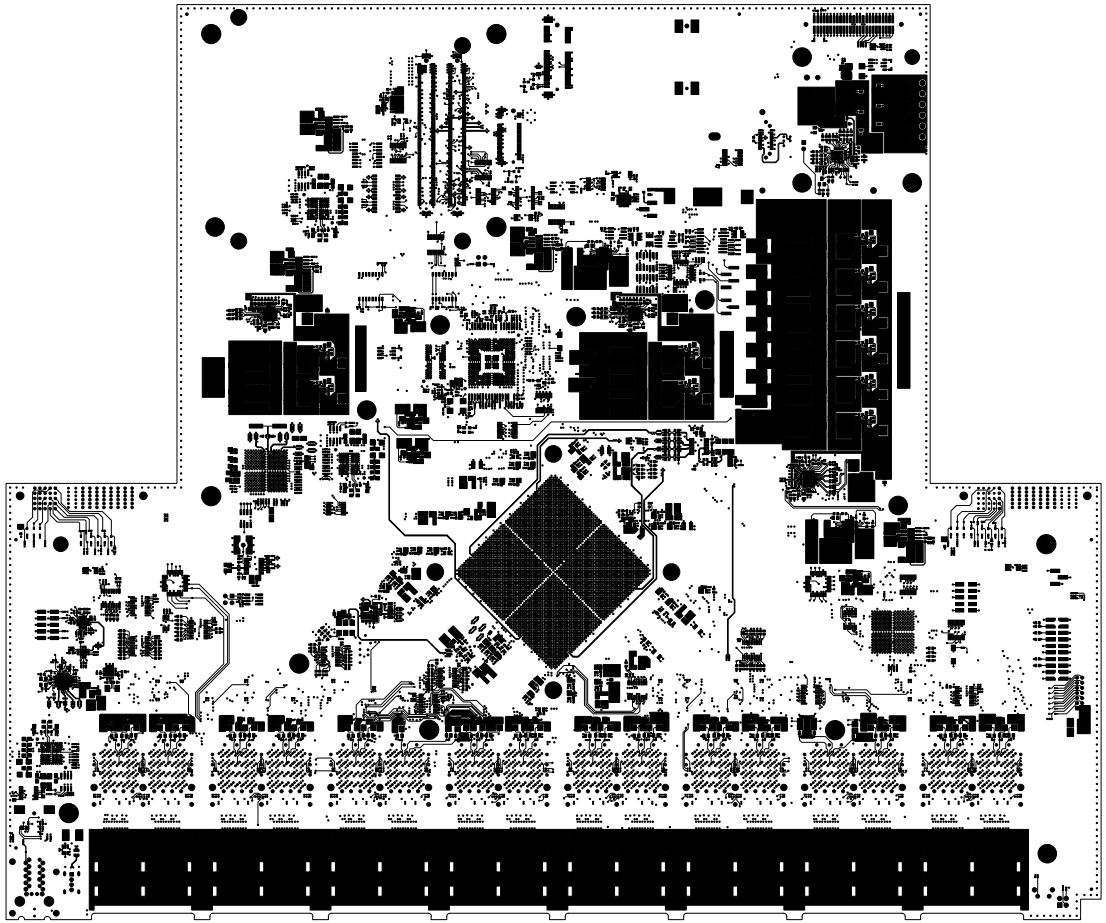
TOTAL THICKNESS 117.78 MIL

SIZE	BOARD NAME:	PART NUMBER:	
D	WEDGE100	136-000025-04	
SCALE 1/1	CUSTOMER NAME: FACEBOOK	SHEET 1 OF 1	REV 0.4

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : ICT_FIXTURE.art

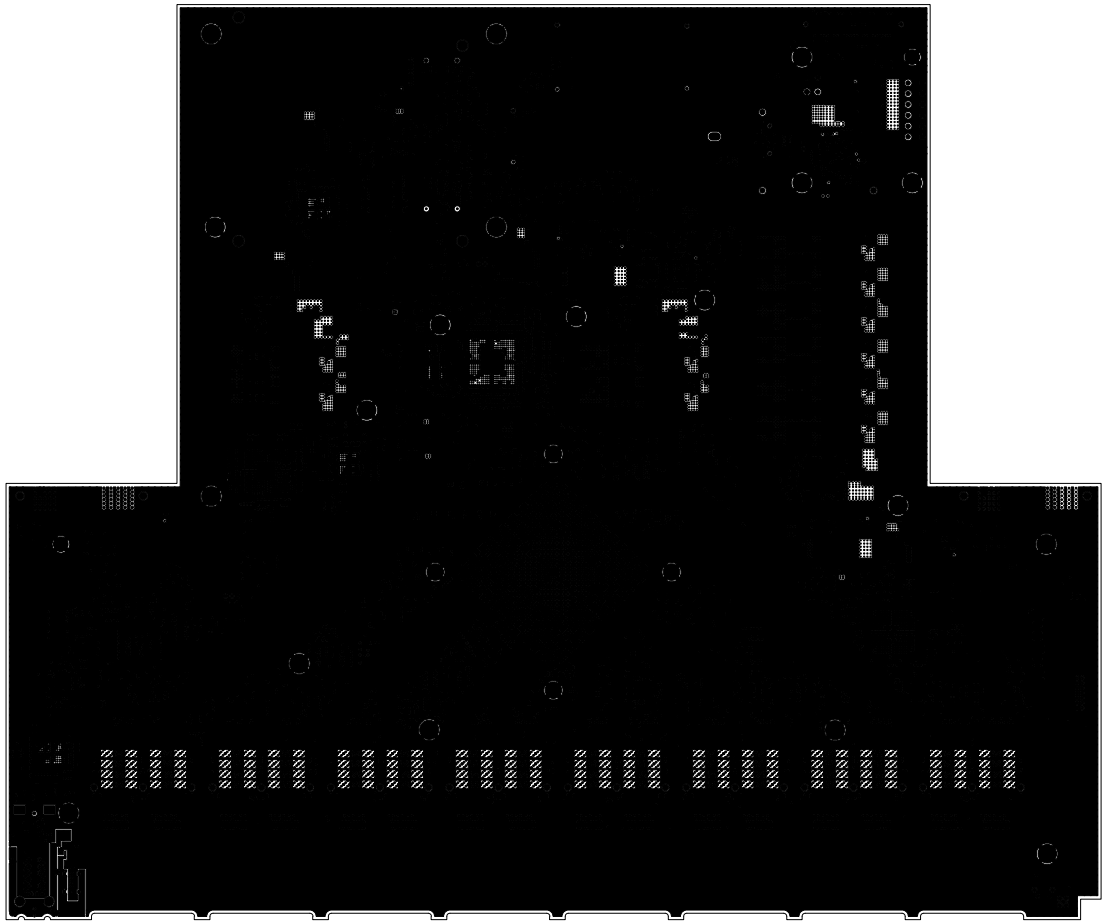


CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L01_TOP.art



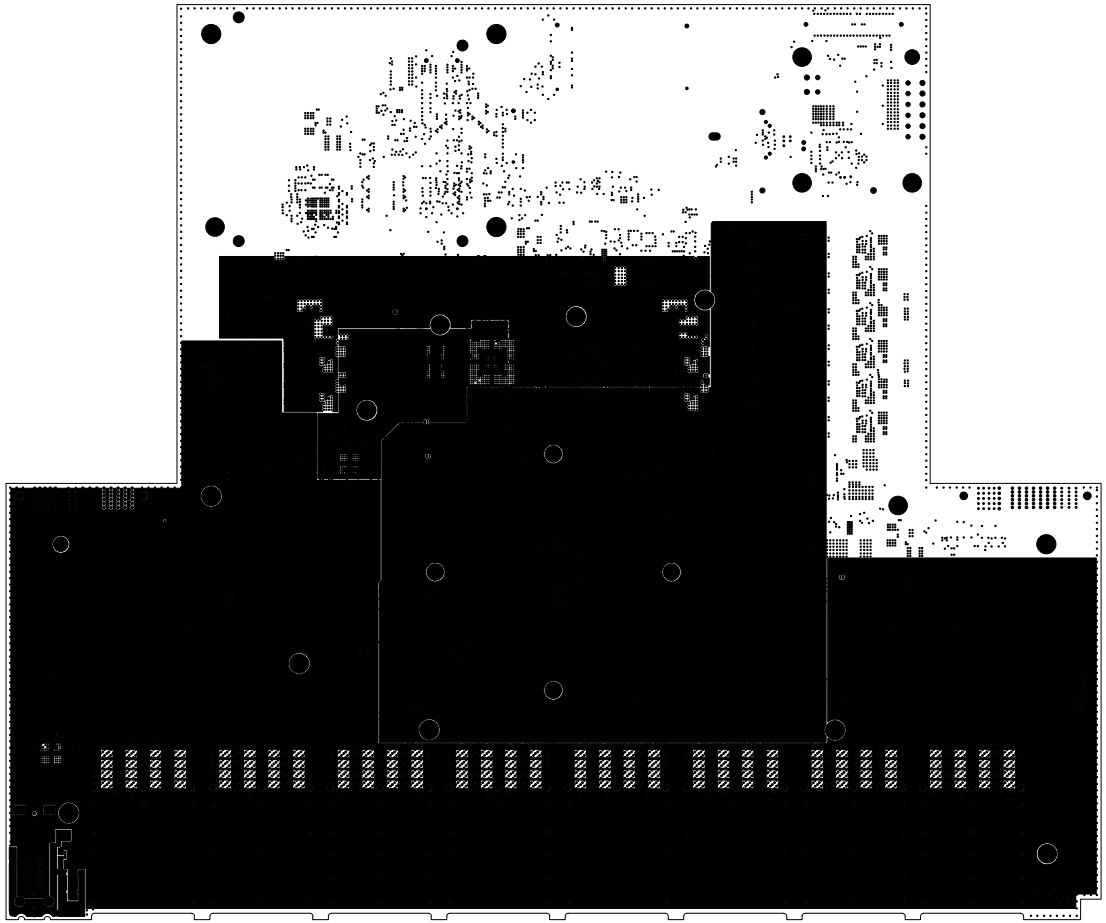
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L1_TOP LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L02_GND.art



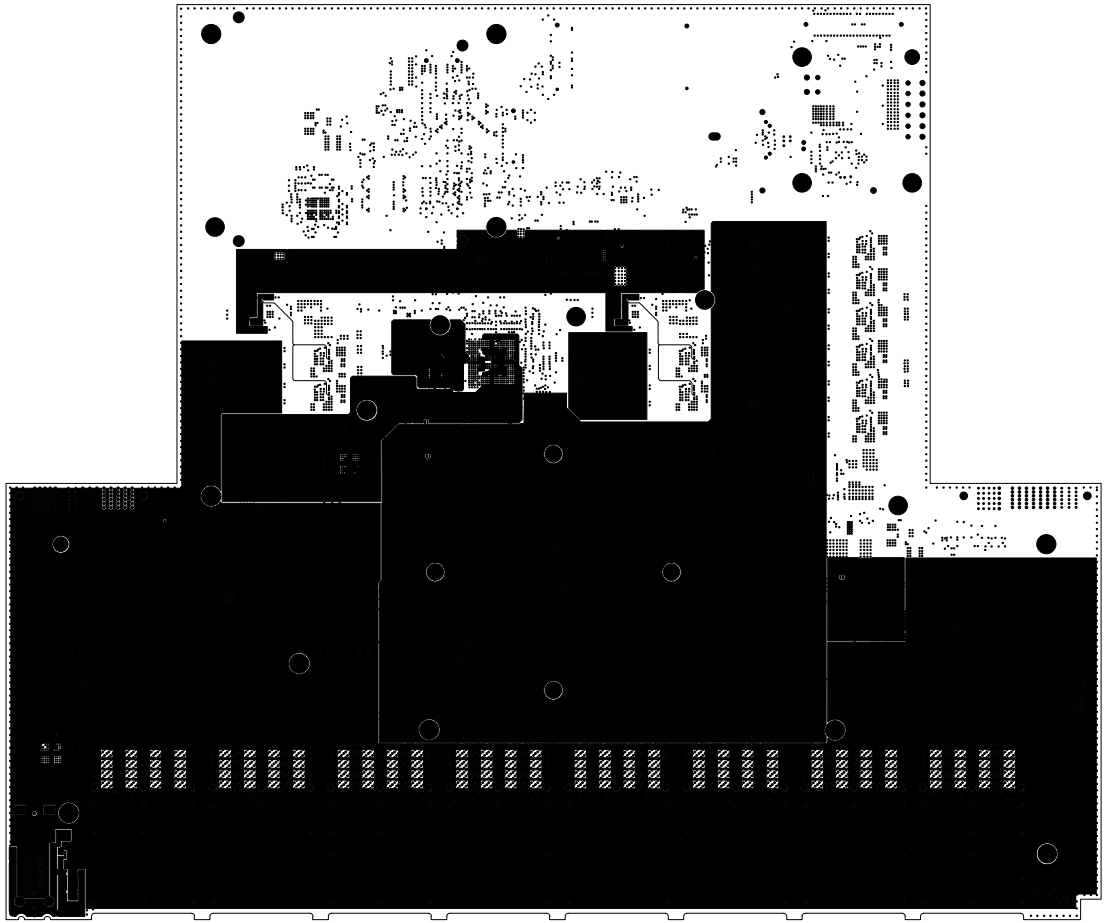
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L2_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L03_PWR.art



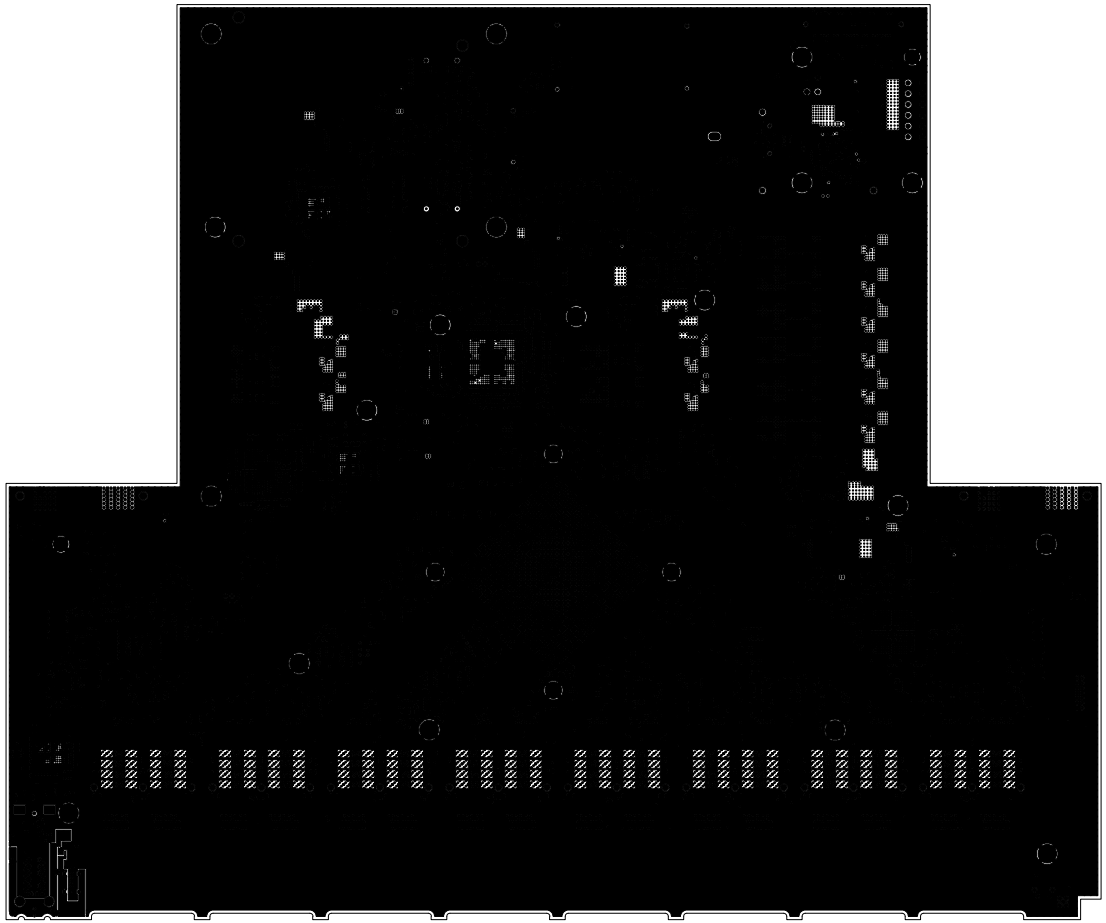
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L3_POWER PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L04_PWR.art



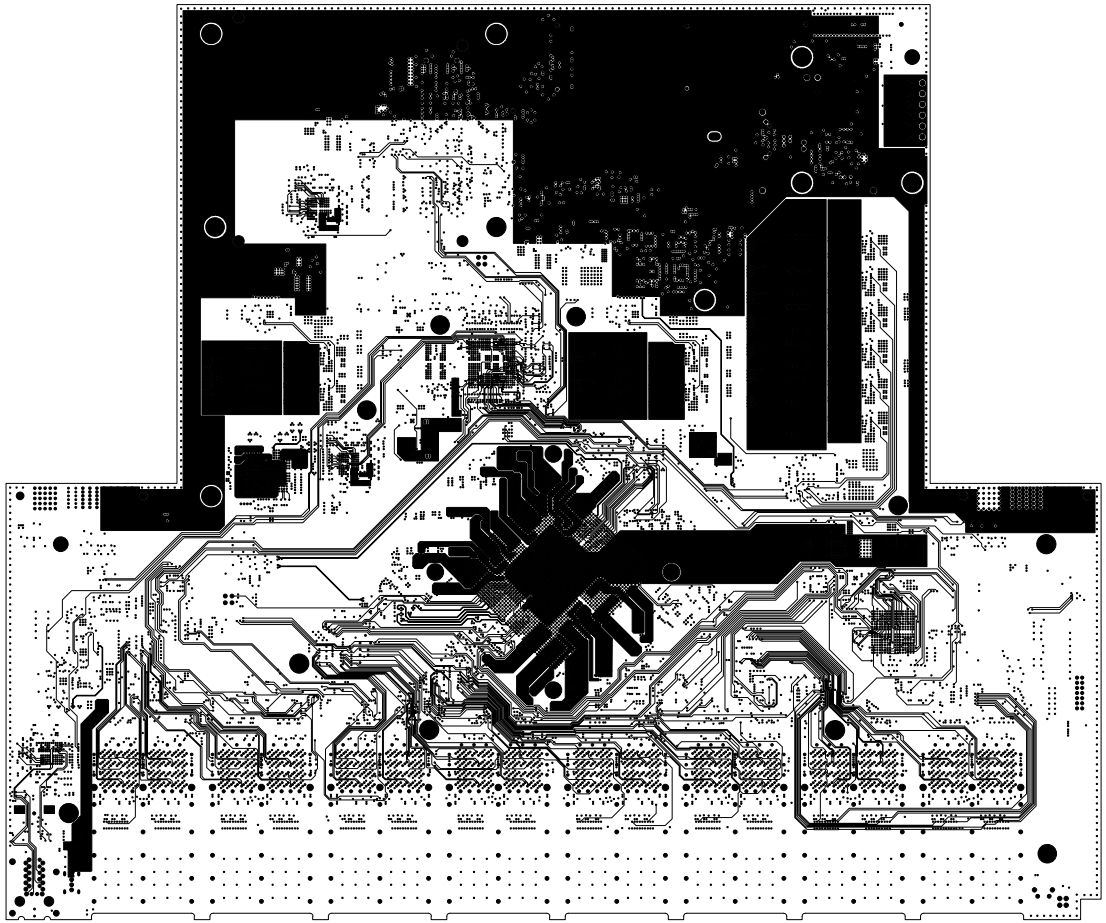
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L4_POWER PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L05_GND.art



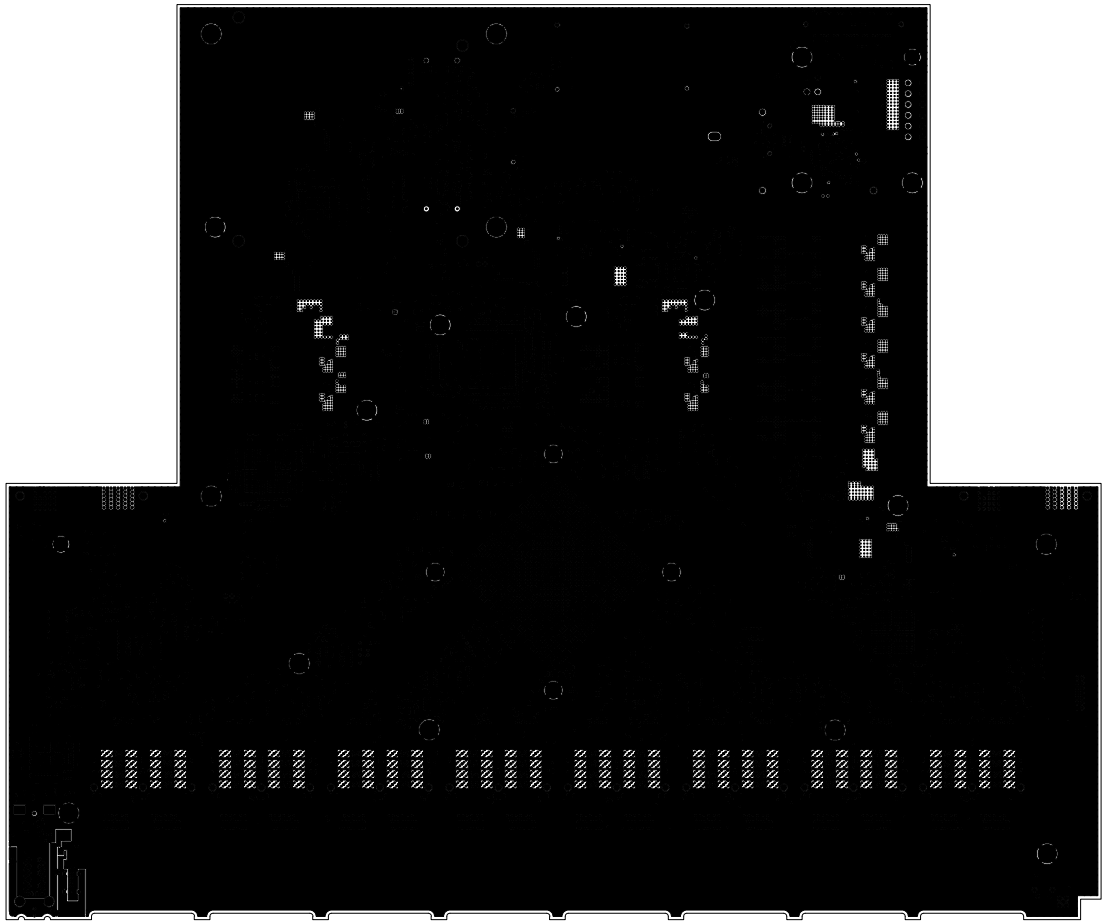
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L5_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L06_SIG.art



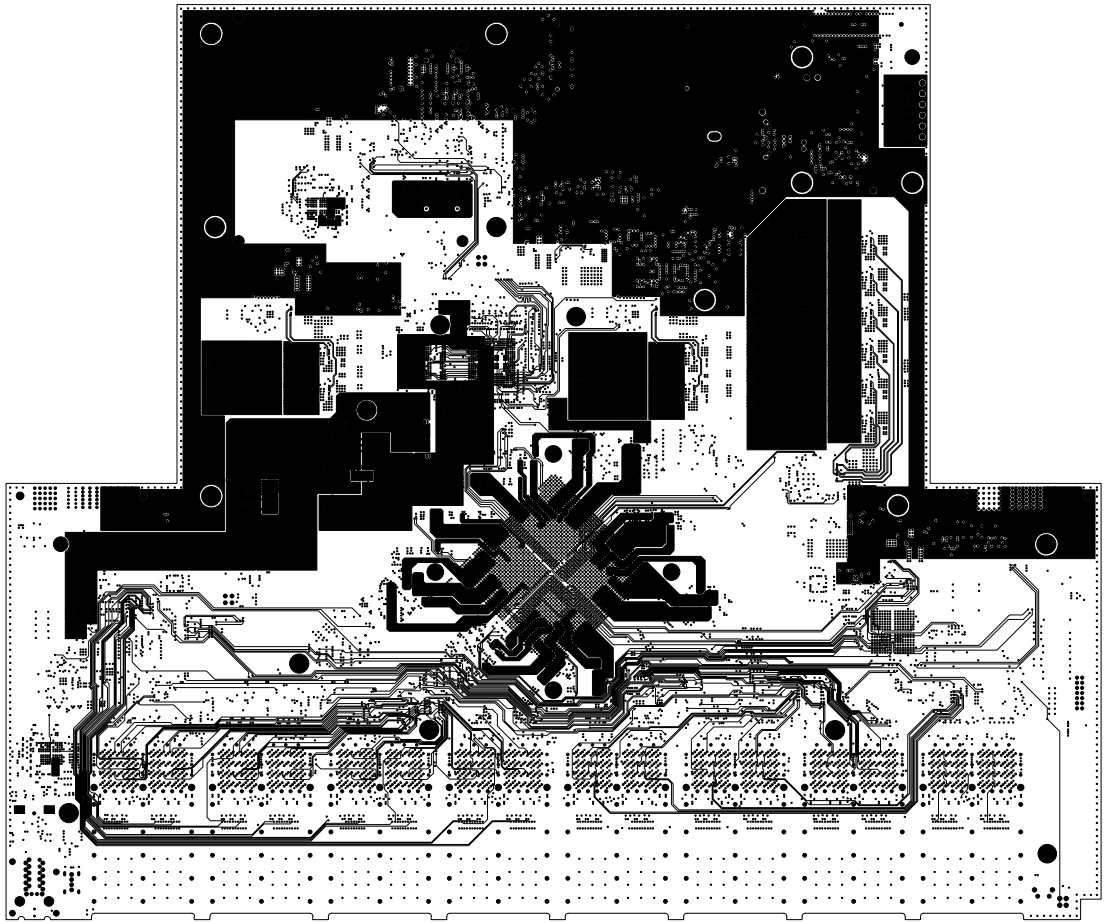
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L6_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:36 2016 - (Untitled) : L07_GND.art



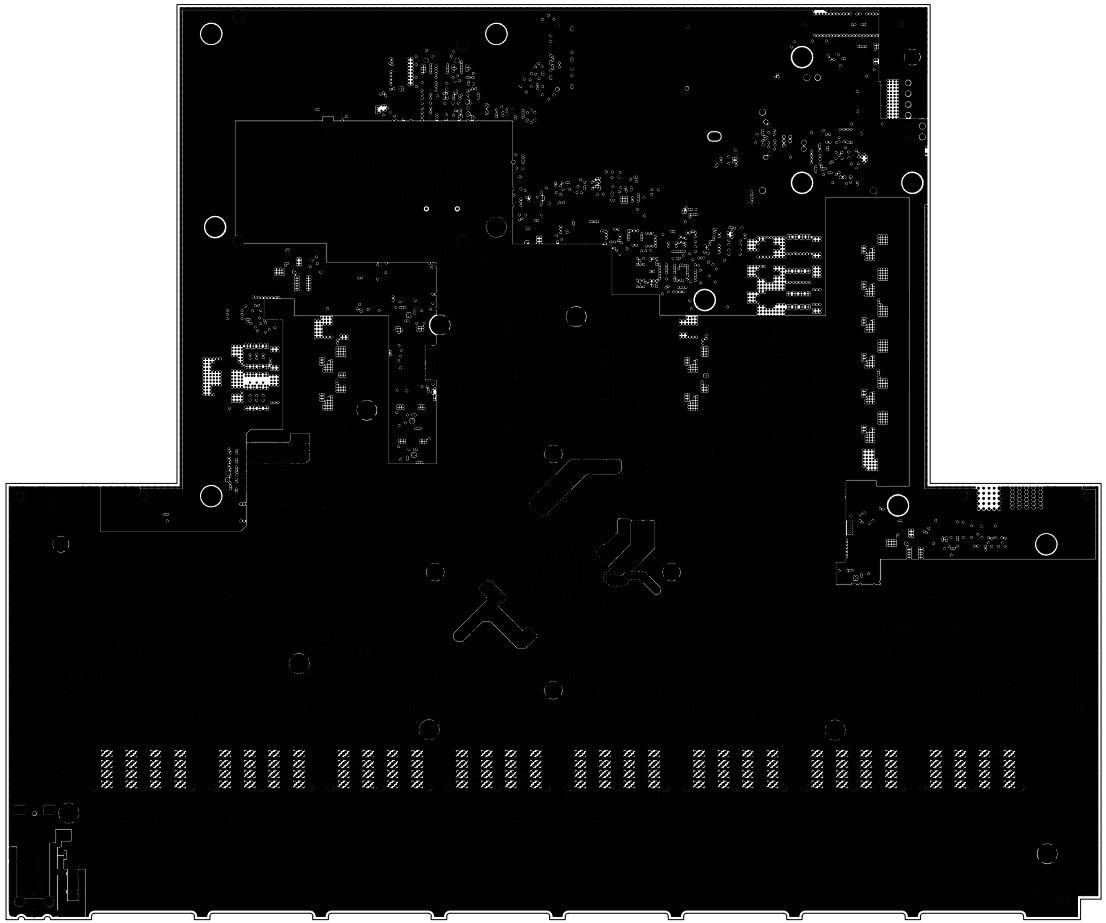
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L7_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L08_SIG.art



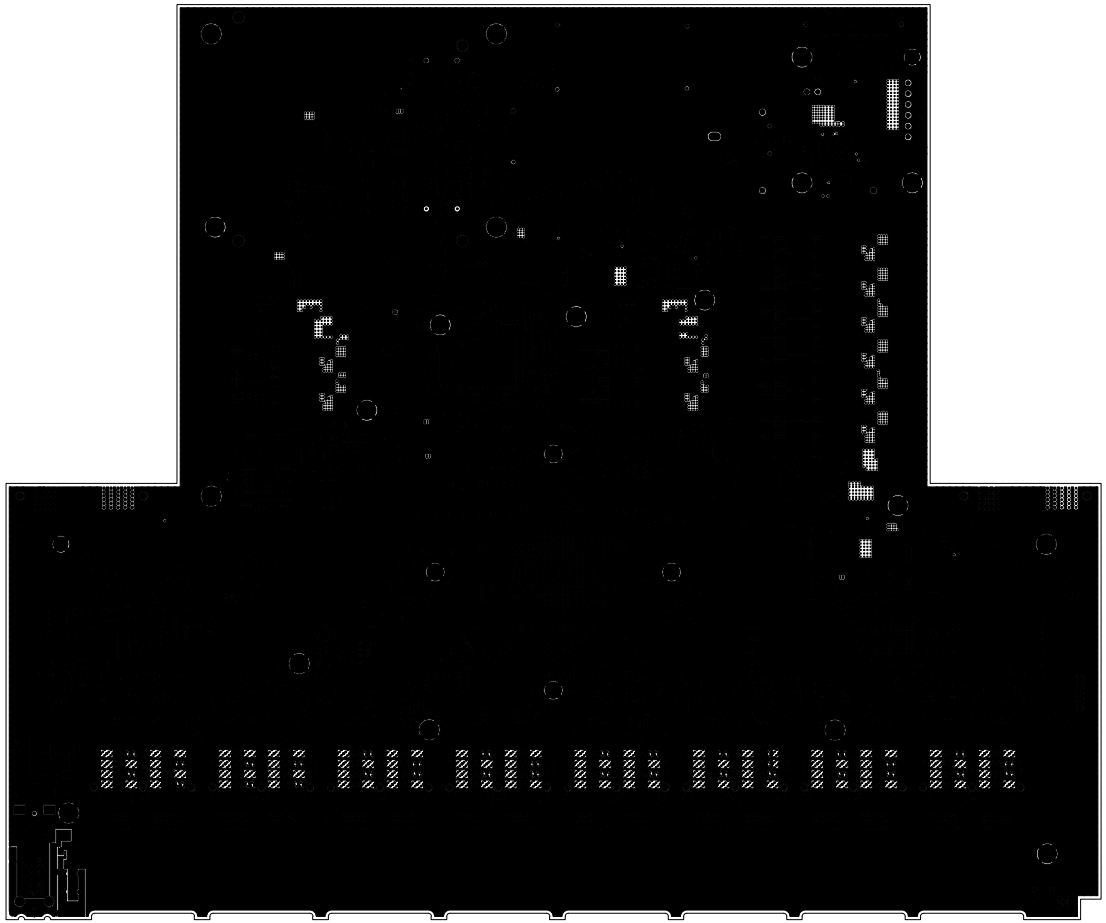
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L8_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L09_PWR.art



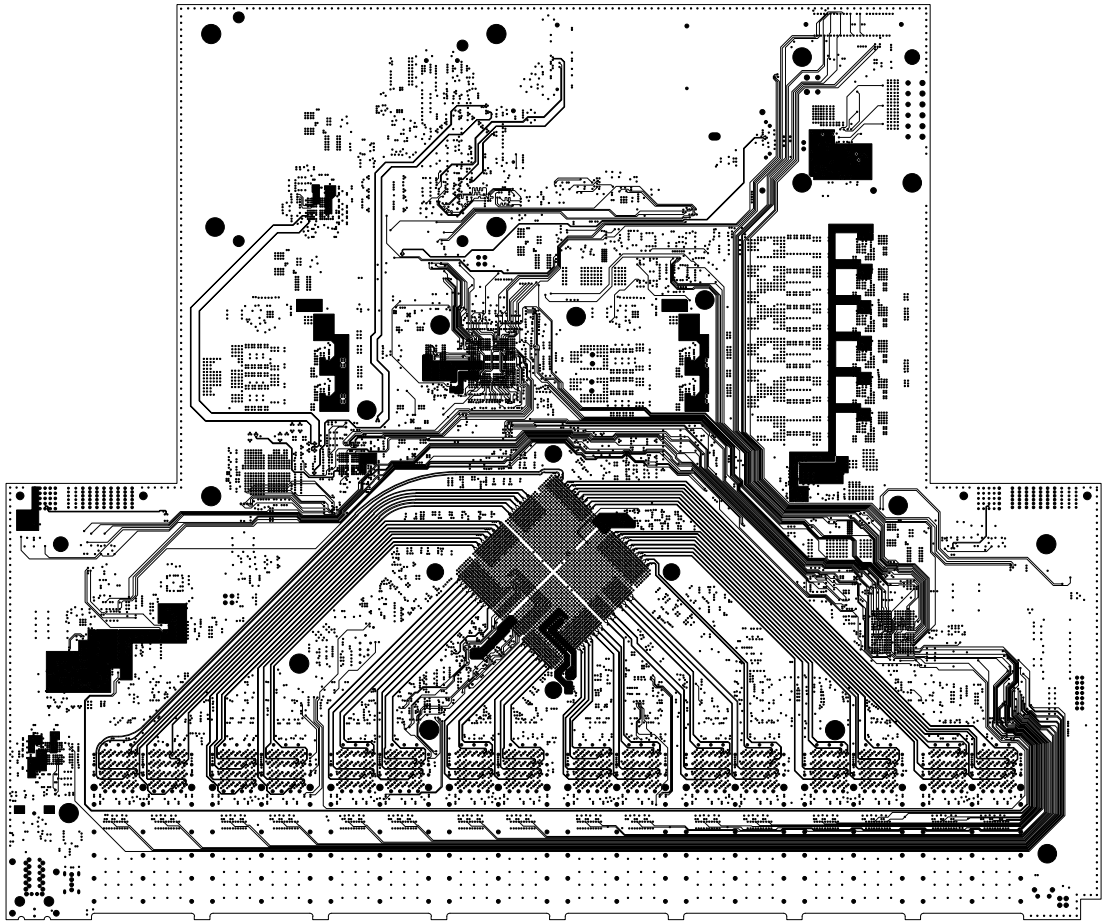
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L9_GND / PWR PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L10_GND.art



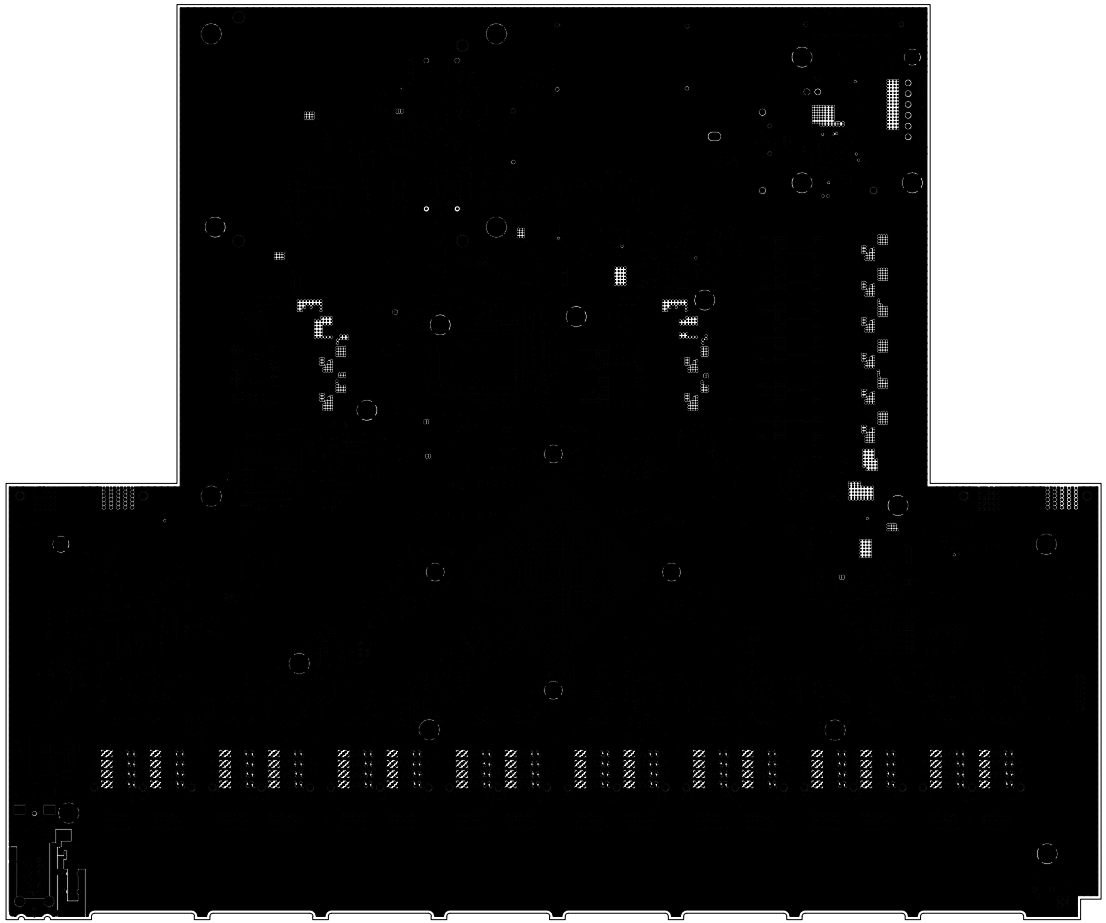
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L10_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L11_SIG.art



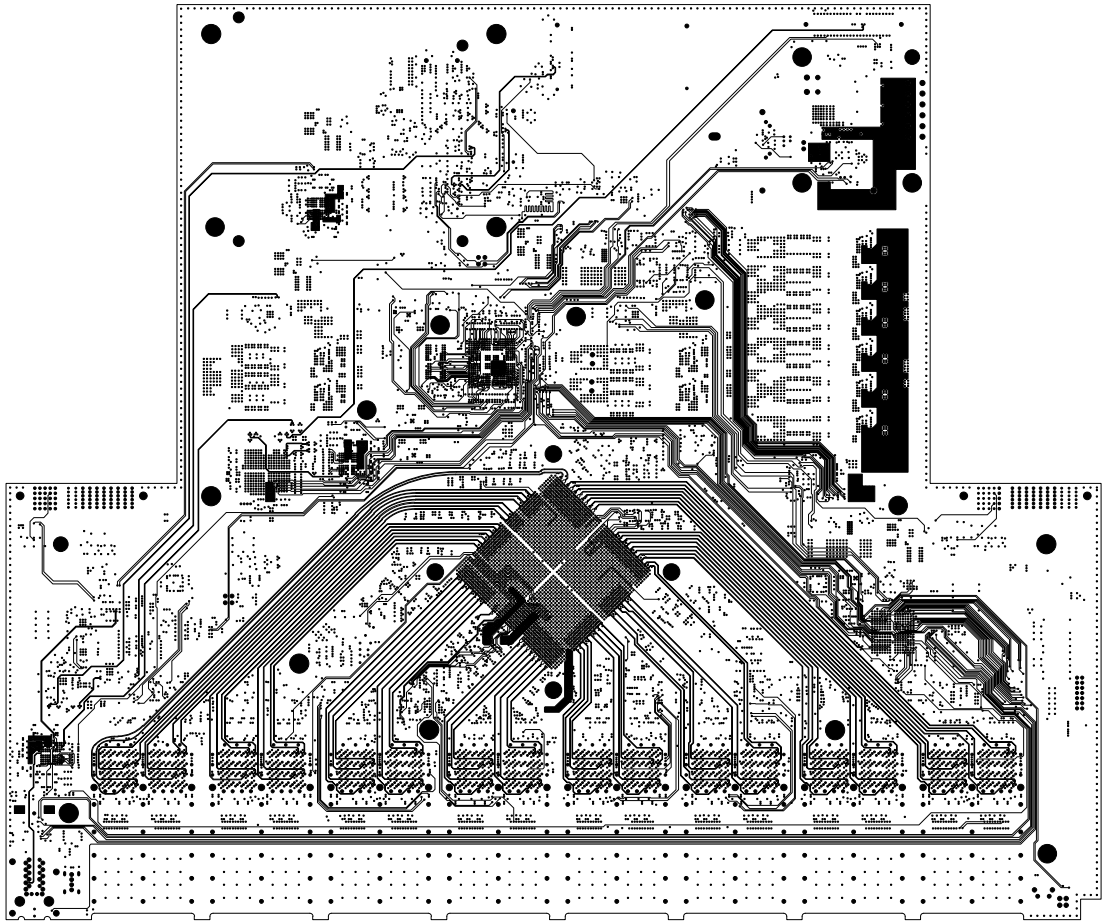
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L11_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L12_GND.art



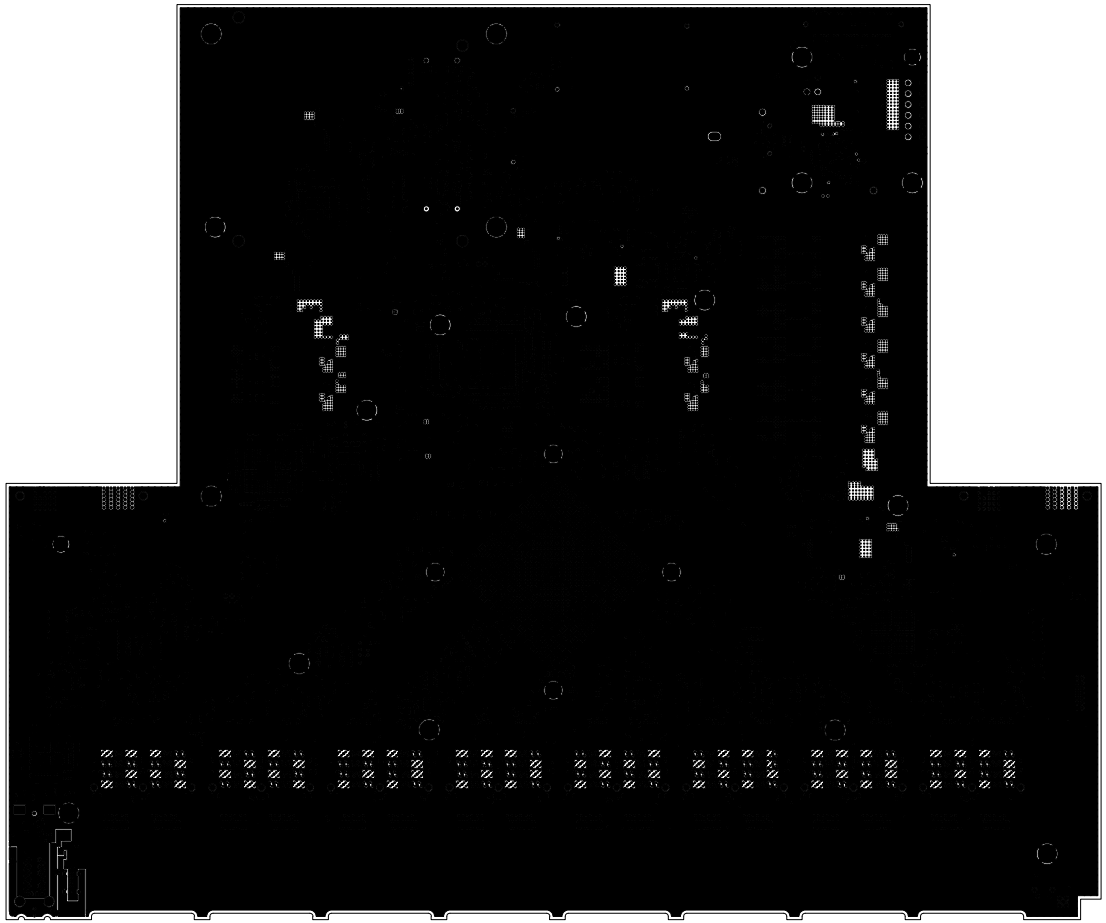
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L12_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L13_SIG.art



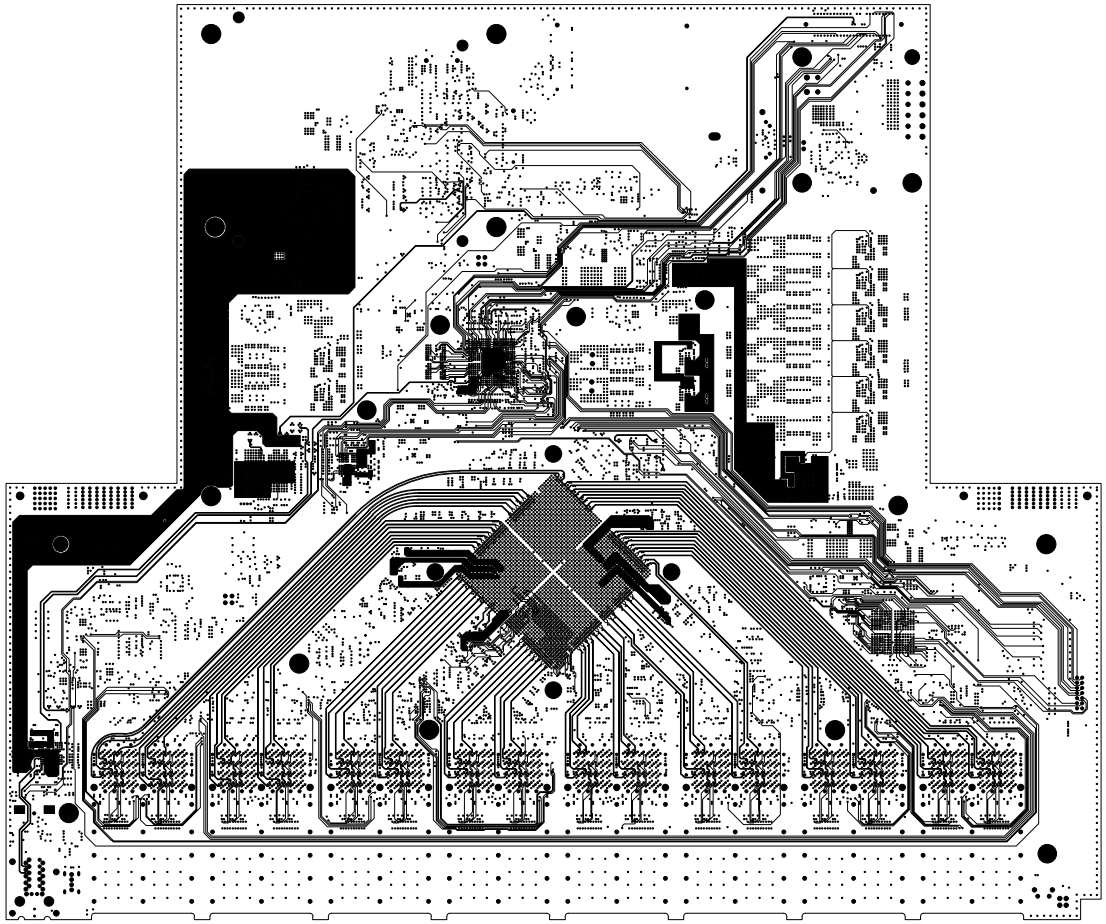
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L13_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L14_GND.art



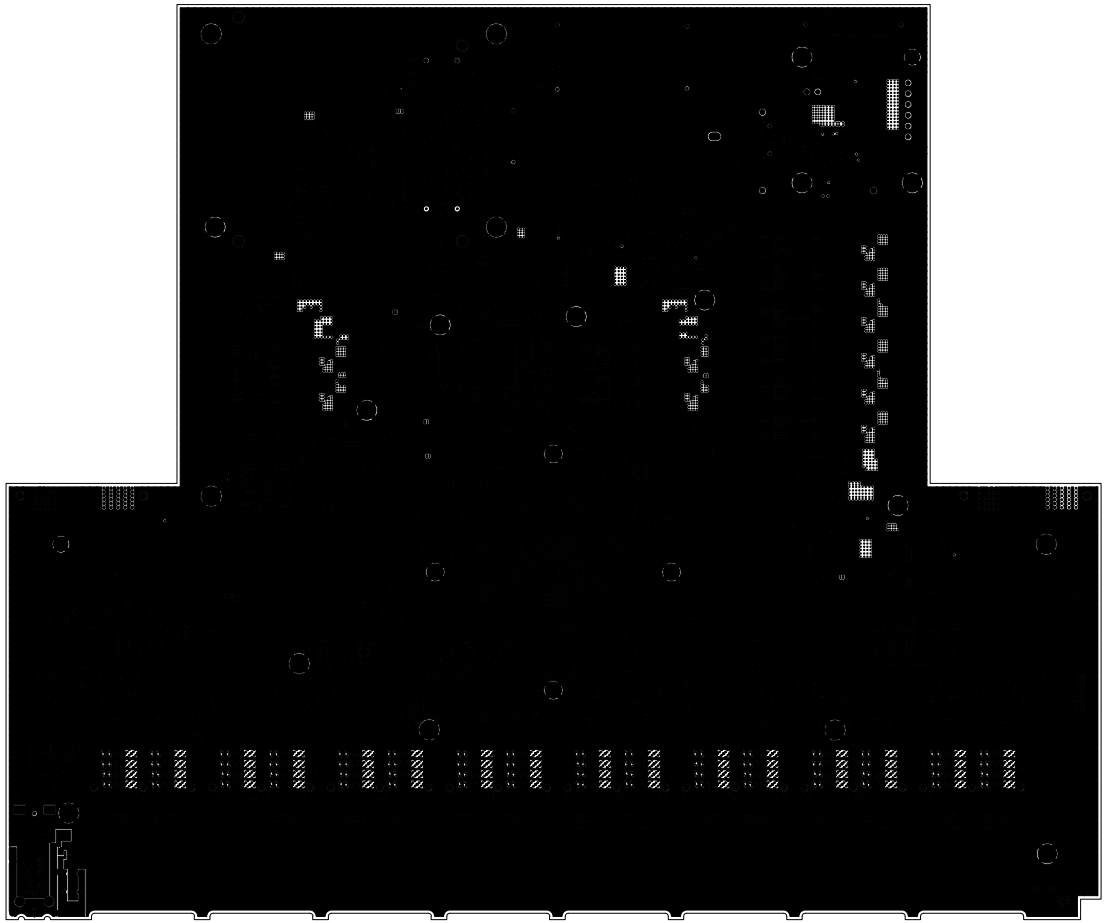
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L14_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L15_SIG.art



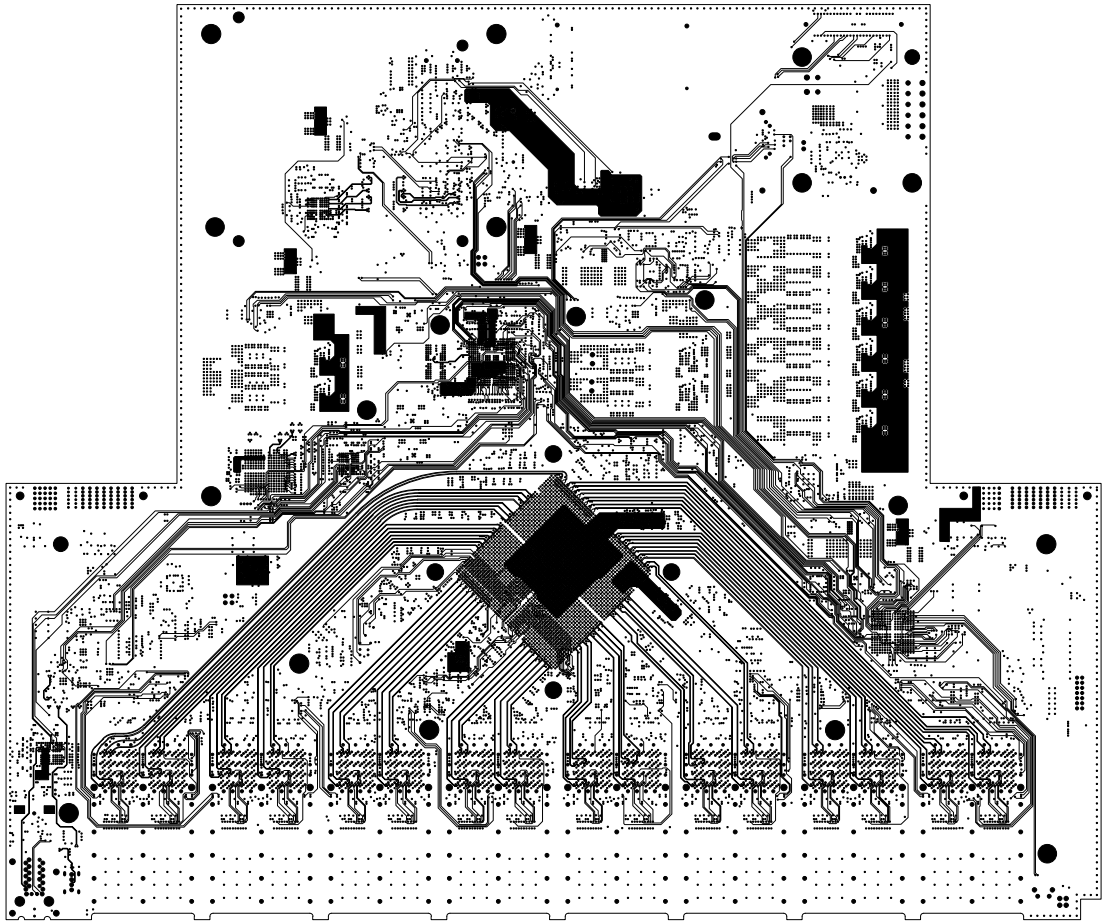
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L15_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:37 2016 - (Untitled) : L16_GND.art



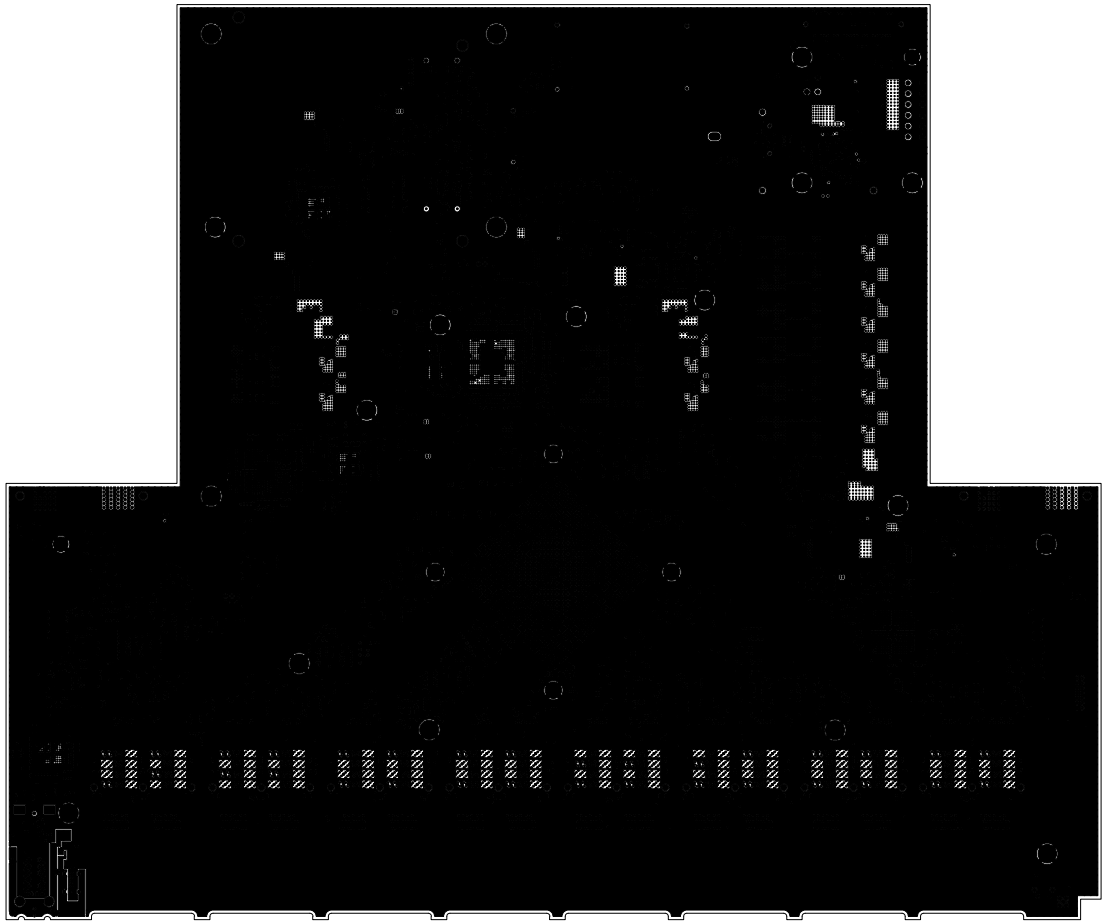
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L16_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L17_SIG.art



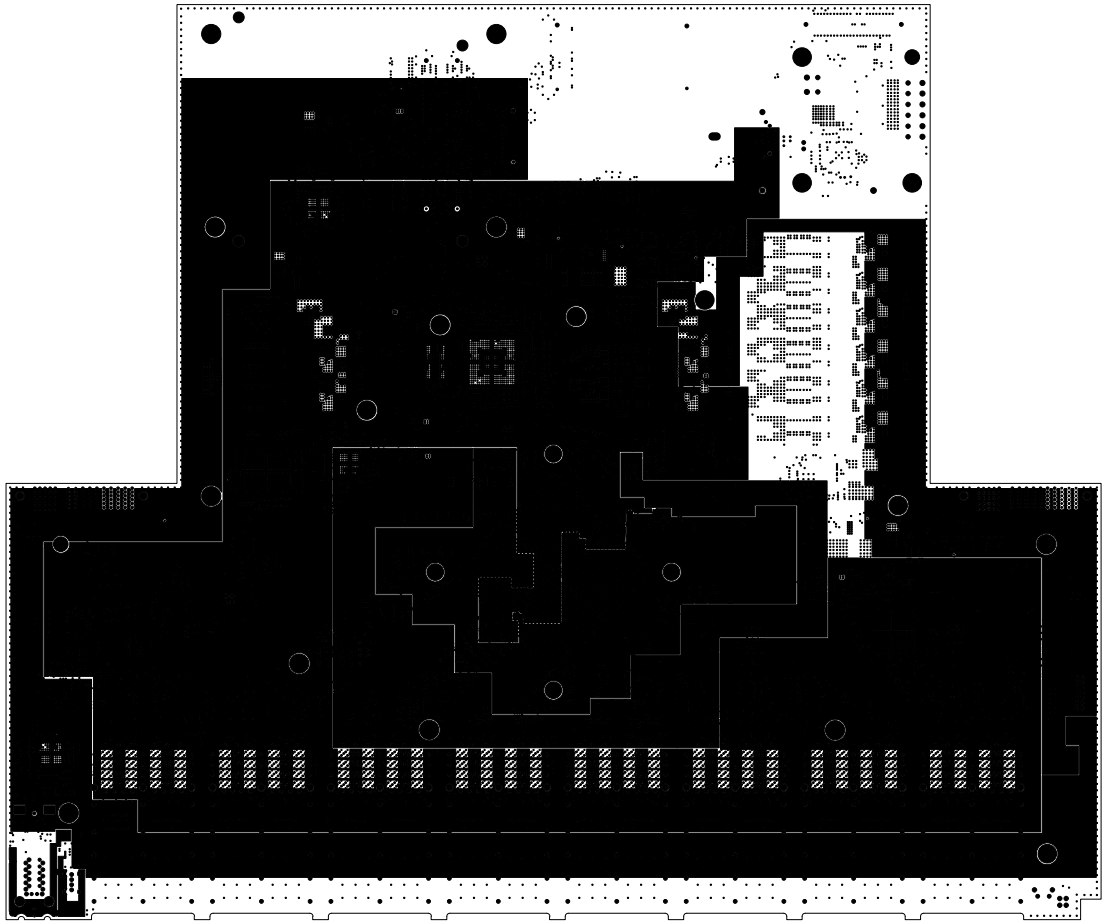
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L17_SIGNAL LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L18_GND.art



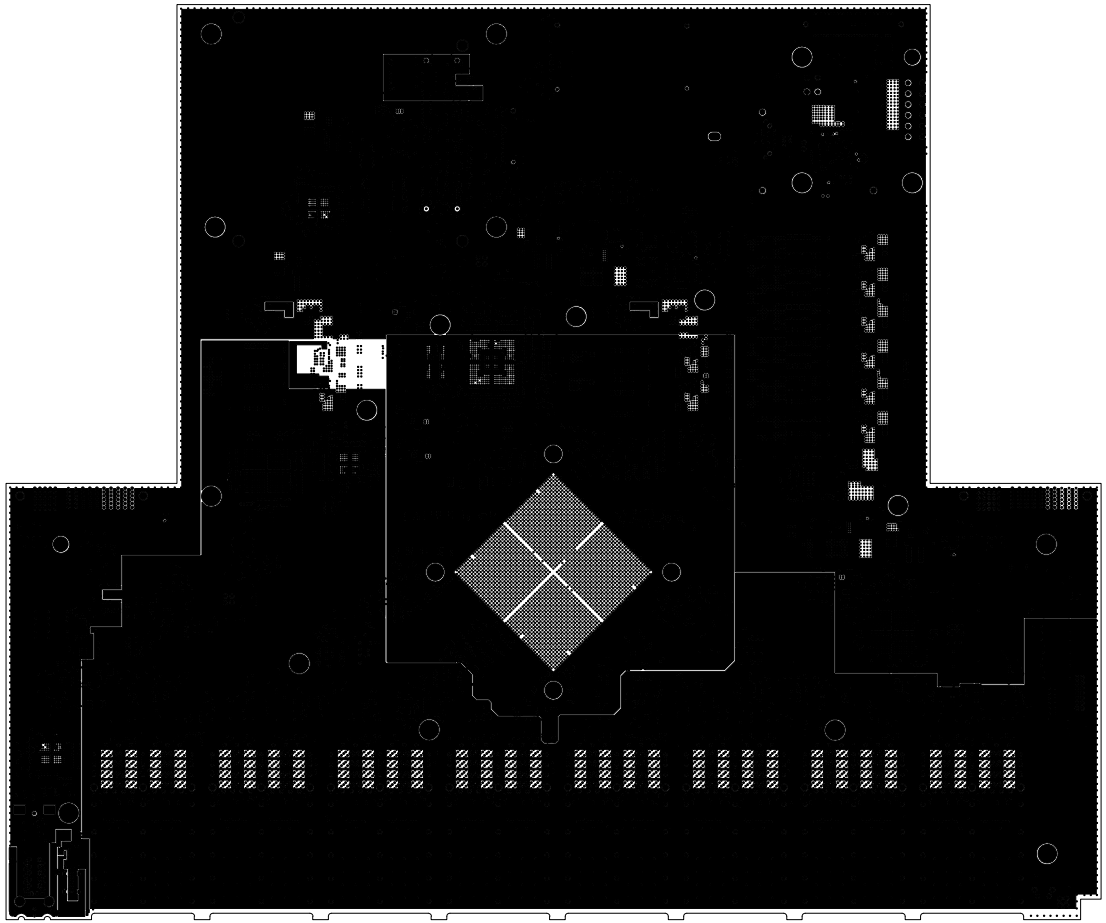
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L18_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L19_PWR.art



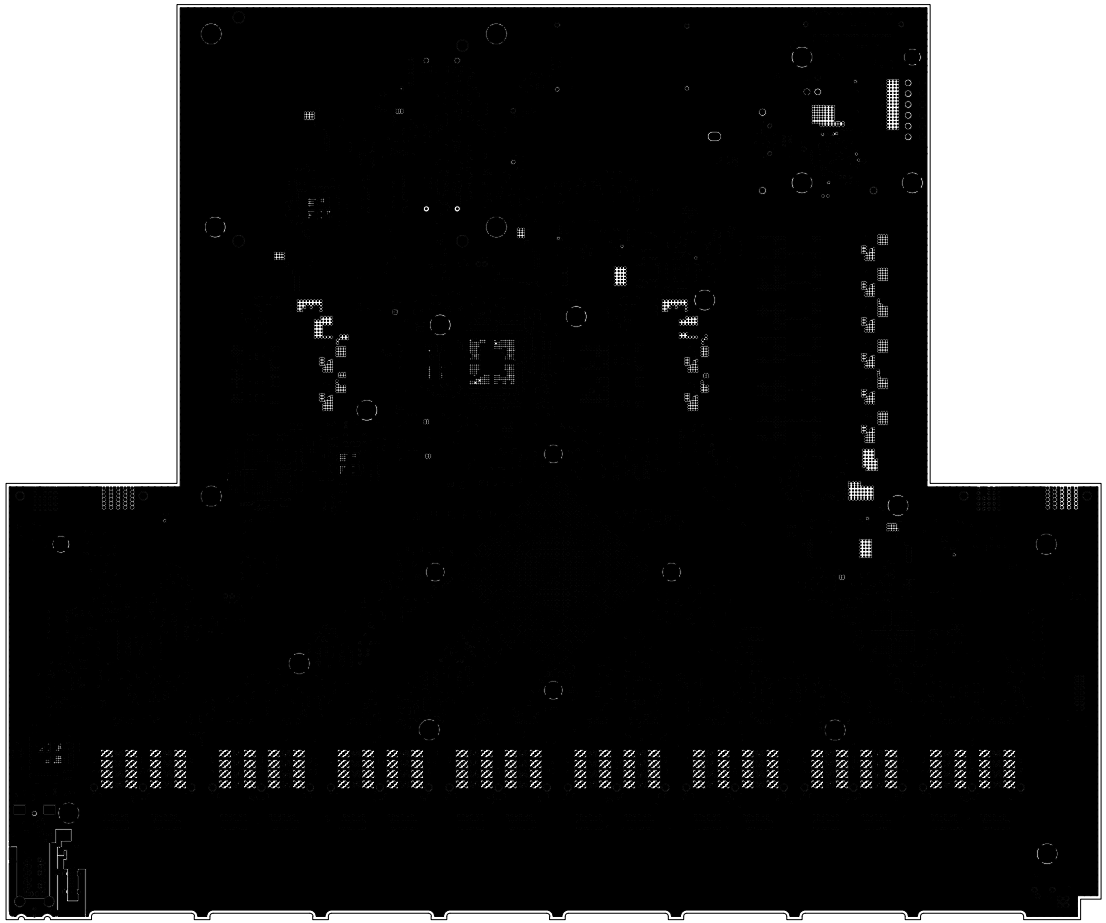
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L19_POWER PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L20_PWR.art



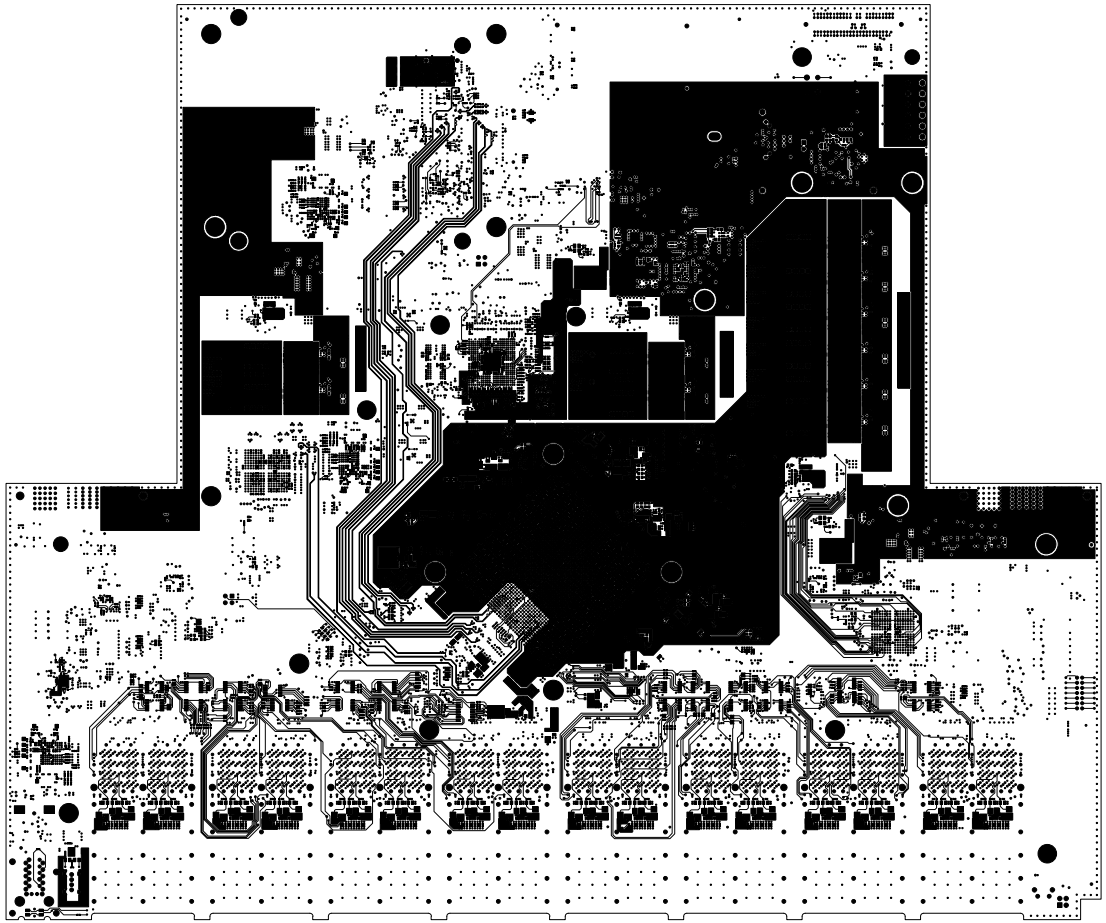
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L20_POWER PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L21_GND.art



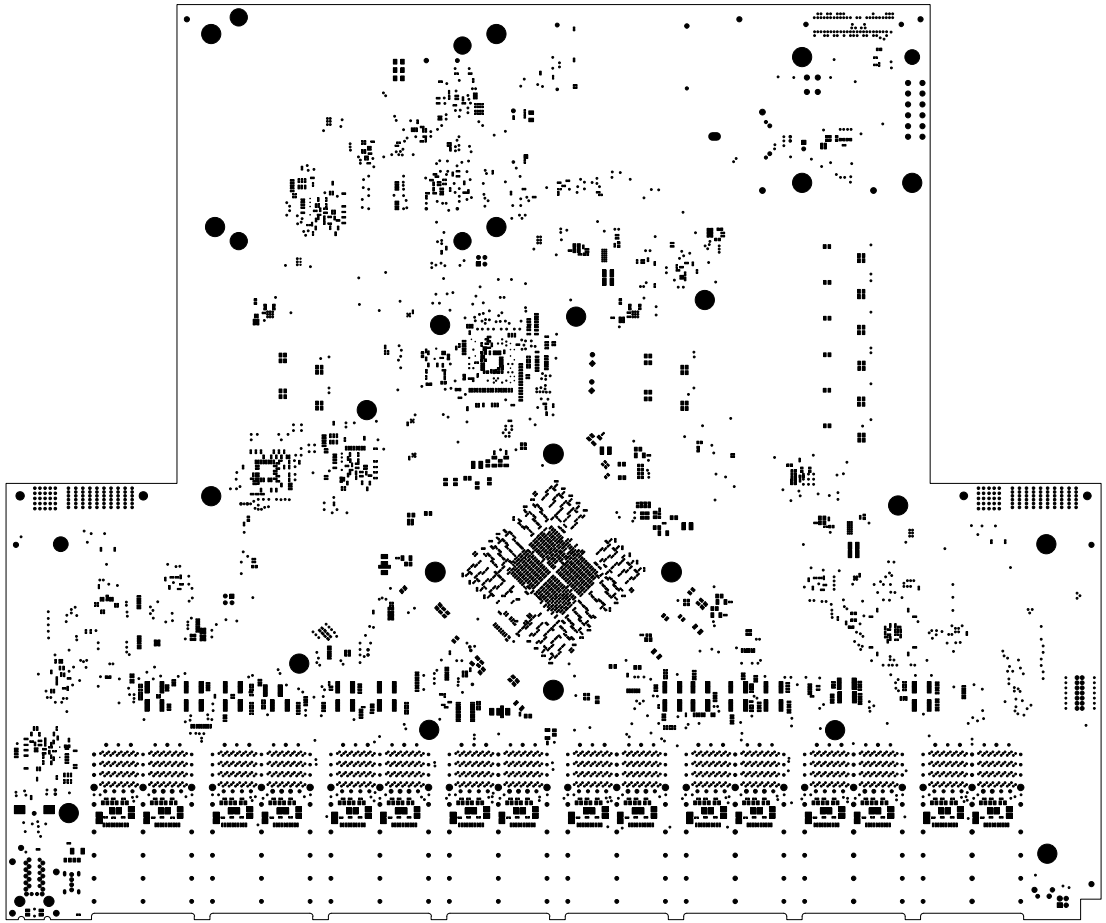
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L21_GND PLANE

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : L22_BOT.art



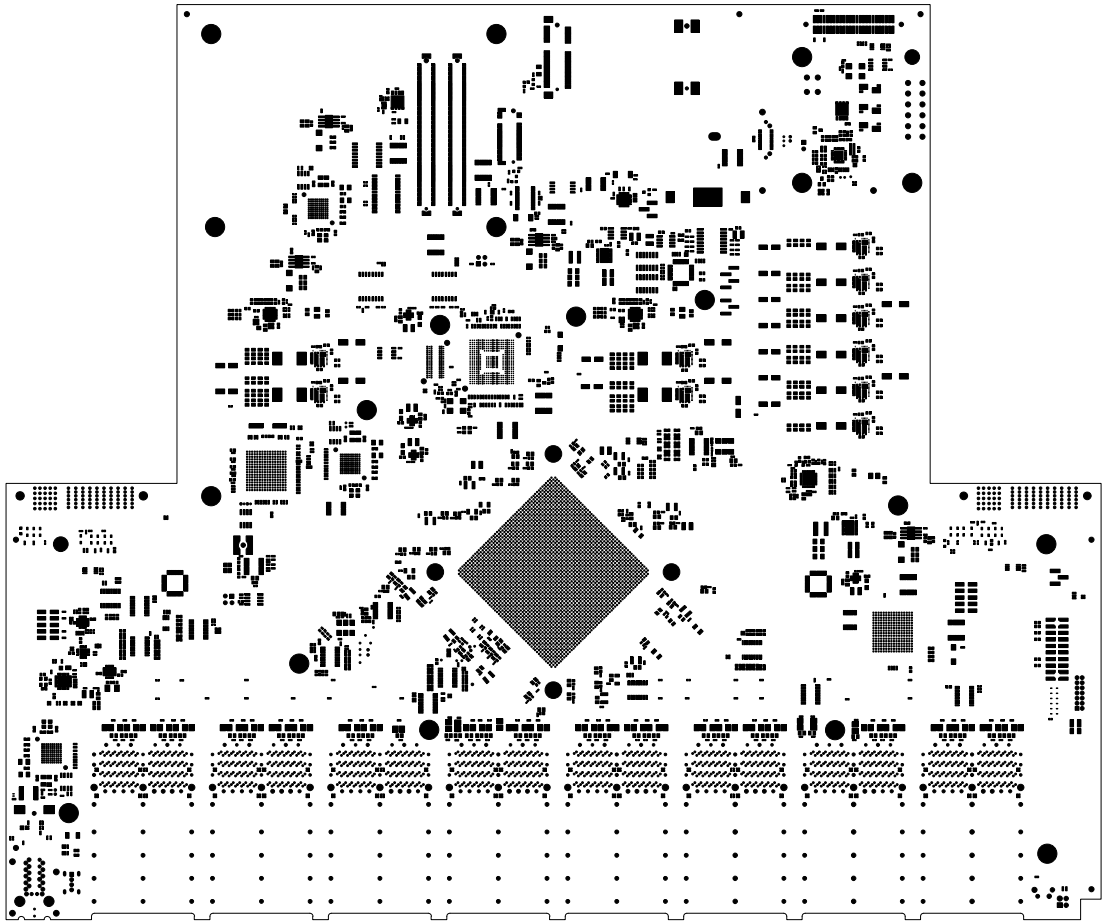
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:L22_BOTTOM LAYER

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : SMB.art



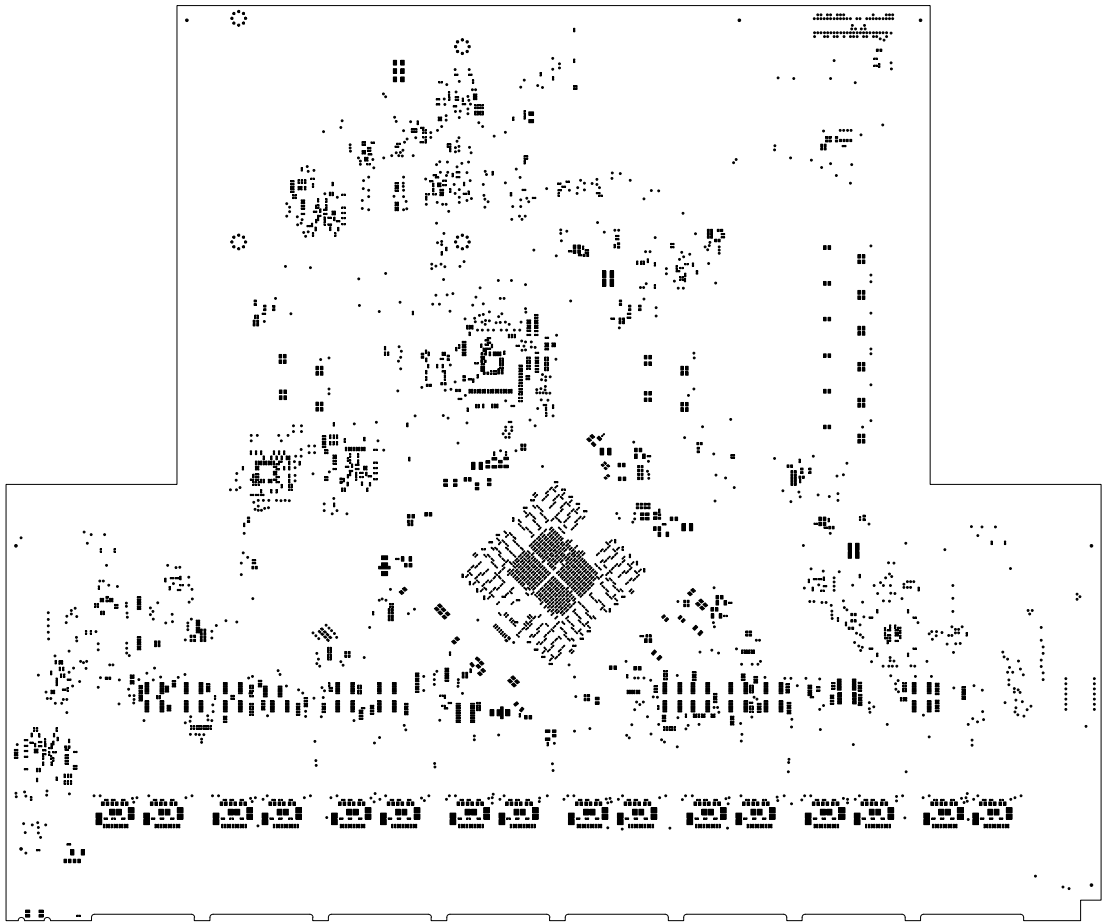
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SMB_SOLDER MASK BOTTOM

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : SMT.art



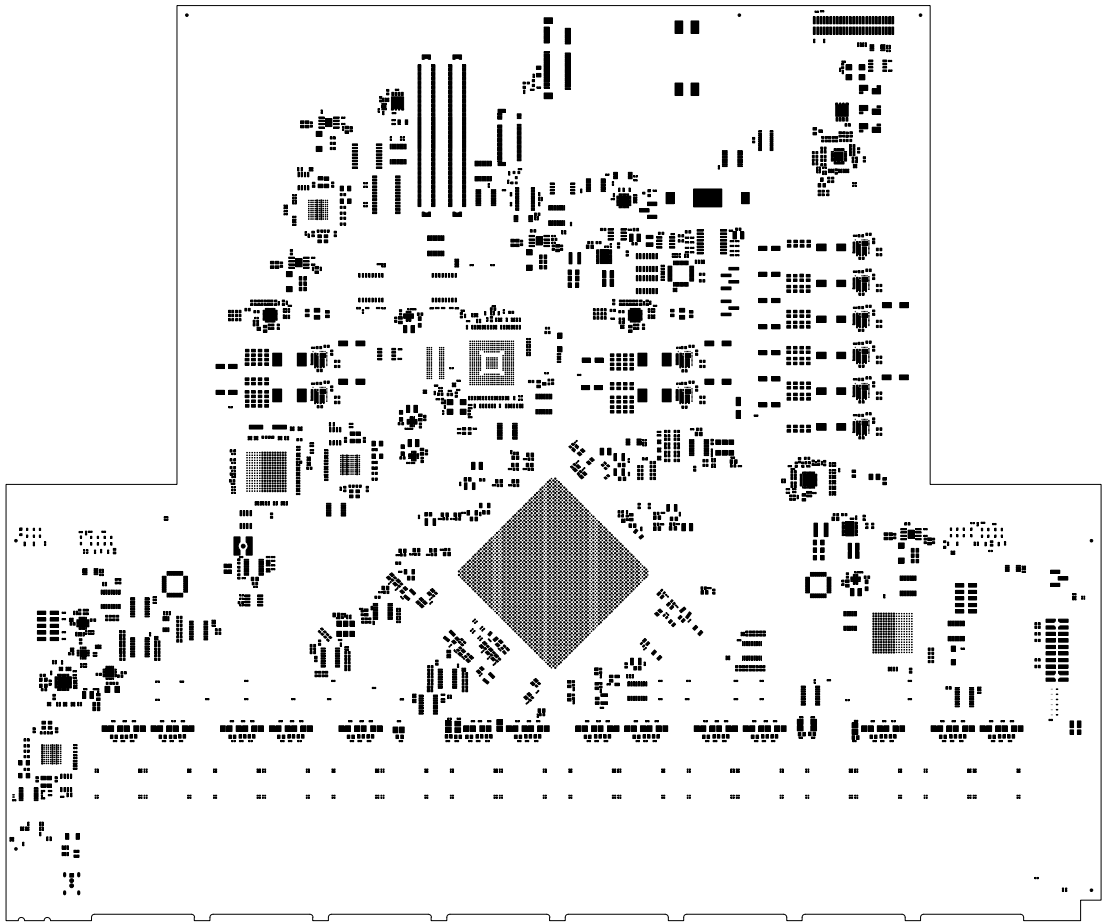
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SMT_SOLDER MASK TOP

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : SPB.art



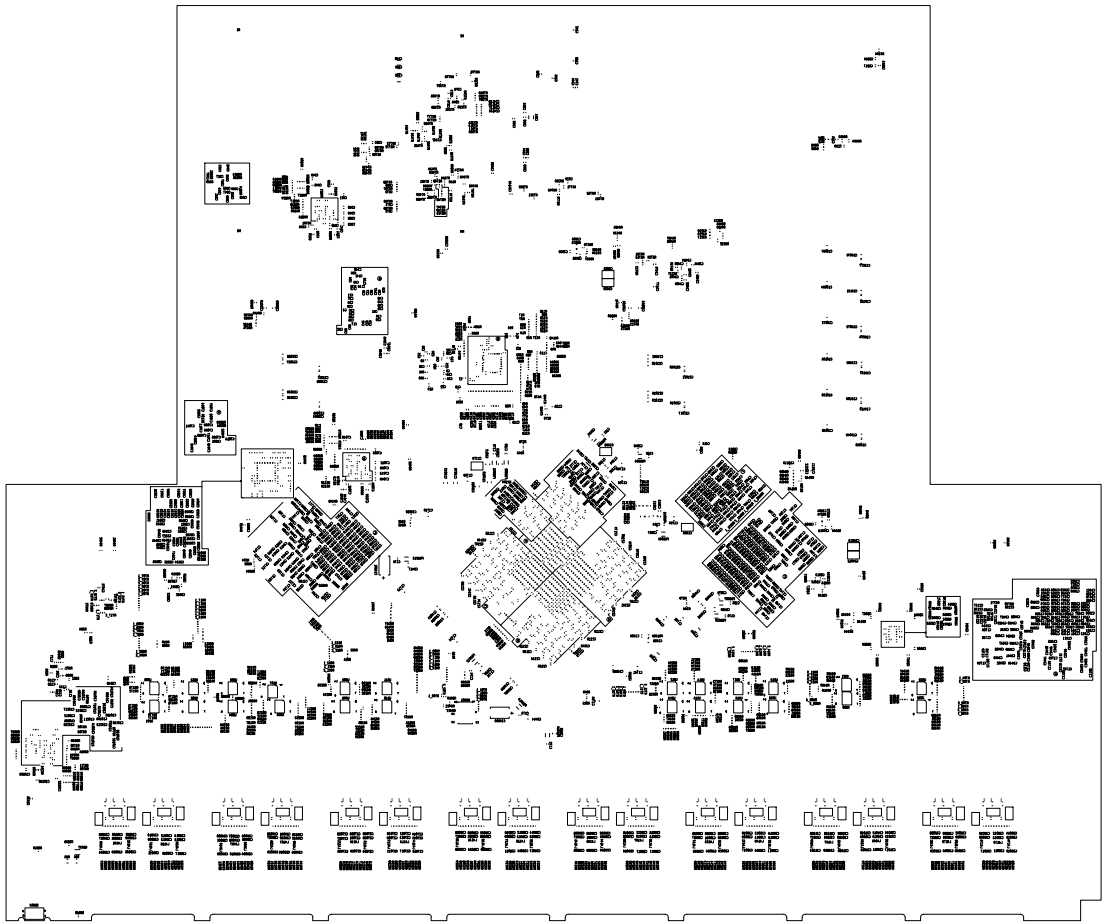
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SPB_SOLDER PASTE BOTTOM

CAM350 V 9.5.1 : Mon Feb 01 19:04:38 2016 - (Untitled) : SPT.art



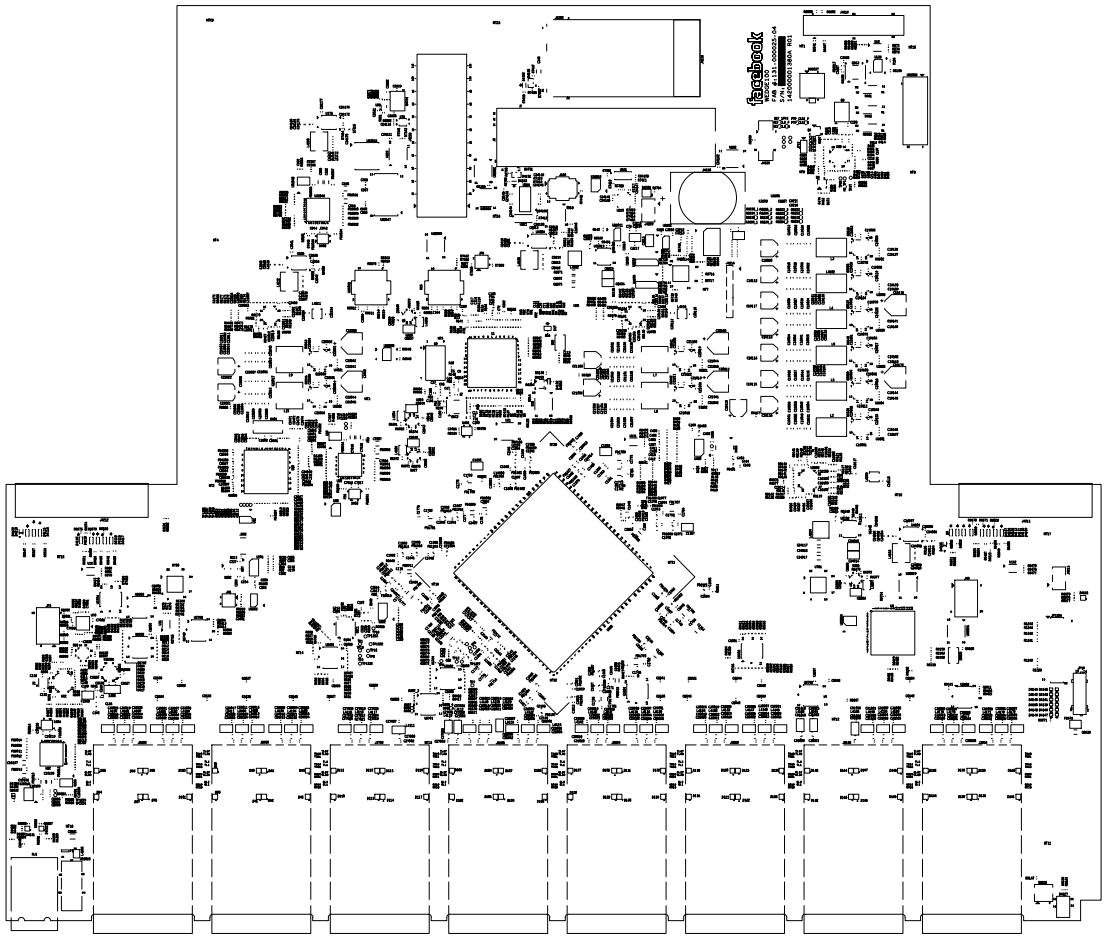
DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SPT_SOLDER PASTE TOP

CAM350 V 9.5.1 : Mon Feb 01 19:04:39 2016 - (Untitled) : SSB.art



DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SSB_SILKSCREEN BOTTOM

CAM350 V 9.5.1 : Mon Feb 01 19:04:39 2016 - (Untitled) : SST.art



DATE:FEB01,2016
PART NO/CARD REF:136-000025-04 Rev:0.4
FILM LAYER:SST_SILKSCREEN TOP