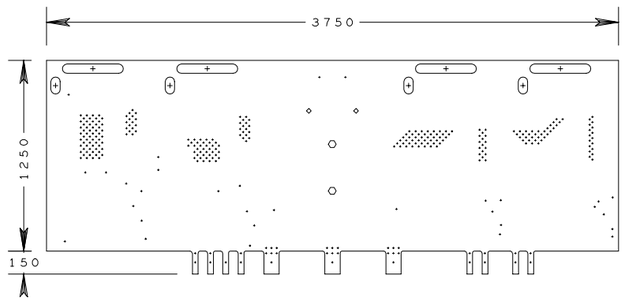
FABRICATION INSTRUCTIONS:

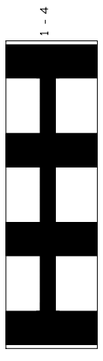
1. BOARD SIZE IS SHOWN IN FIGURE 2.
   COPPER LAYERS ARE DEFINED IN THE CROSS SECTION CHART.
2. PCB MUST CONFORM TO IPC-6012 CLASS 2.
3. COPPER ON TOP AND BOTTOM LAYER'S FINISHED THICKNESS SHOULD BE PER THE CROSS SECTION CHART.
   COPPER THICKNESS ON INNER LAYERS MUST BE PER THE CROSS SECTION CHART.
4. BOARD OVERALL THICKNESS IS SHOWN IN THE CROSS SECTION CHART +/-10%.
5. USE FR-4 MATERIAL FOR BOTH PREPREG AND CORE.
6. NET LIST TEST BARE BOARDS.
7. USE GREEN LPI SOLDER MASK.
8. ALL VIA & THRU-HOLES ARE SPECIFIED IN THE DRILL LEGEND.
9. ALL HOLES TO BE PLATED THROUGH, THE WALL PLATING THICKNESS MUST BE 2 MIL MINIMUM.
   THE THICKNESS OF COPPER PLATING ON THE WALL OF PLATED THROUGH HOLES SHALL BE IAW IPC-RB-276, CLASS 1.
10. PLUG VIAS WITH NON-CONDUCTIVE EPOXY AND CAP WITH COPPER.
    CAP WITH COPPER ON TOP AND BOTTOM LAYER OF ALL FILLED VIA. MINIMUM THICKNESS OF CAPPING COPPER IS 8UM FOR EACH LAYER.
11. ALL PAD OPENING MUST BE FINISHED 100% ENIG(Electroless Nickel immersion gold)
12. ALL PADS ARE SOLDERMASK DEFINED.
13. USE WHITE EPOXY NON-CONDUCTIVE INK ON SILKSCREEN ON ALL LAYERS.
14. ALL LAYERS: KEEP SILKSCREEN AWAY FROM COMPONENT PADS.
15. NOMINAL TRACE LINE WIDTH IS 15MIL +/-0.5MIL AND SPACE IS 15MIL +/- 0.5MIL.
16. DO NOT CHANGE LAYOUT WITHOUT PRIOR NOTIFICATION AND APPROVAL BY INFINEON.
17. PLEASE NOTIFY US IMMEDIATELY IF YOU EXPERIENCE ANY ERRORS WITH ANY FILES.
18. THERE NO ARE SHORTED NETS ON THIS BOARD.
19. MARK BOARD WITH VENDOR ID, REQUIRED UL MARKINGS AND DATE CODE.

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
-	eGaN HB2 BOARD	09/15/2015	MARK STEM
B	Added Fiducials	09/15/2017	MARK STEM

FIGURE 2: BOARD LAYOUT





* SURFACE - AIR 0 MIL
* DIELECTRIC - SMOBC 1 MIL
L1: TOP CONDUCTOR - 3OZ_COPPER 4.2 MIL
* DIELECTRIC - FR-4 14 MIL
L2: MID1 CONDUCTOR - 3OZ_COPPER 4.2 MIL
* DIELECTRIC - FR-4 14 MIL
L3: MID2 CONDUCTOR - 3OZ_COPPER 4.2 MIL
* DIELECTRIC - FR-4 14 MIL
L4: BOTTOM CONDUCTOR - 3OZ_COPPER 4.2 MIL
* DIELECTRIC - SMOBC 1 MIL
* SURFACE - AIR 0 MIL

DESIGN CROSS SECTION CHART
TOTAL THICKNESS 60.8 MIL

FIGURE 1: DRILL LEGEND

DRILL LEGEND: TOP to BOTTOM

ALL UNITS ARE IN MILS

FIGURE	SIZE	PLATED	QTY
•	13.0	PLATED	314
◇	30.0	PLATED	2
○	50.0	PLATED	2
⊕	110.0x60.0	PLATED	4
⊂+⊃	400.0x60.0	PLATED	4

TOTAL HOLES: 326

NOTES:
HOLE SIZES IN LEGEND ARE FINISHED.

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	NAME	DATE
TOLERANCES ON:		
2 PL DECIMALS +/- .010		
3 PL DECIMALS +/- .005		
MILS +/- 5 MILS		
HOLES +/- 3 MILS		
ANGLES °		
FRACTIONS °		

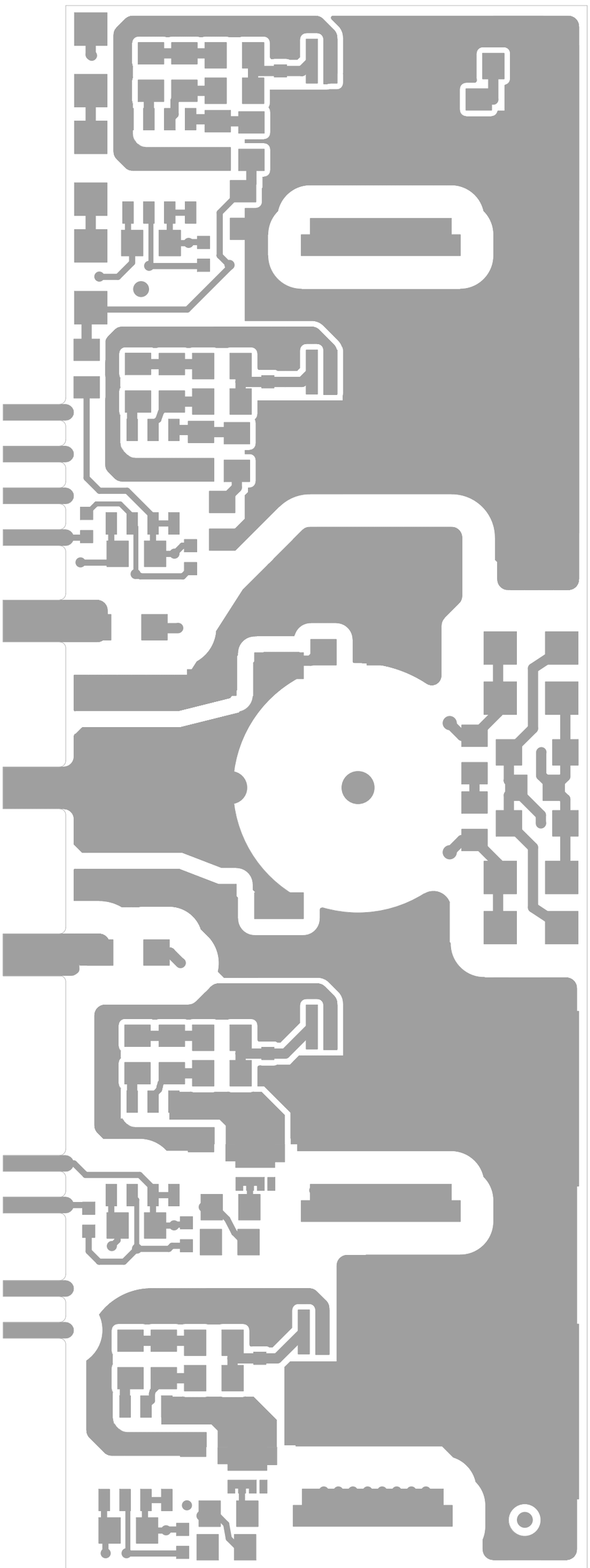
INFINEON TECHNOLOGIES
101 N. Sepulveda BLVD, El Segundo, CA 90245

TITLE: eGaN HB2 BOARD

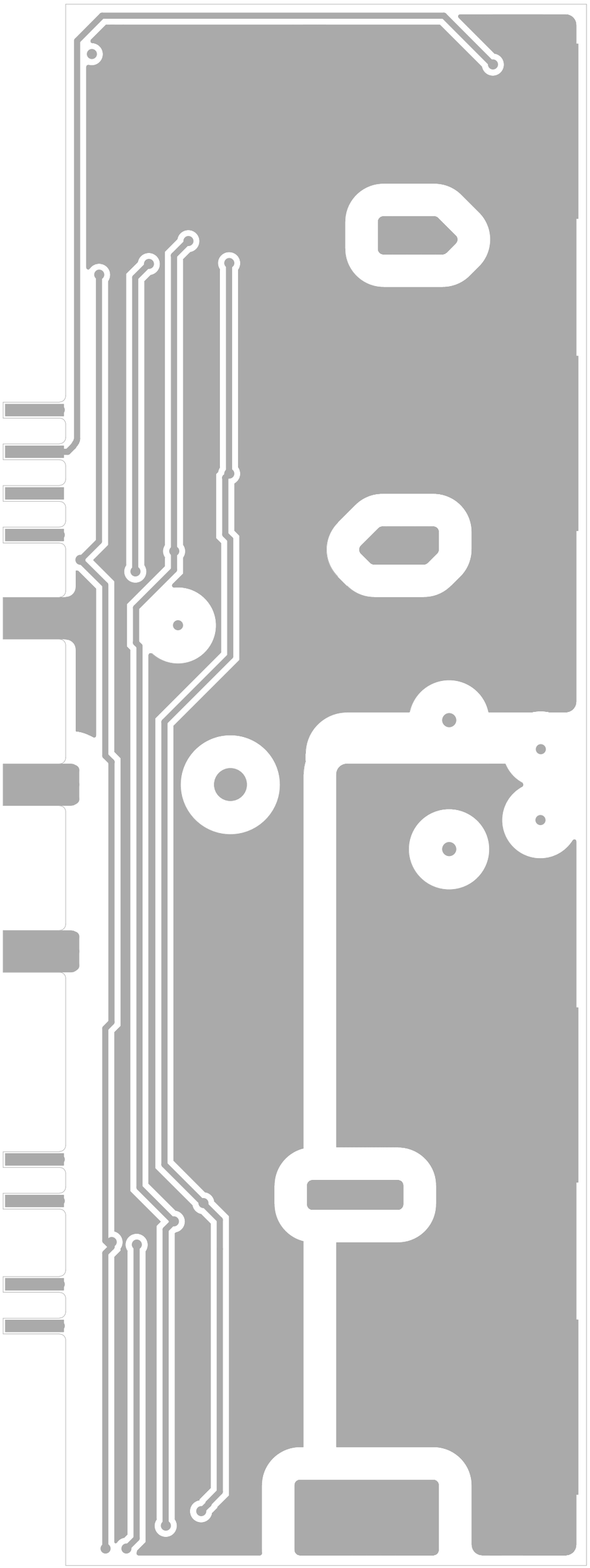
SIZE	DWG NO	REV
	P100015	B

SCALE | SHEET

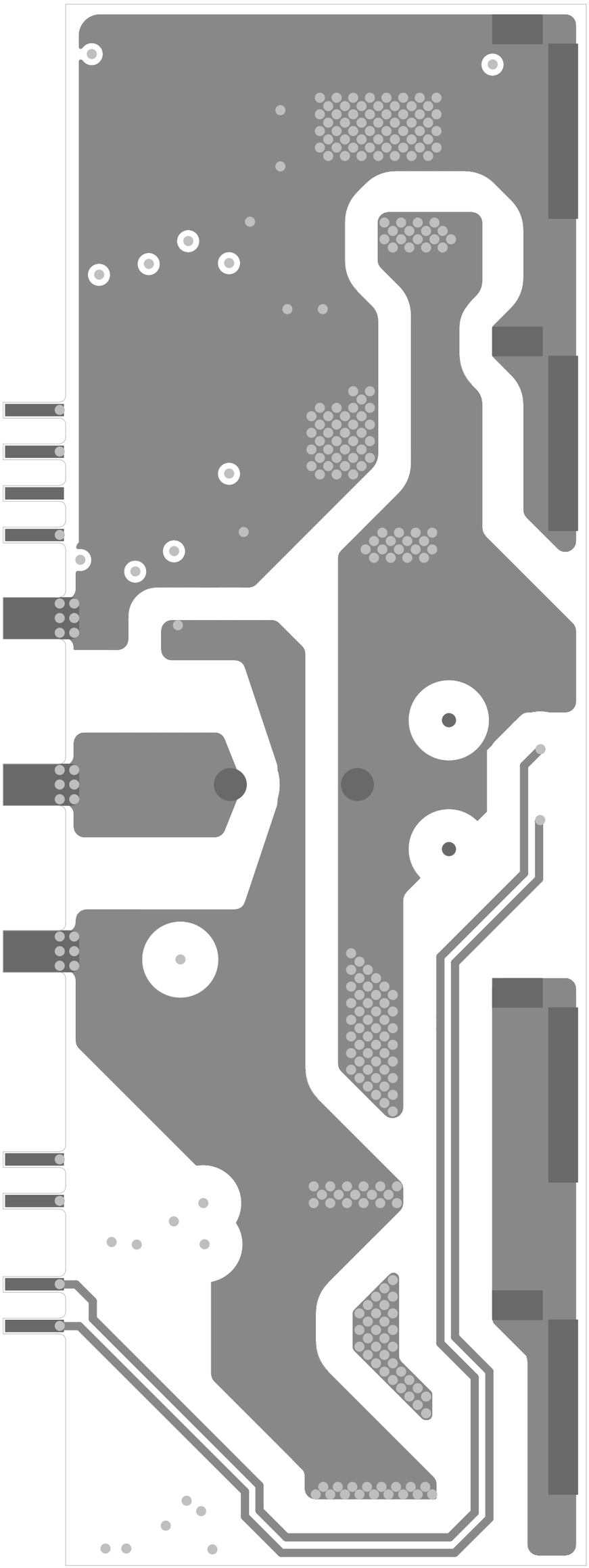
Top

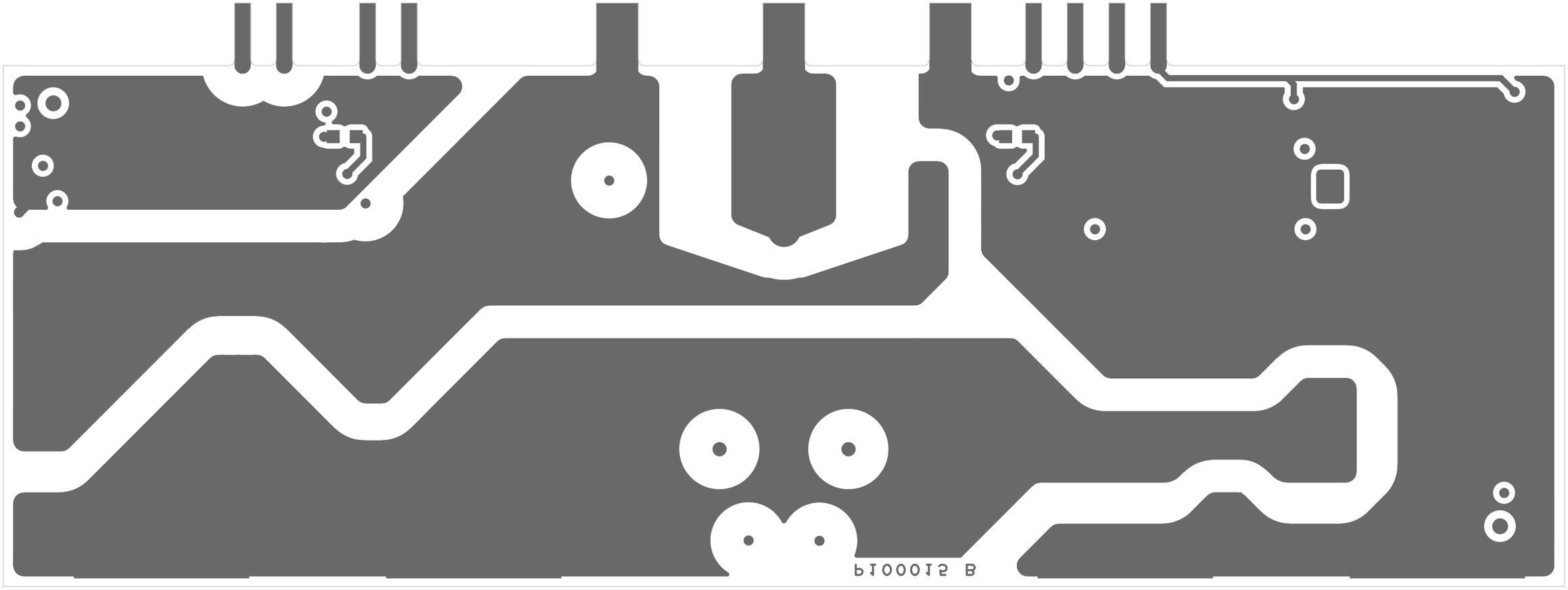


Mid1



Mid2




Bottom

Silkscreen_Top

H4 H2 H3 H1

C26 R7 Q4 Q2 Q3 Q1

R27 C28 R28 D5 D6 C27 R26 D4 D3

LLC eGaN HB TOLL

T1 R29 C29 C22 C21 C24

R8 R25 R11 C6 C14 C10 R9 U4 R20 R21 C18 D7 D8 D9

R6 R23 R10 C3 C12 C8 R5 R18 R19 C17 C30 P1 U2 R30 C15 C20 C19 C25 C23 C16

R3 R24 D2 R13 C5 C13 C9 R4 R16 R17 C2 U3 R31

R2 R22 D1 C4 C11 C7 R12 R1 R14 R15 C1 U1

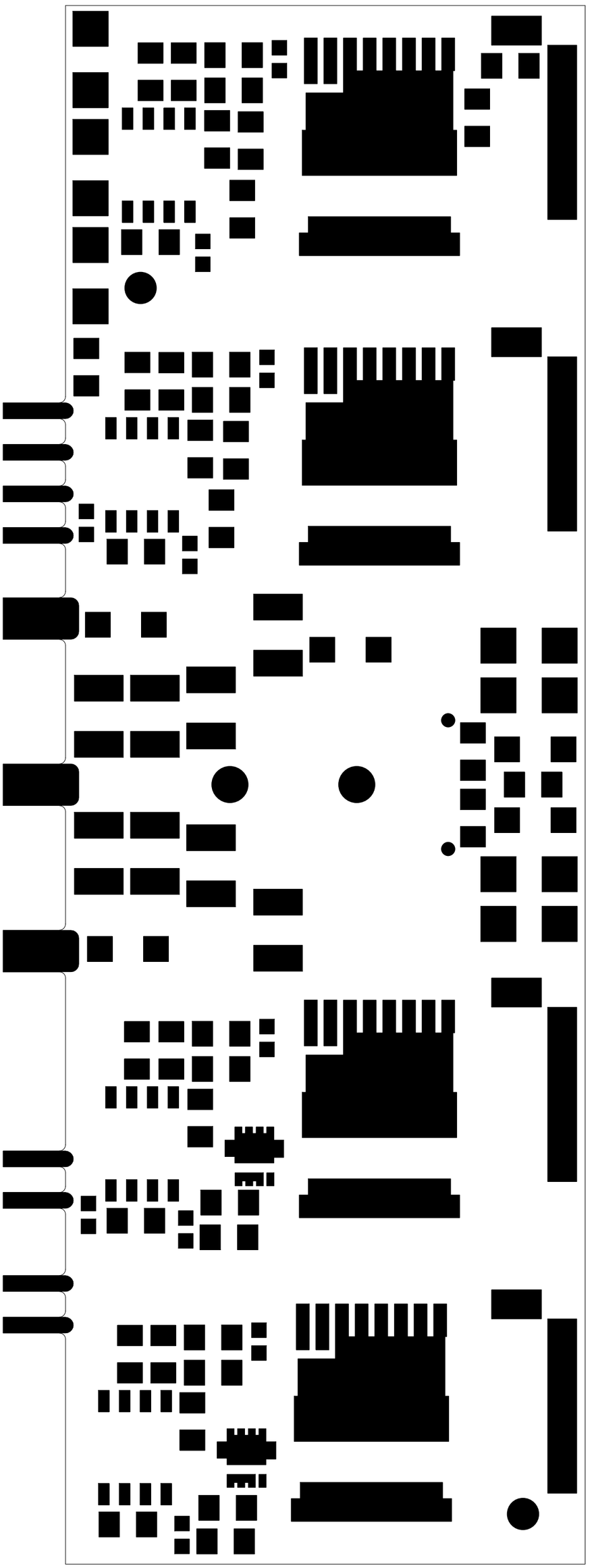
Silkscreen_Bottom

R35

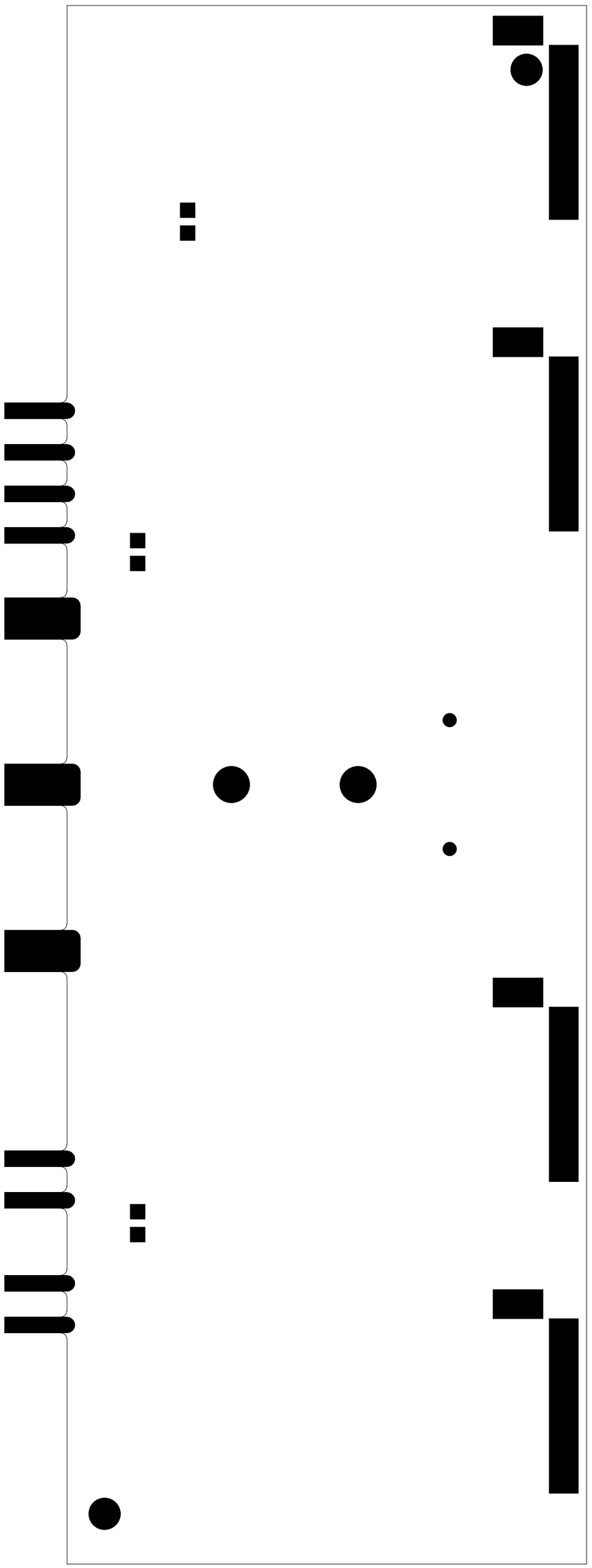
C31

C35

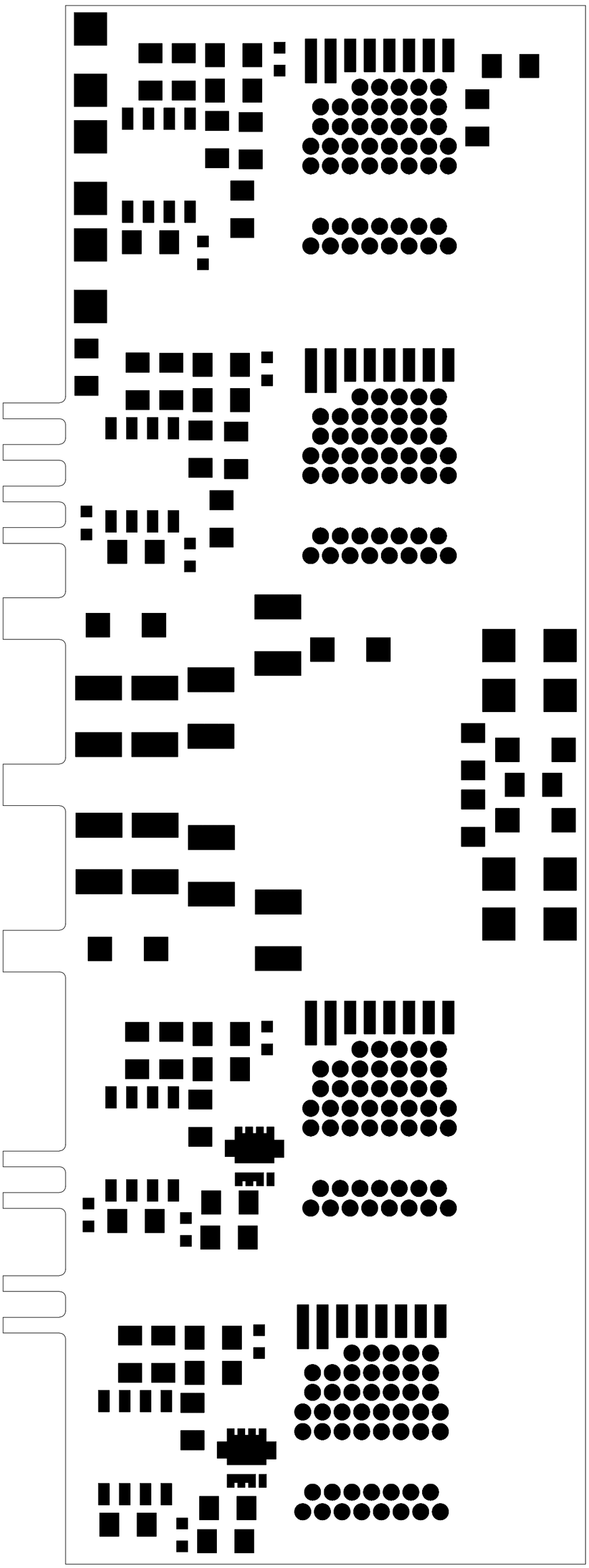
Soldermask_Top



Soldermask_Bottom



Pastemask_Top



Pastemask_Bottom

