

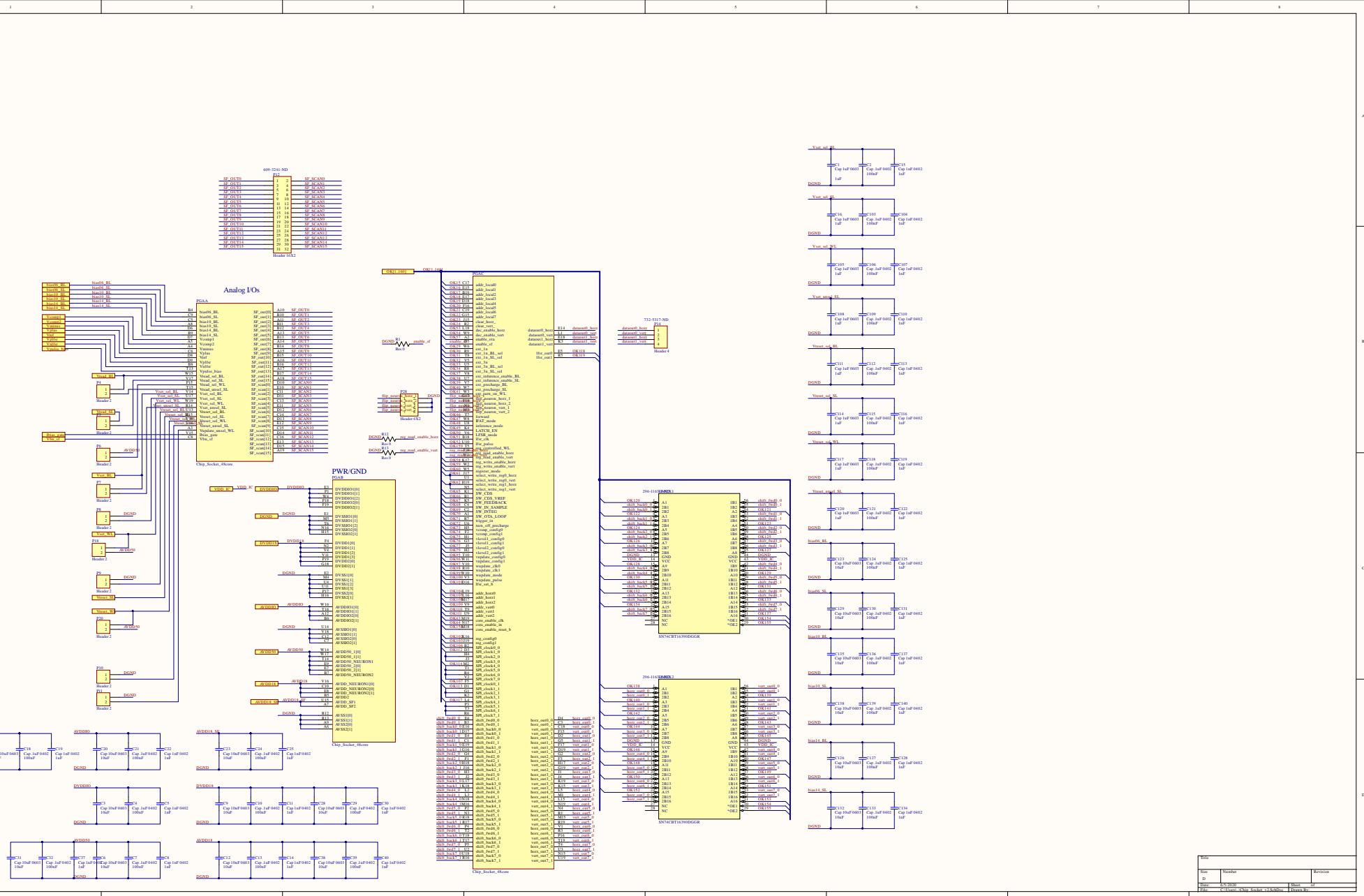
See Xilinx FGG484 Package pins for the LX45 device used on the Opal Kelly

see https://www.xilinx.com/support/documentation/user_guides/ug385.pdf

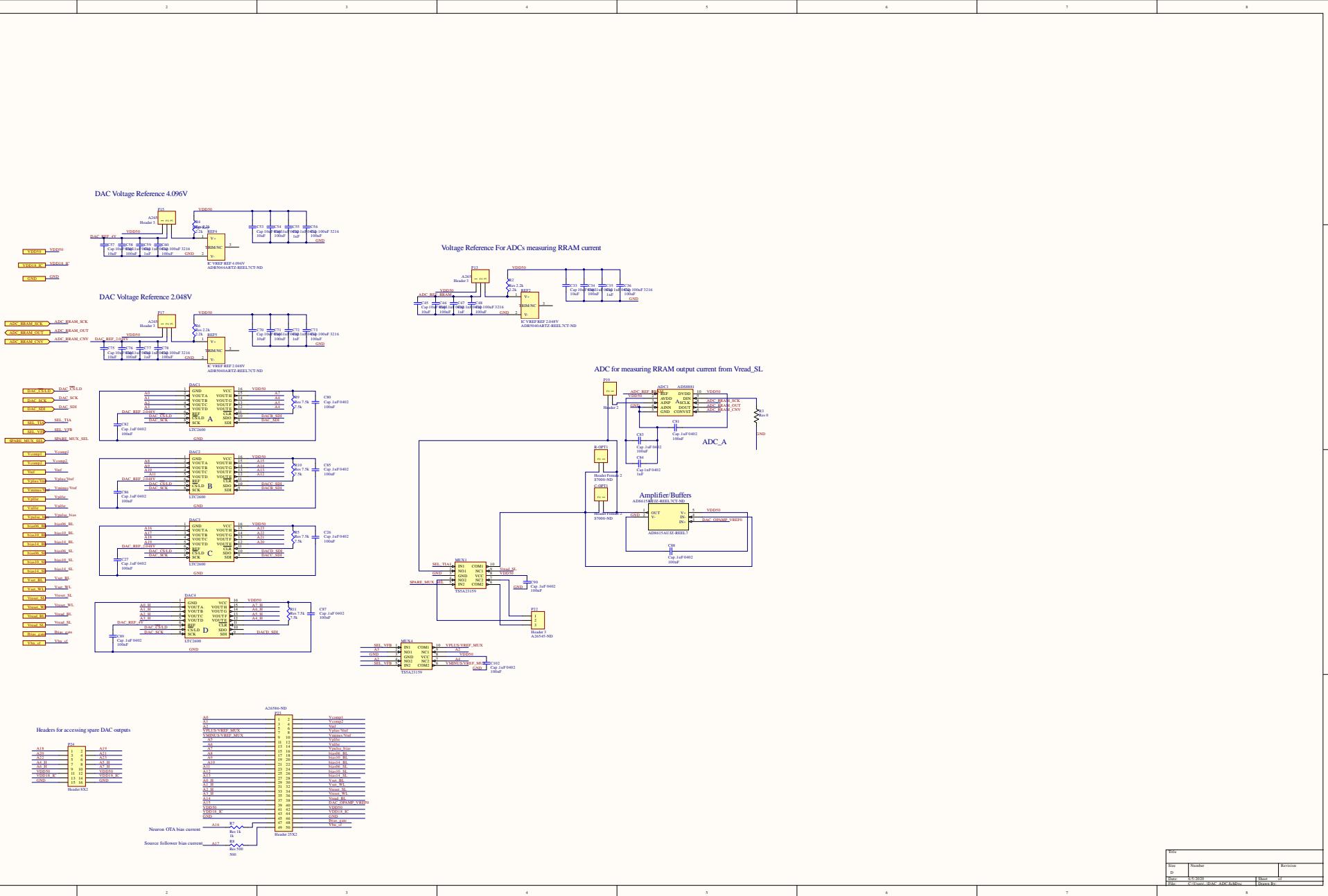
along with https://pins.opalkelly.com/pin_list/XEM6010#

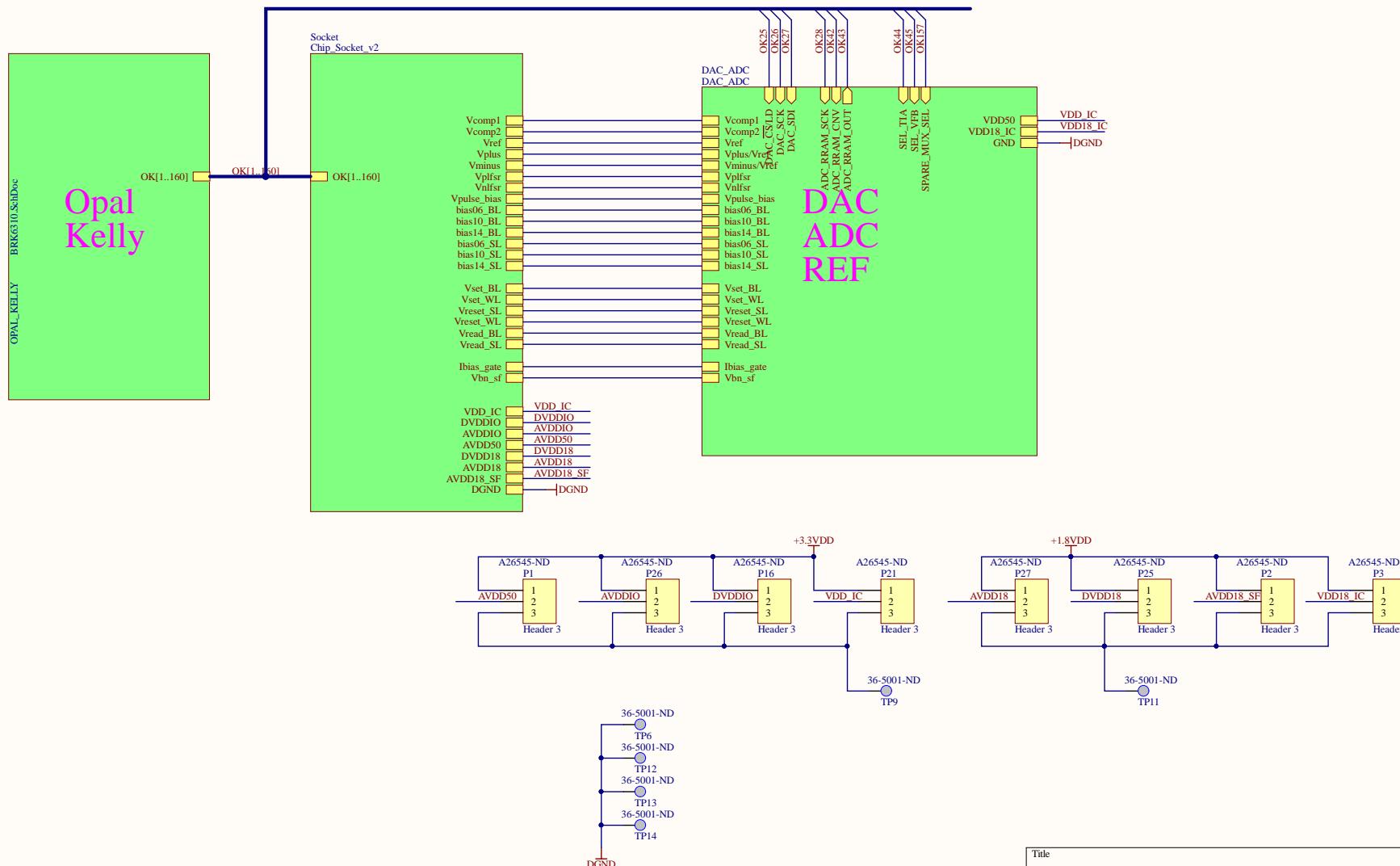
and, not least, <http://assets00.opalkelly.com/library/XEM6010-UM.pdf>, page 22



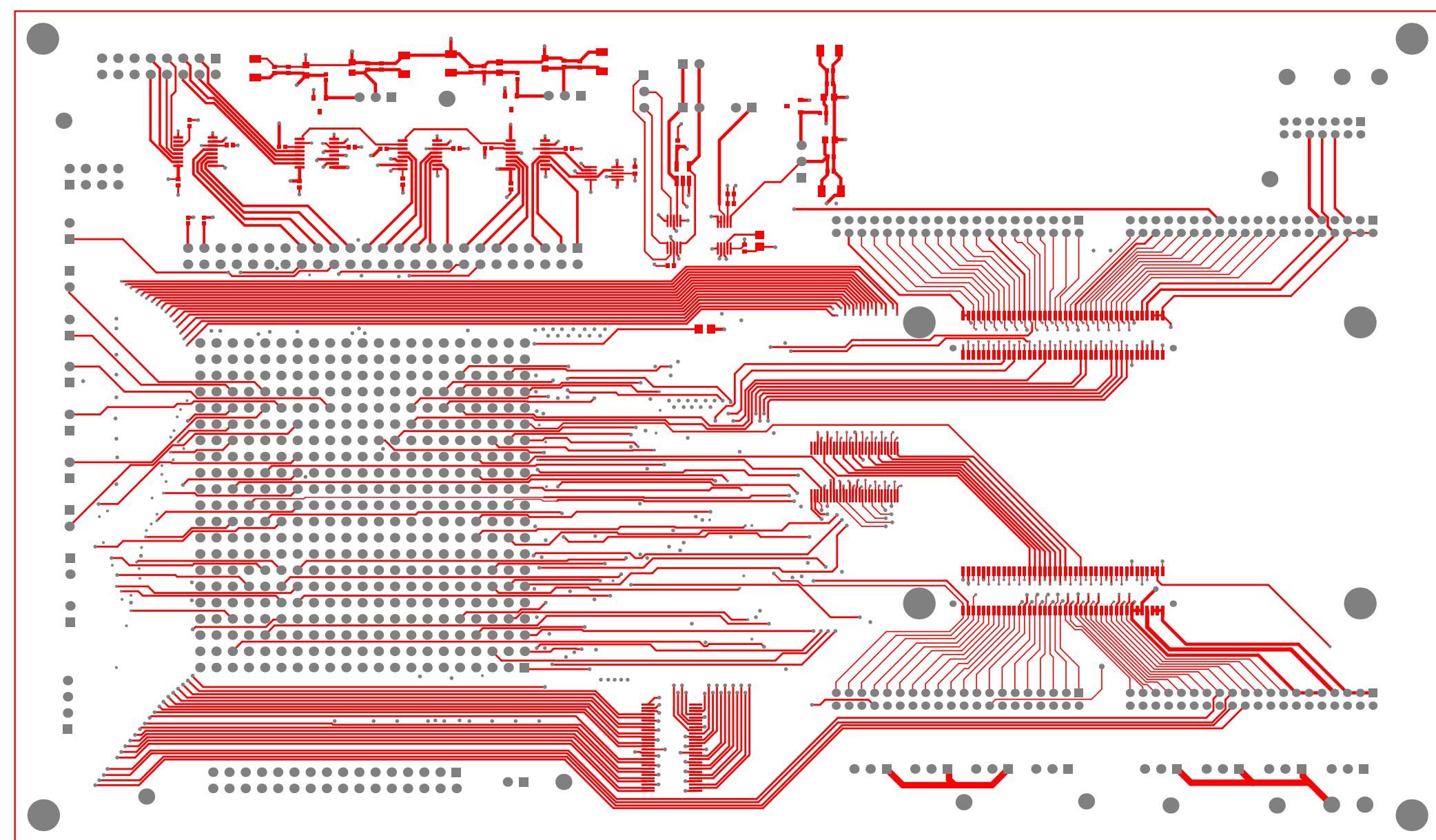


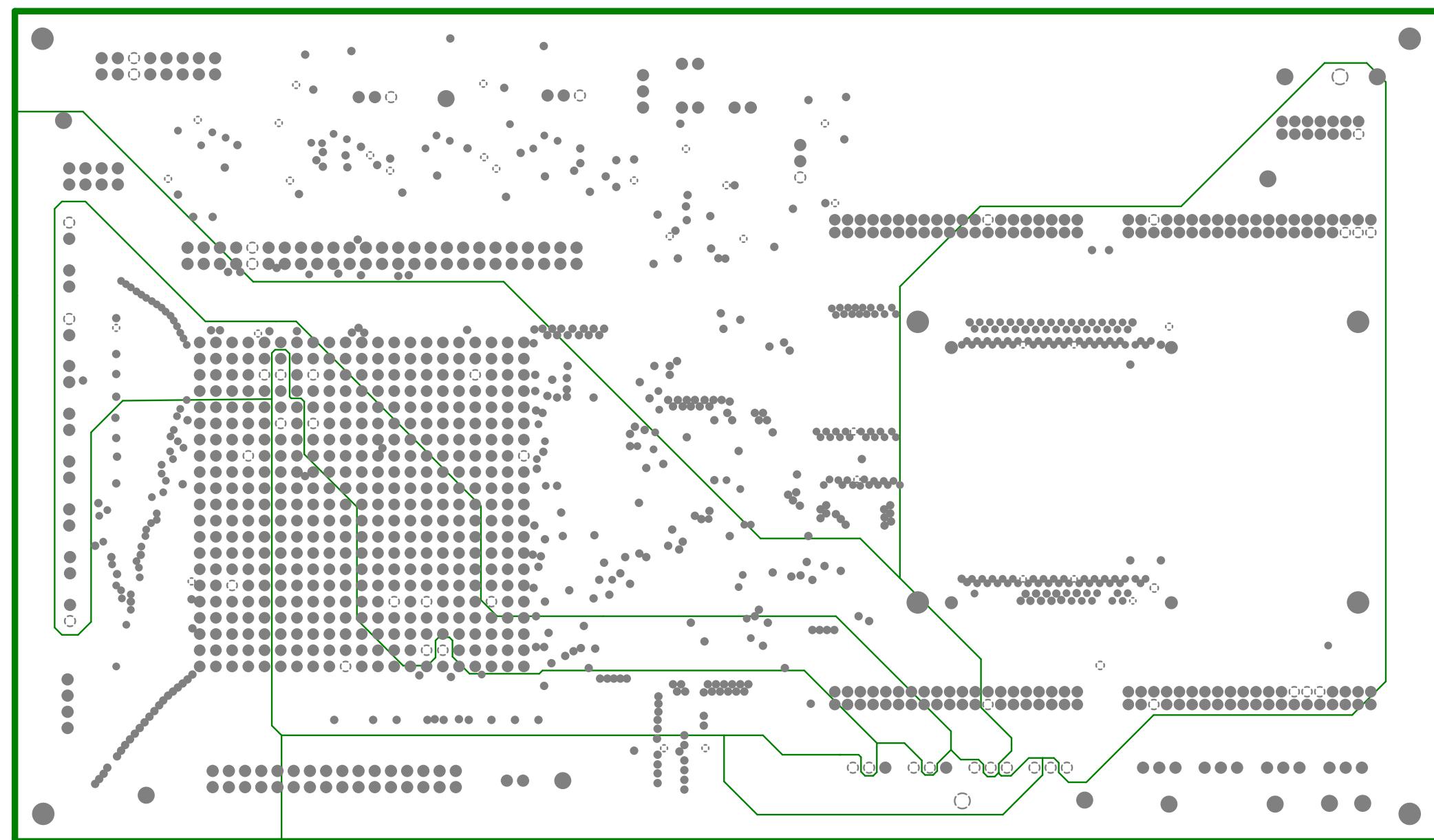
Page	Section	Number	Description
1	Pinout	409-2241-ND	409-2241-ND
2	Pinout	712-5313-ND	712-5313-ND
3	Pinout	206-116-BMMIX	206-116-BMMIX

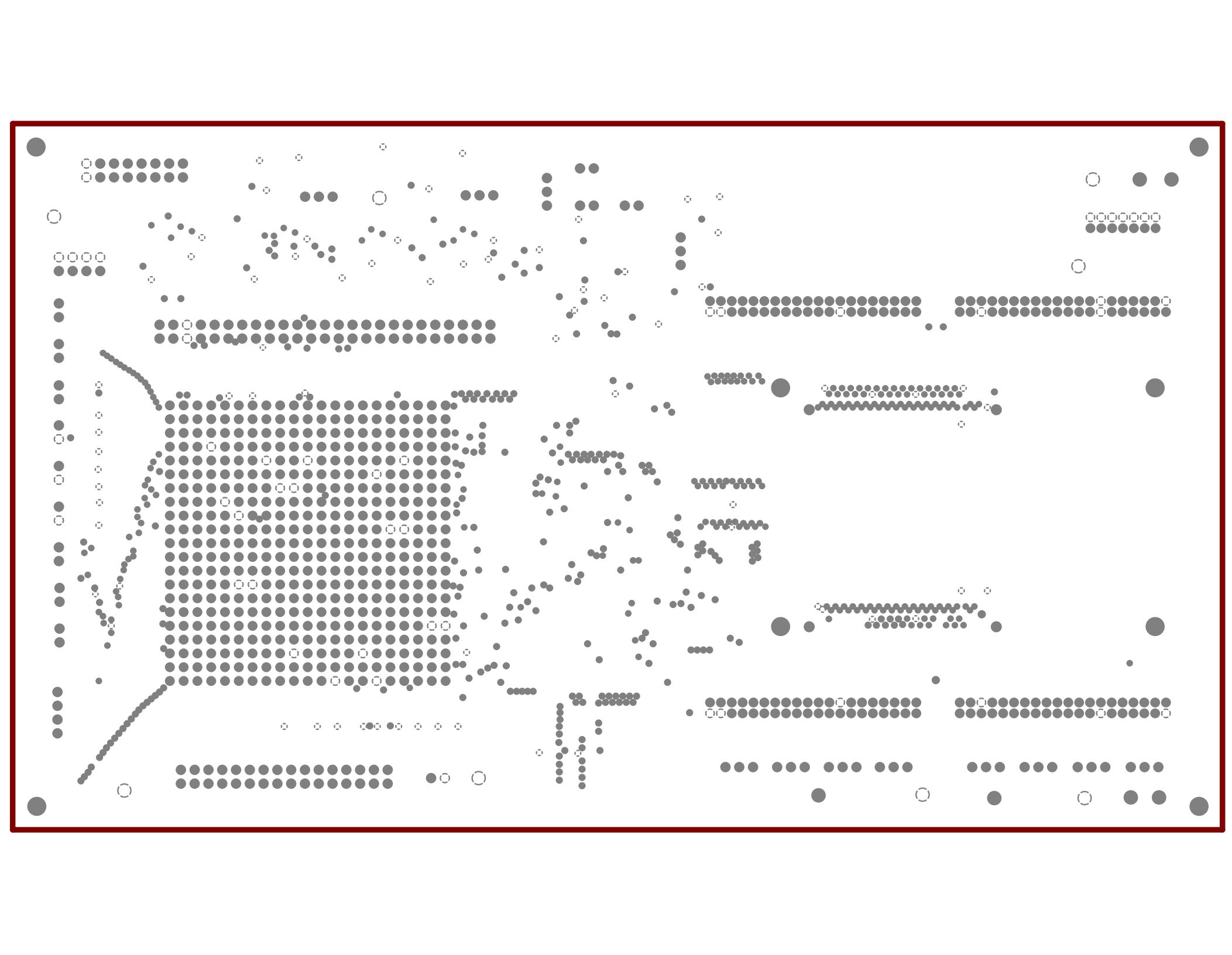


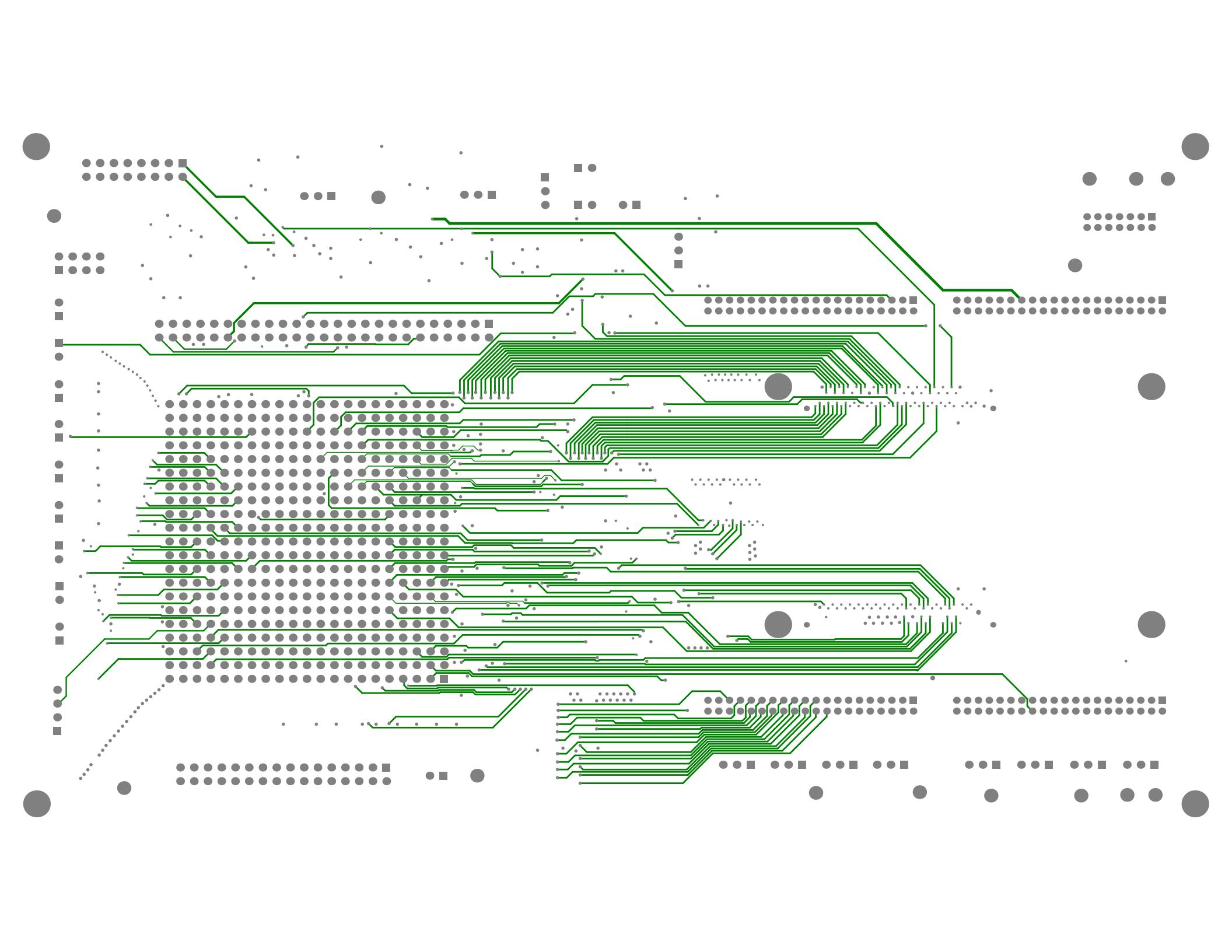


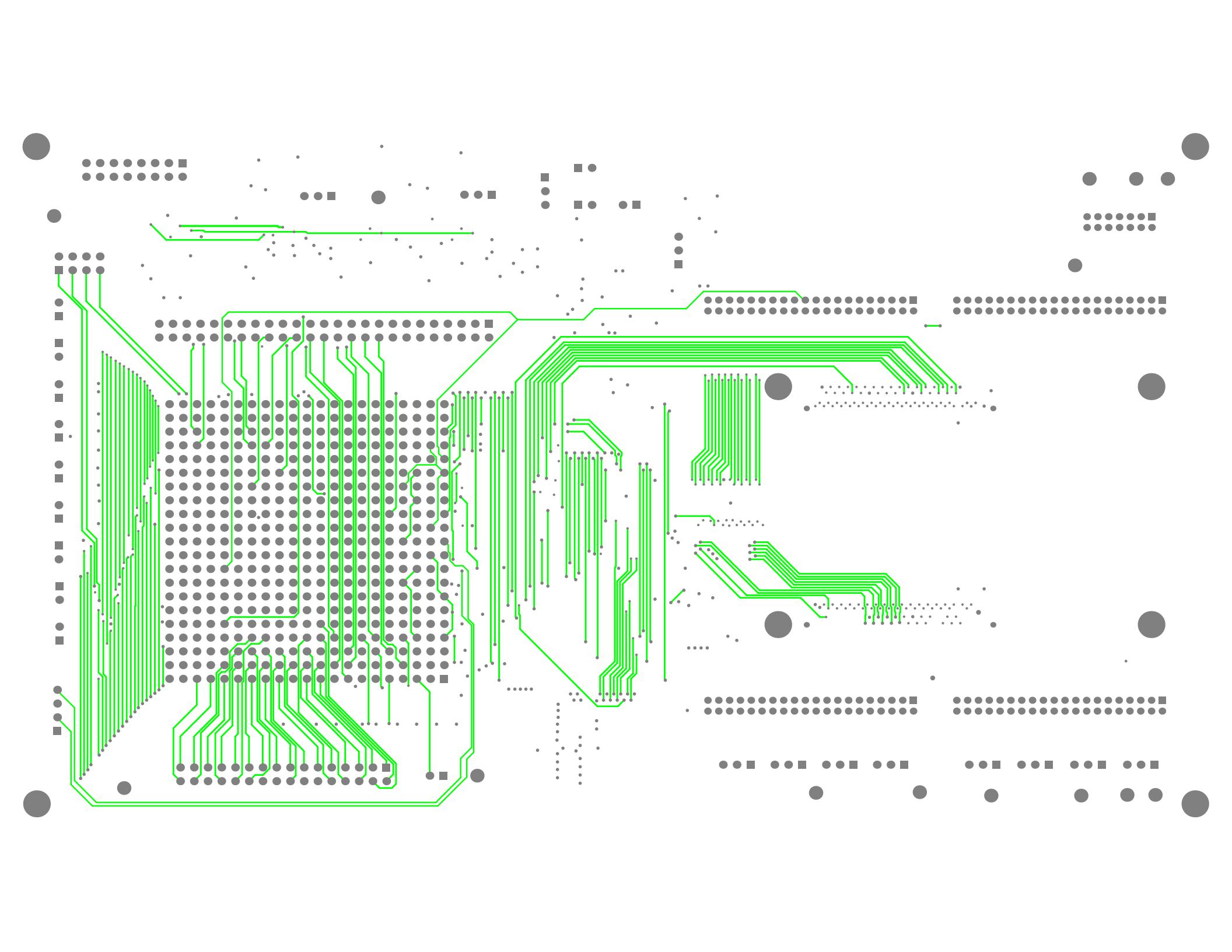
Title			
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Date:	6/5/2020	Sheet	of
File:	C:\Users\...\Top.SchDoc	Drawn By:	

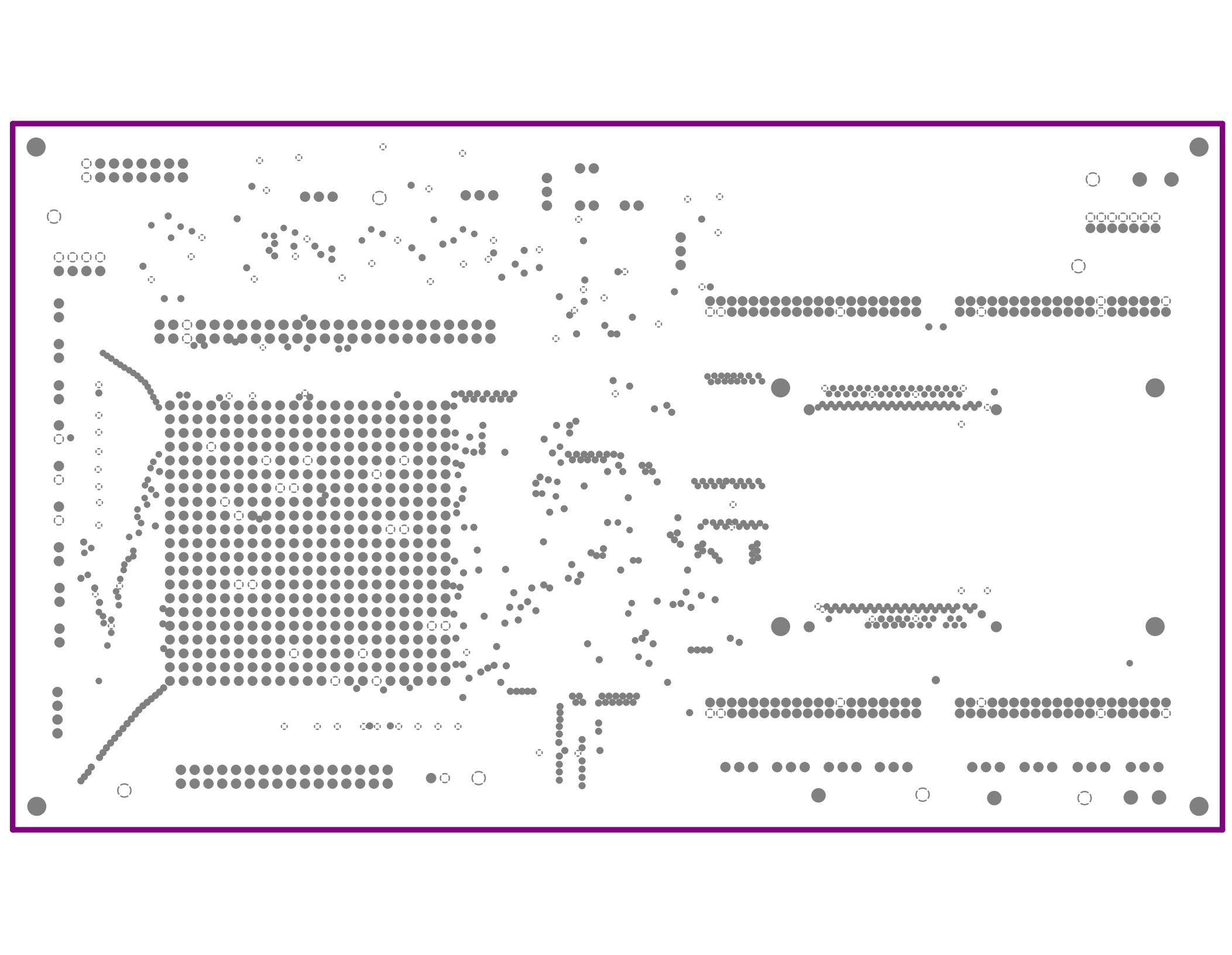


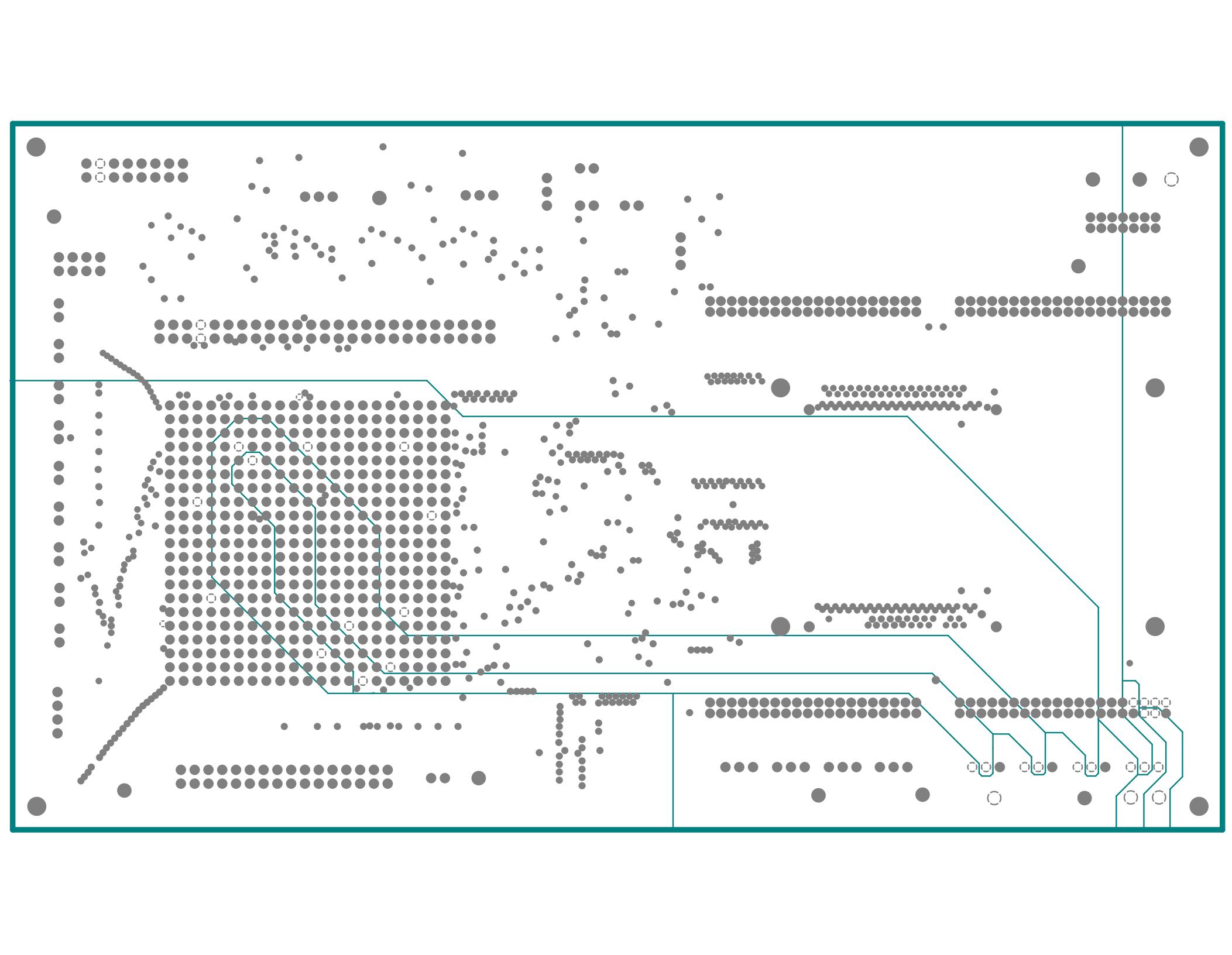


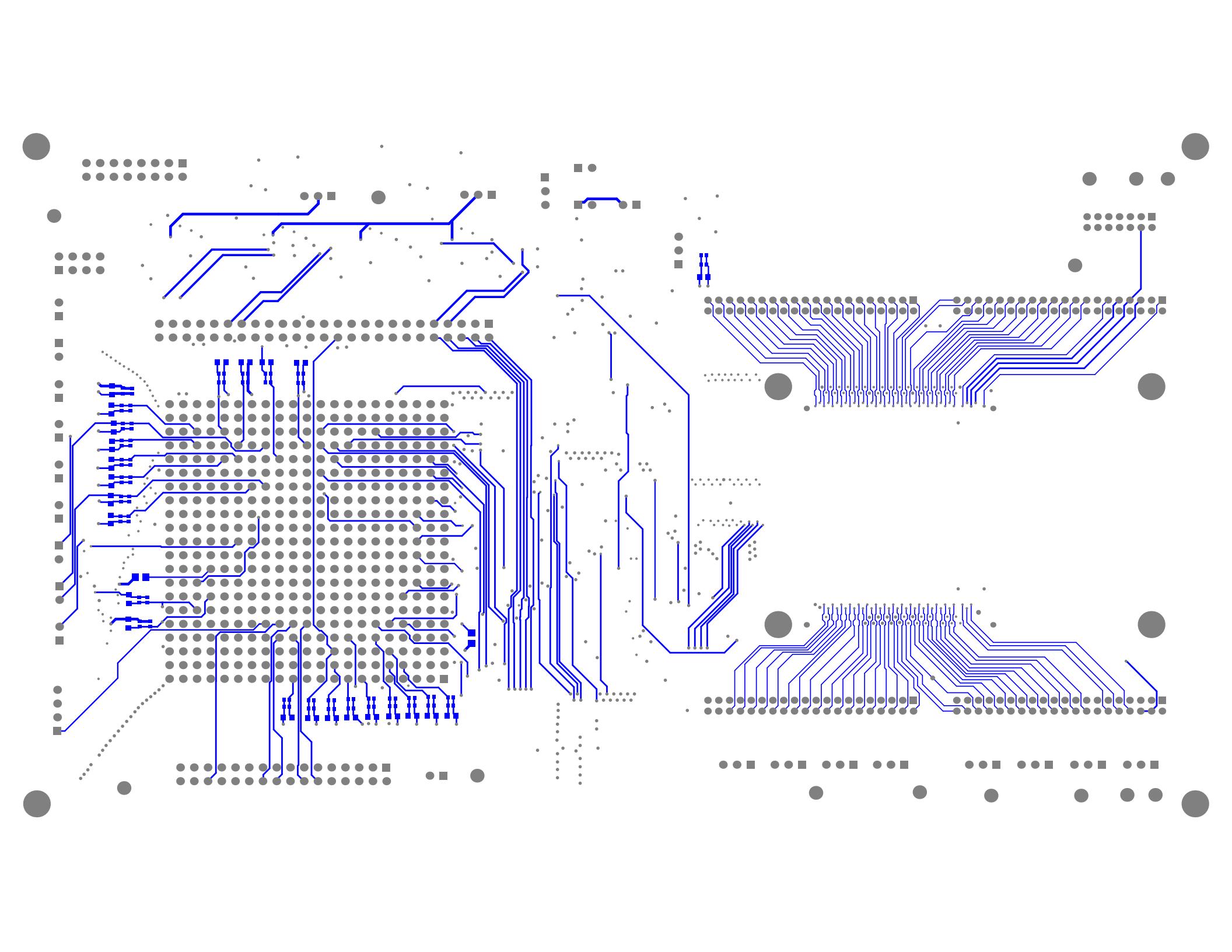


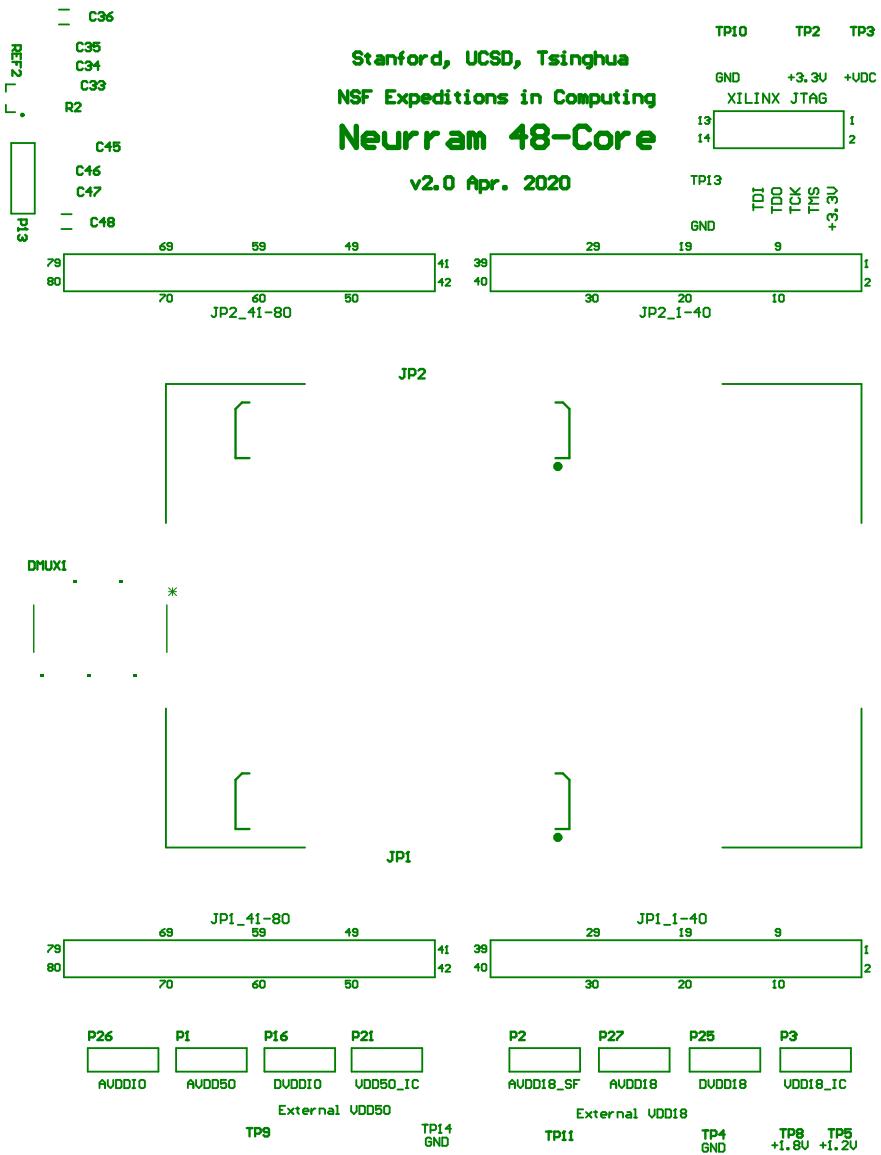
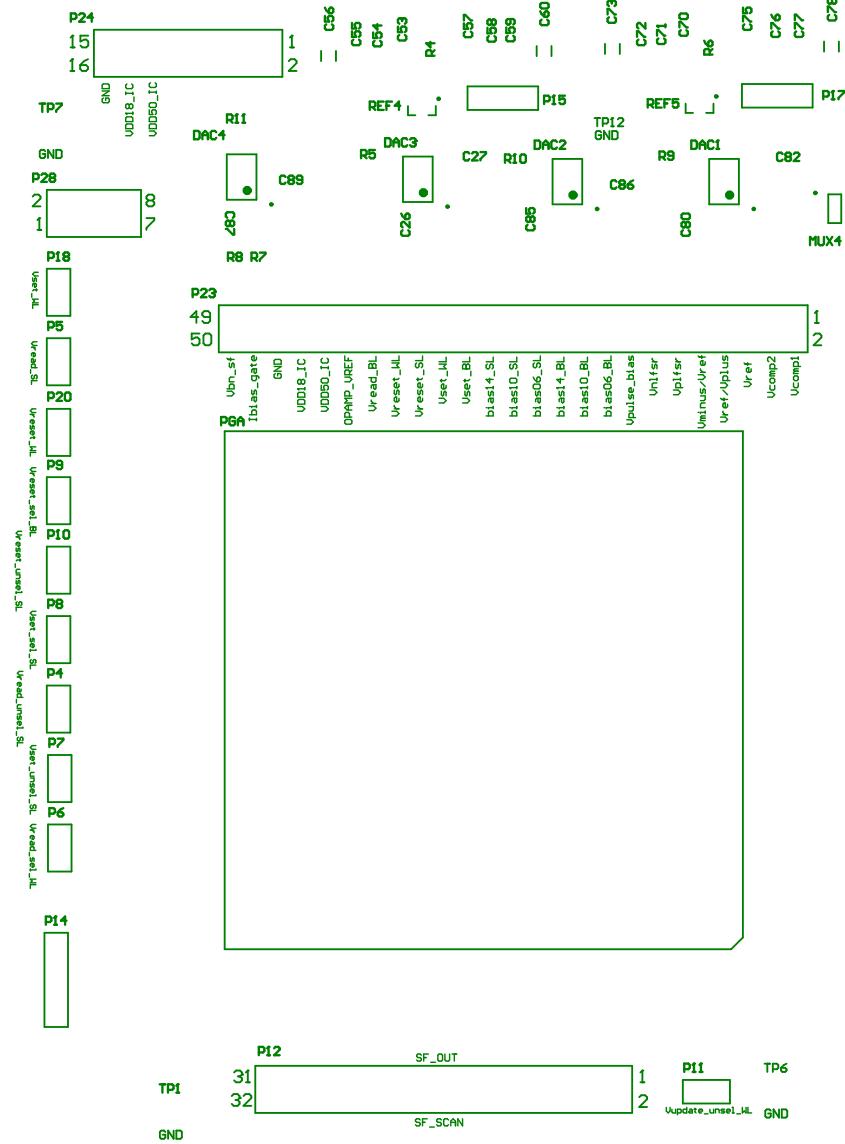






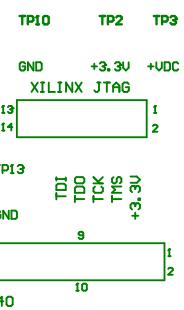






Stanford, UCSD, Tsinghua
NSF Expeditions in Computing
Neurram 48-Core

v2.0 Apr. 2020



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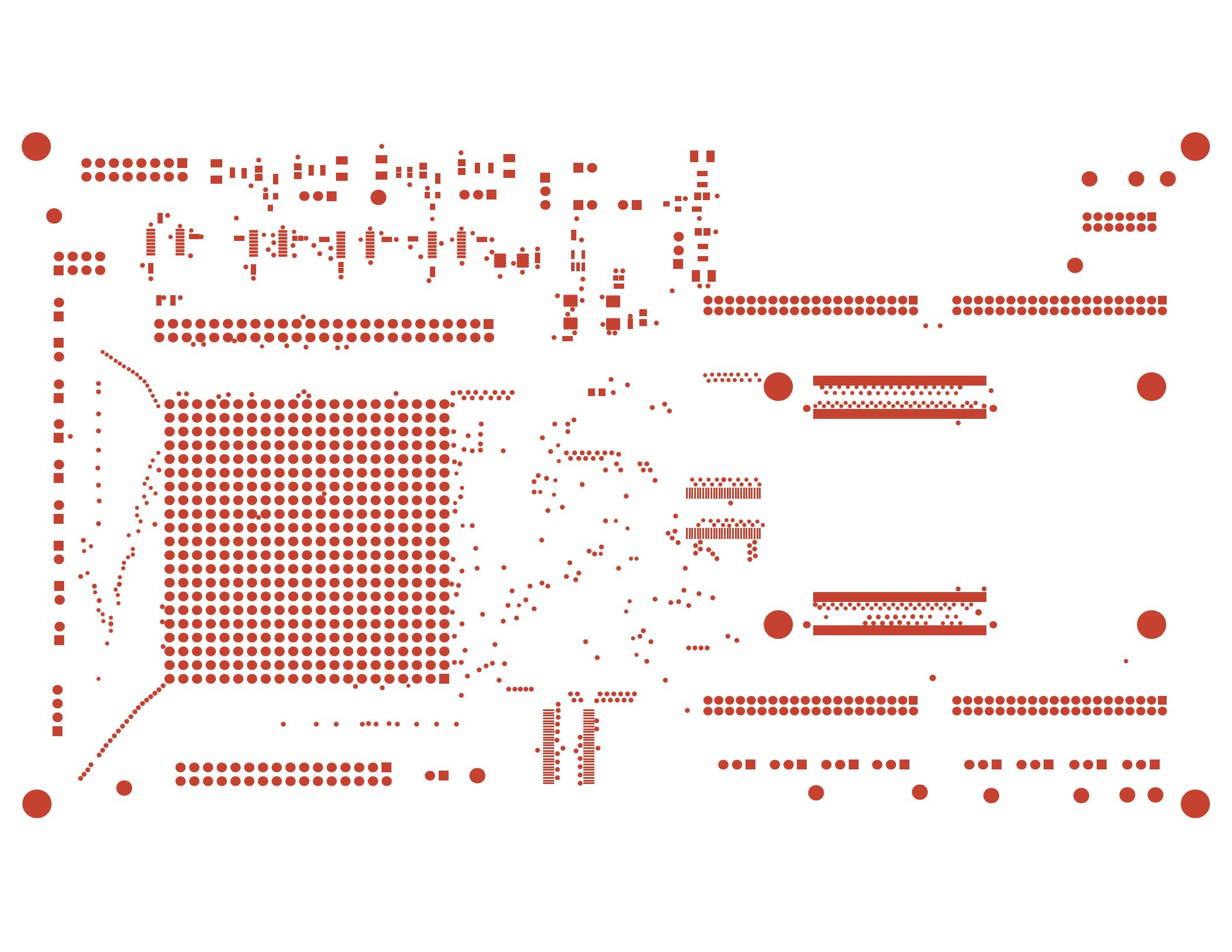
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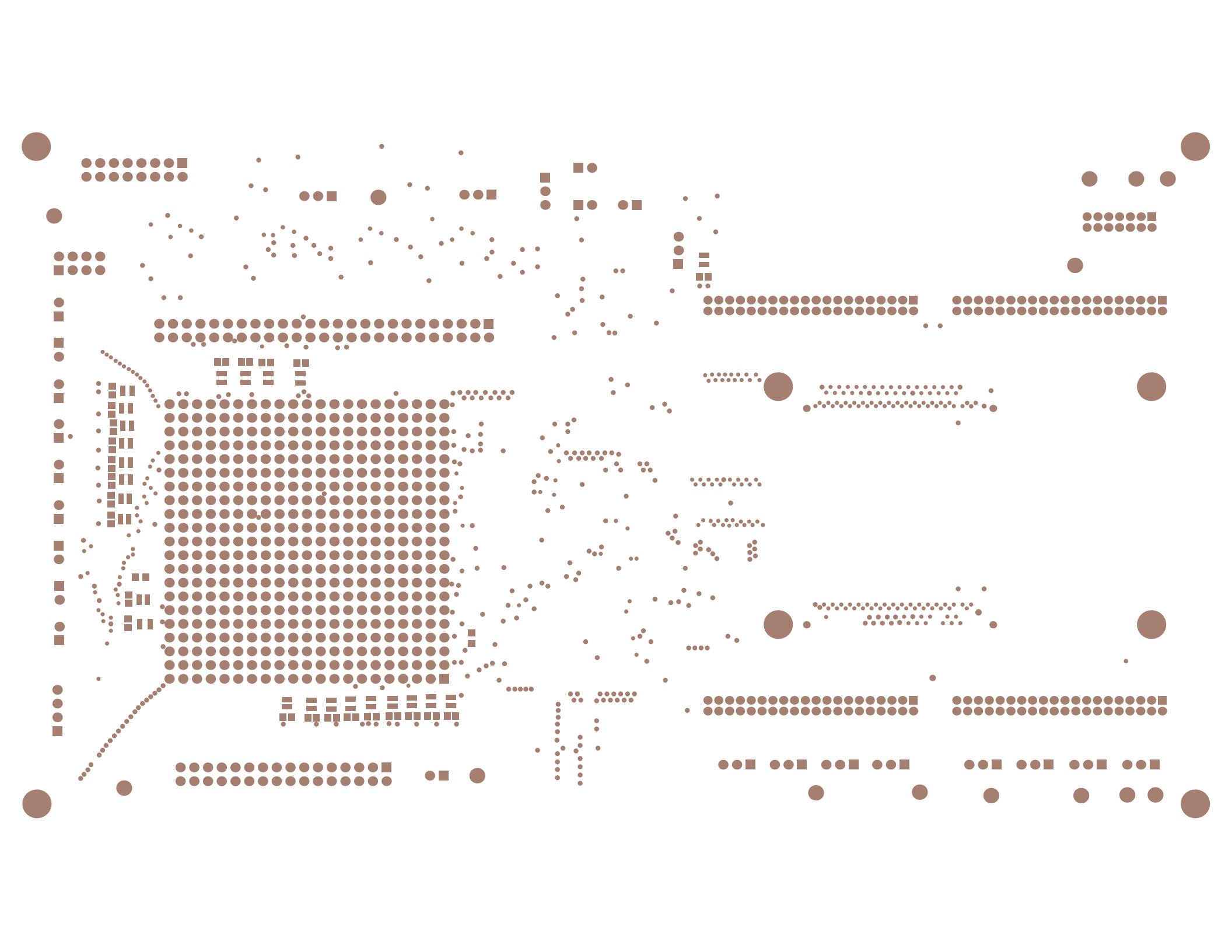
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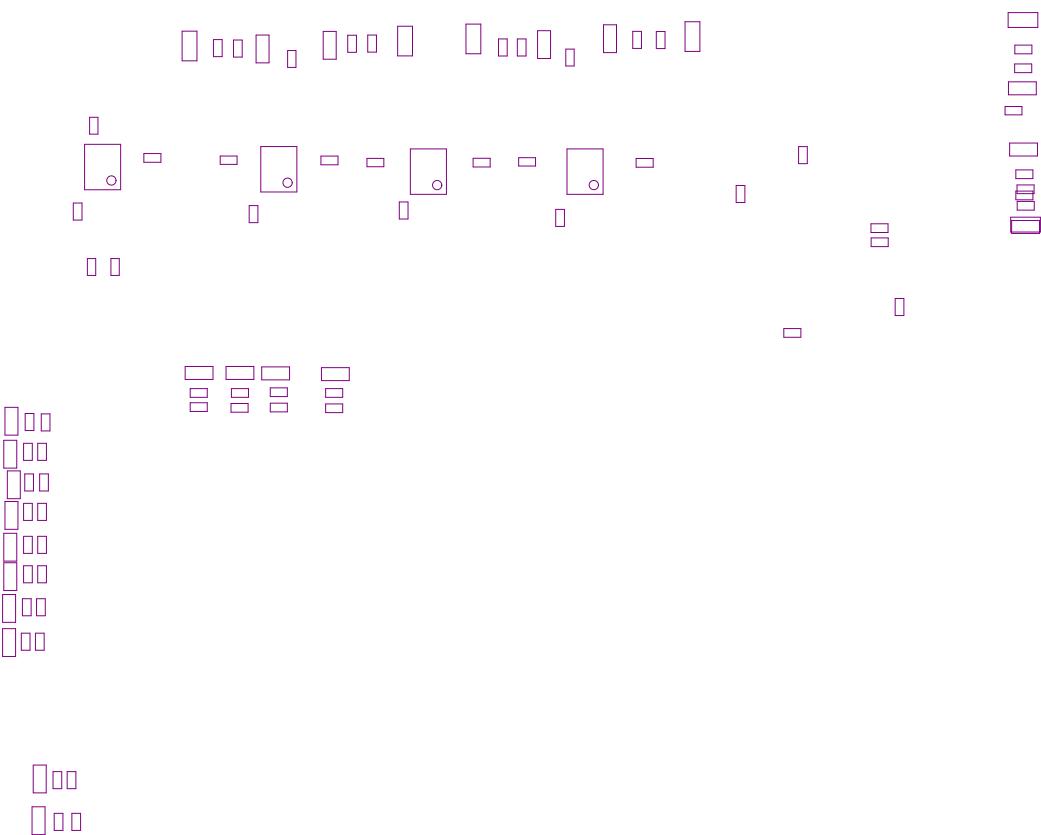
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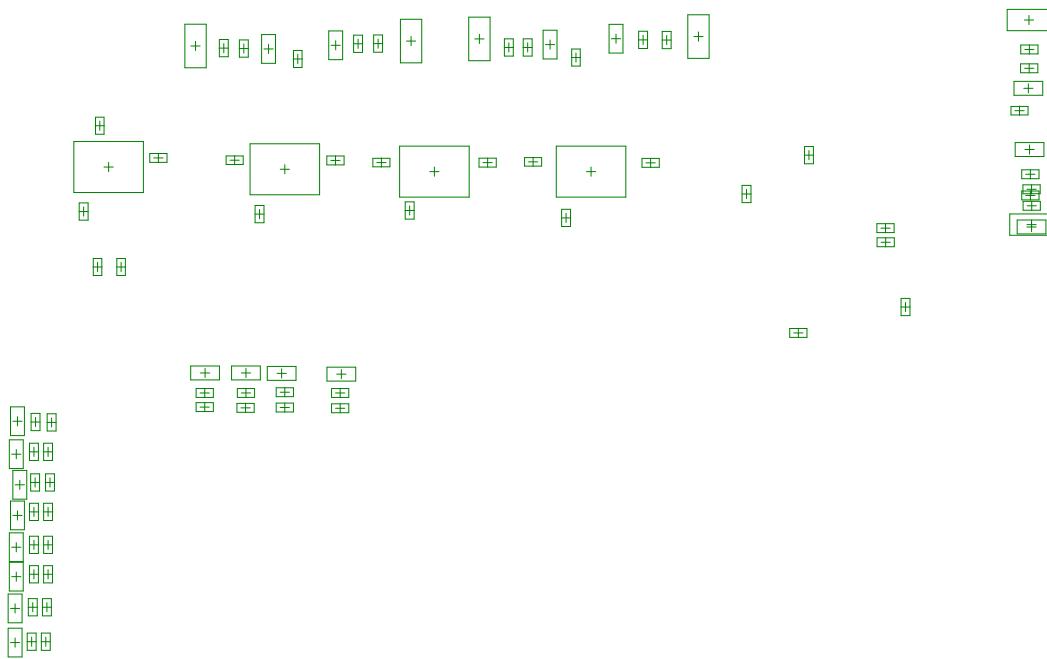
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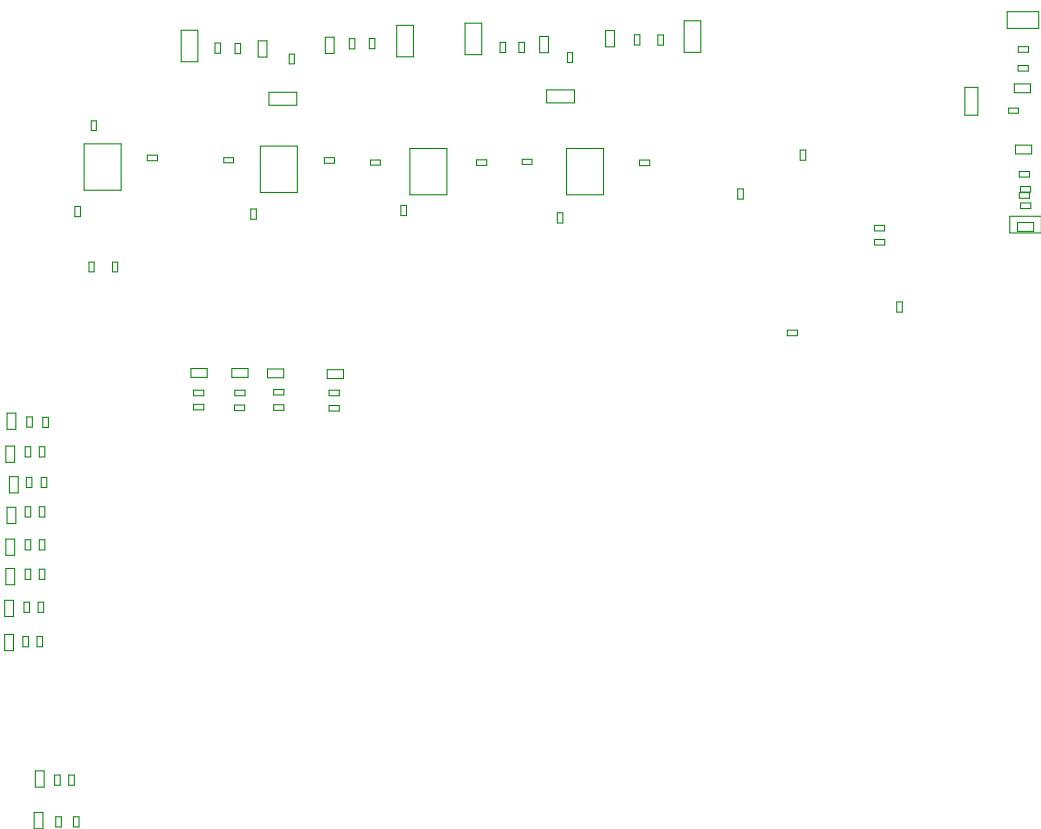
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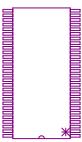


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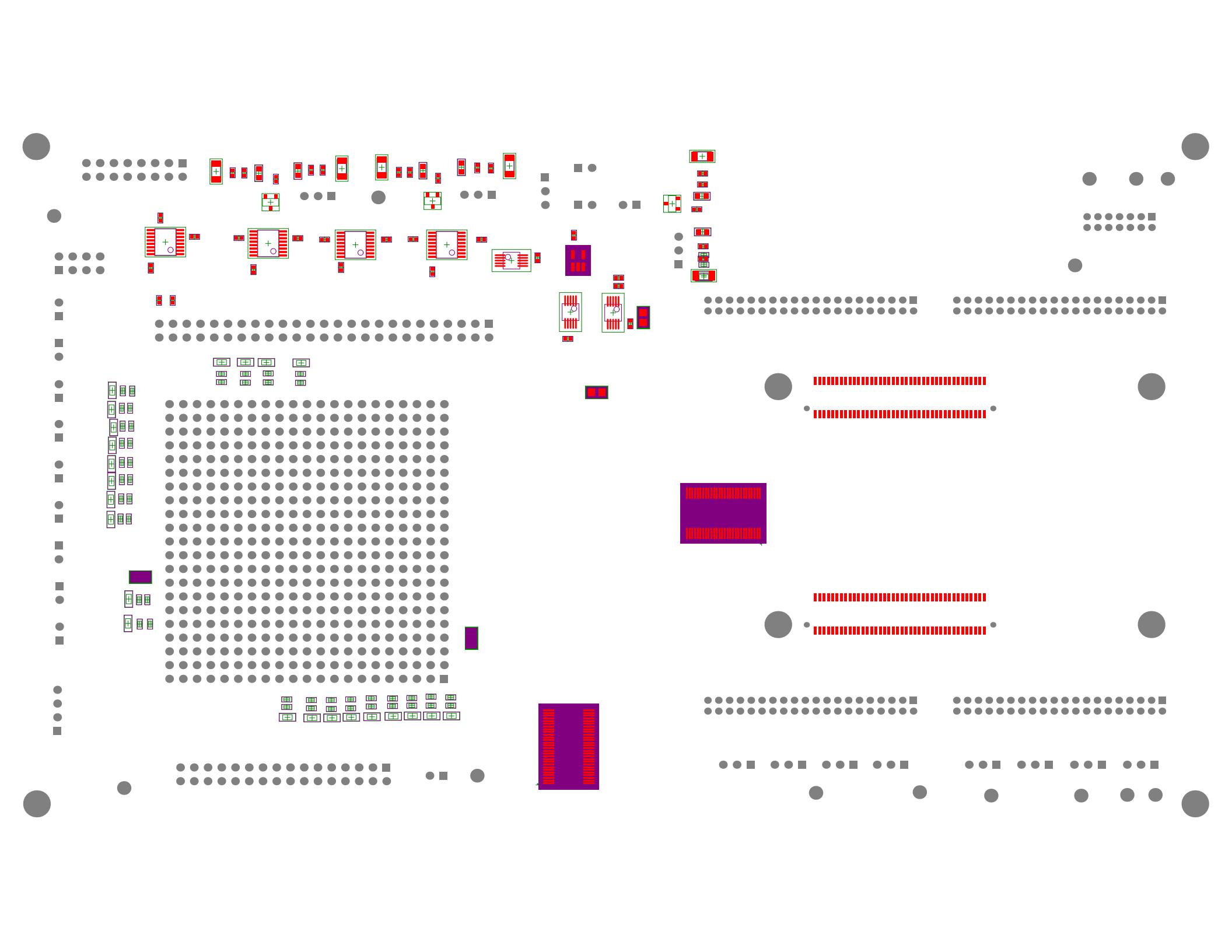
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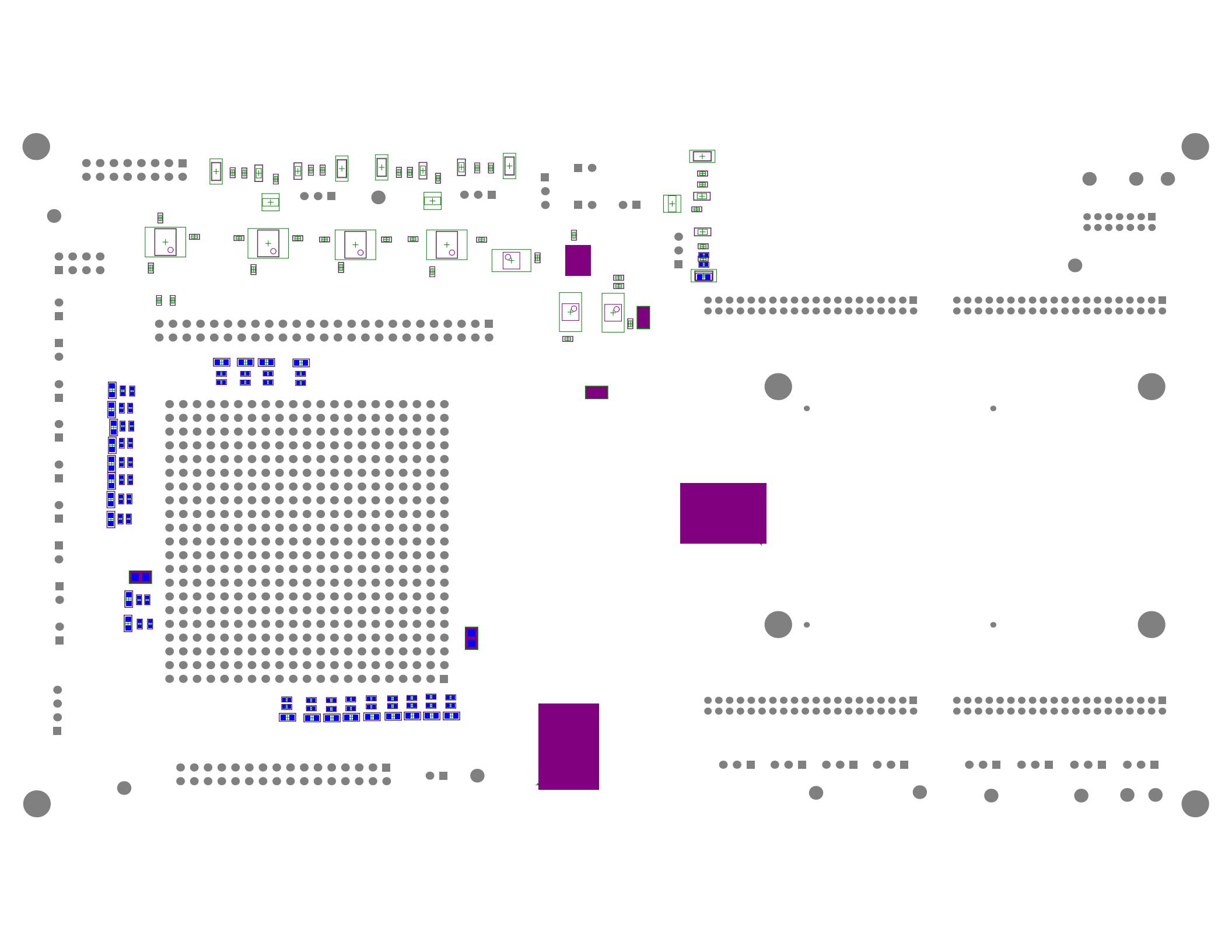


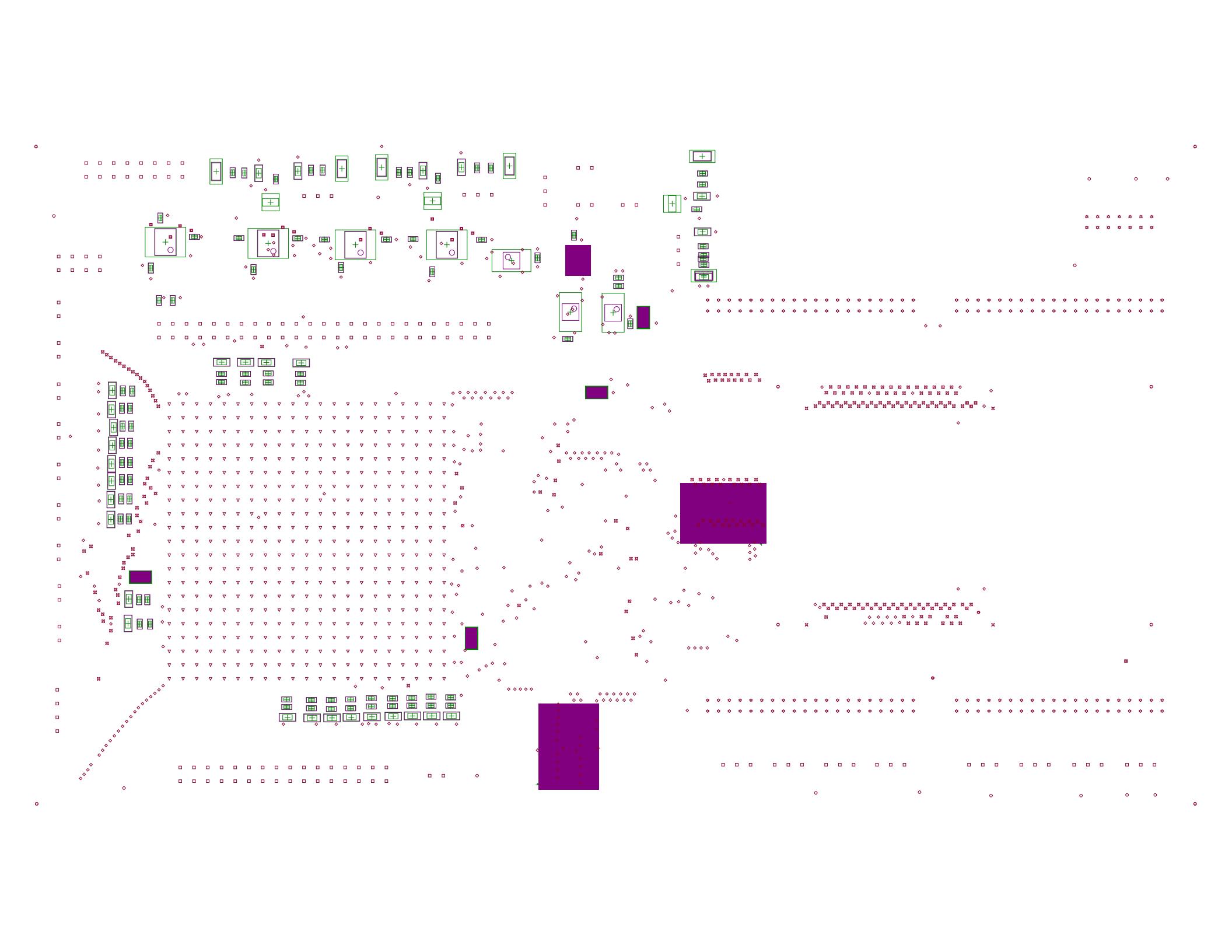
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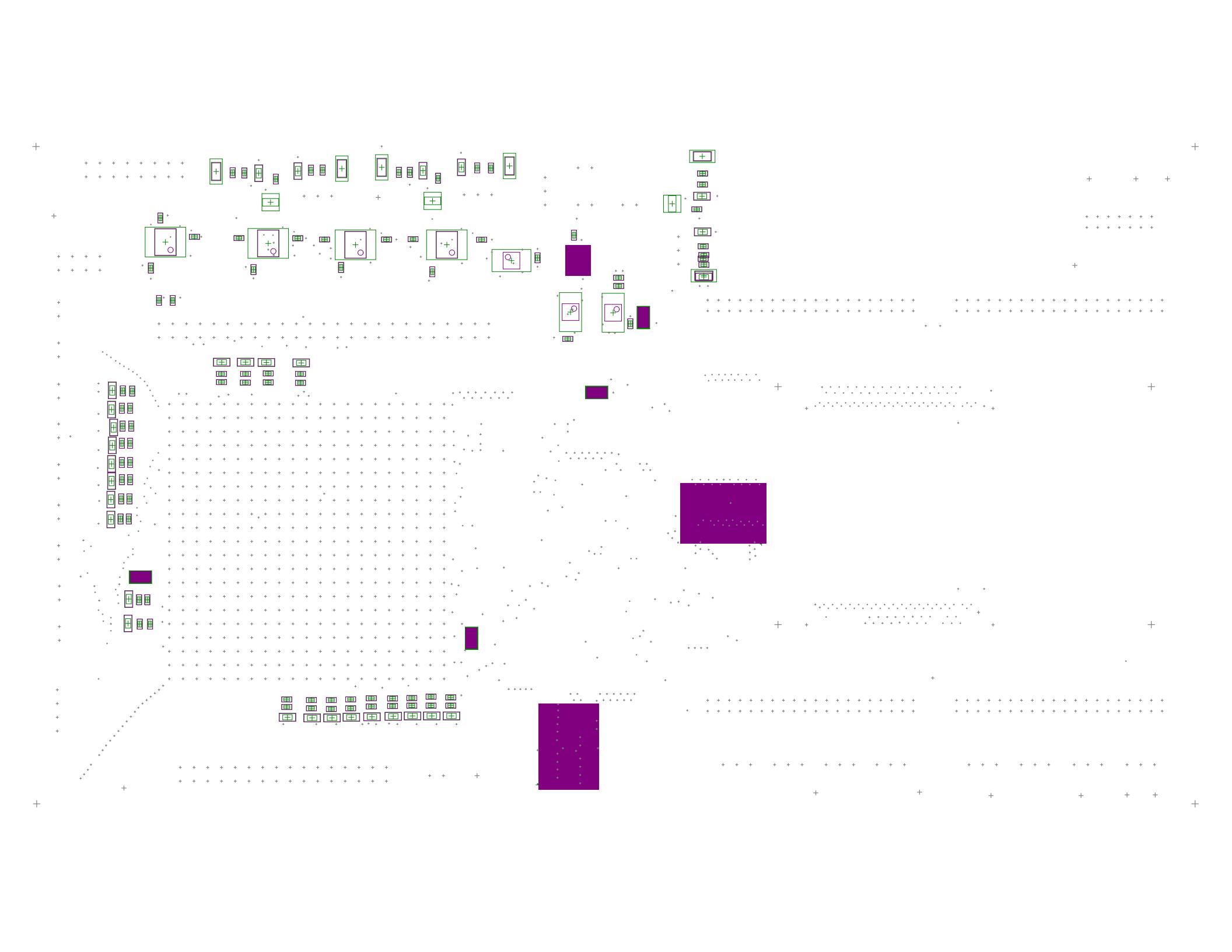
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Bill of Materials

Bill of Materials for Project [neurram_v2.PrjPCB] (No PCB Document Selected)

Source Data From:	neurram_v2.PrjPCB		
Project:	neurram_v2.PrjPCB		
Variant:	None		
Creation Date:	6/5/2020	10:46 AM	
Print Date:	05-Jun-20	10:46:21 AM	

Footprint	Comment	LibRef	Designator	Description	Quantity
TI-DGS10_M	ADS8881	ADS8881	ADC1	TI ADS8881 ADC	1
CAPC1608X9	Cap 1uF0603	Cap 1uF0603	C1, C16, C105, C108, C111, C114, C117,	CAP CER 1UF 10V X5R 0603	8
CAPC1005X6	Cap .1uF 0402	Cap .1uF 0402	C2, C4, C7, C10, C13, C18, C21, C24,	CAP CER .1UF 10V 10% X5R 0402	43
CAPC1608X9	Cap 10uF0603	Cap 10uF0603	C3, C6, C9, C12, C17, C20, C23, C28,	CAP CER 10UF 6.3V X5R 0603	22
CAPC1005X6	Cap 1nF0402	Cap 1nF0402	C5, C8, C11, C14, C15, C19, C22, C25,	CAP CER 1000PF 50V 10% X7R 0402	31
CAPC3216X1	Cap 100uF3216	Cap 100uF3216	C36, C48, C56, C60, C73, C78	CAP CER 100UF 6.3V Y5V 1206	6
HDR1X2	Header Female	Header Female	C-OPT1, R-OPT1	Header, 2-Pin	2
SOP63P600X	LTC2600	LTC2600	DAC1, DAC2, DAC3, DAC4	LTC2600	4
DGG56-M	SN74CBT16390	SN74CBT16390	DMUX1, DMUX2	IC 16:32 BITMUX/DEMUX56-TSSOP	2
BTE-040	BTE/BSE-040	BTE/BSE-040	JP1, JP2	Header/Socket -80-pin - 0.80mm	2
HDR2X20-2N	Header 20X2	Header 20X2	JP1_1-40, JP1_41-80, JP2_1-40, JP2_41-	Header, 20-Pin, Dual row	4
HDR2X7-2M	JTAGXLNX	JTAGXLNX	JTAG	Xilinx JTAG Header, 7-Pin, Dual row	1
TI-DGS10_M	TS5A23159	TS5A23159	MUX1, MUX4	Dual 2to1 Analog Mux	2
HDR1X3	Header 3	Header 3	P1, P2, P3, P13, P15, P16, P17, P21,	Header, 3-Pin	12
HDR1X2	Header 2	Header 2	P4, P5, P6, P7, P8, P9, P10, P11, P18,	Header, 2-Pin	11
HDR2X16	Header 16X2	Header 16X2	P12	Header, 16-Pin, Dual row	1
HDR1X4	Header 4	Header 4	P14	Header, 4-Pin	1
HDR2X25	Header 25X2	Header 25X2	P23	Header, 25-Pin, Dual row	1
HDR2X8	Header 8X2	Header 8X2	P24	Header, 8-Pin, Dual row	1
HDR2X4	Header 4X2	Header 4X2	P28	Header, 4-Pin, Dual row	1
PGA441x21	Chip_Socket_48	Chip_Socket_48	PGA	Pos PGA, ZIF (ZIP) Socket Gold Through Hole	1
RC0805N-M	Res0	Res0	R1, R3, R12, R13	0Ohms Jumper 0.125W, 1/8W Chip Resistor	4
RESC1005X4	Res 2.2k	Res 2.2k	R2, R4, R6	RES 2.20K OHM1/16W 1% 0402 SMD	3
RESC1005X4	Res 7.5k	Res 7.5k	R5, R9, R10, R11	RES 7.50K OHM1/10W 1% 0402 SMD	4
RESC1005X4	Res 1k	Res 1k	R7	RES 1K OHM1/16W 1% 0402 SMD	1
RESC1005X4	Res 500	Res 500	R8	RES 500 OHM1/16W 1% 0402 SMD	1
SOT95P240-3	IC VREF REF2	ADR5040	REF2, REF5	IC VREF SHUNTPREC 2.048V SOT23	2
SOT95P240-3	IC VREF REF4	ADR5044	REF4	IC VREF SHUNTPREC 4.096V SOT23	1
TP_MED	TESTPOINT	TESTPOINT	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8,	Testpoint	14
UJ_5-M	AD8615AUJZ-R	AD8615AUJZ-R	U1	IC OPAMP GP 1 CIRCUIT TSOT23-5	1
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Approved	Notes