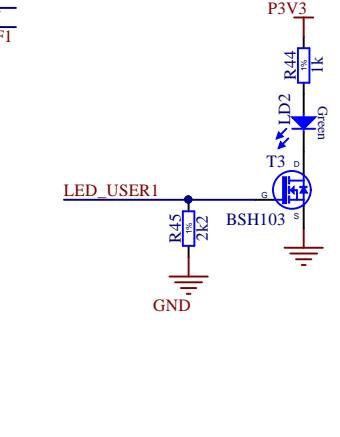
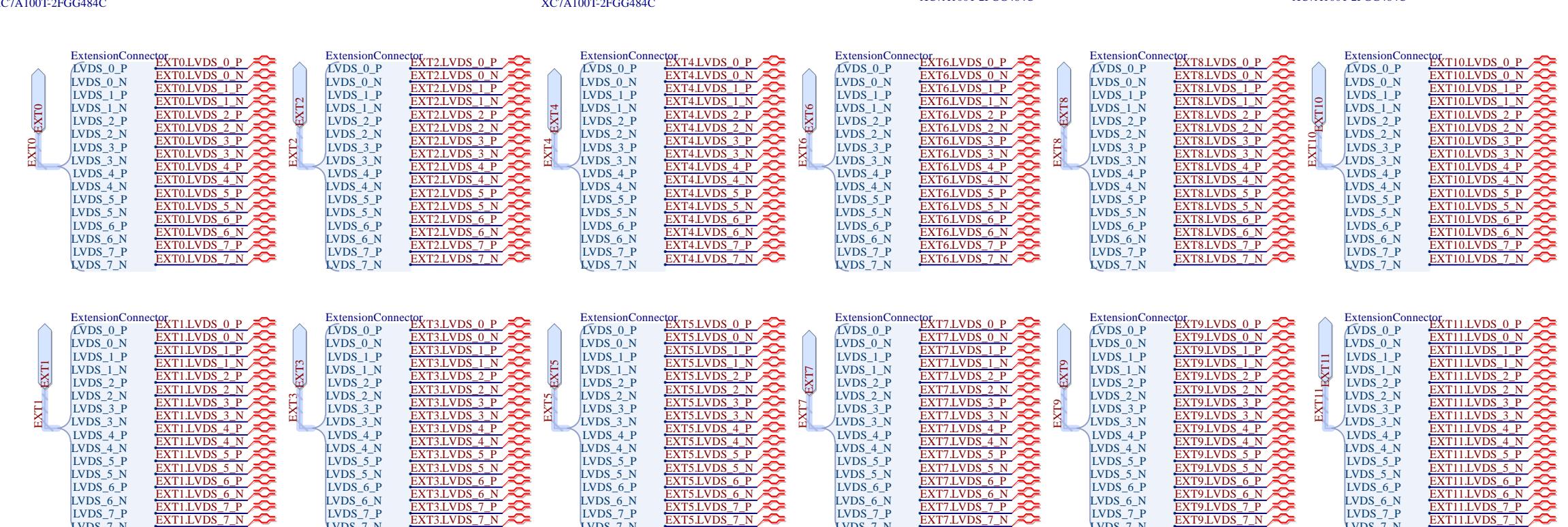
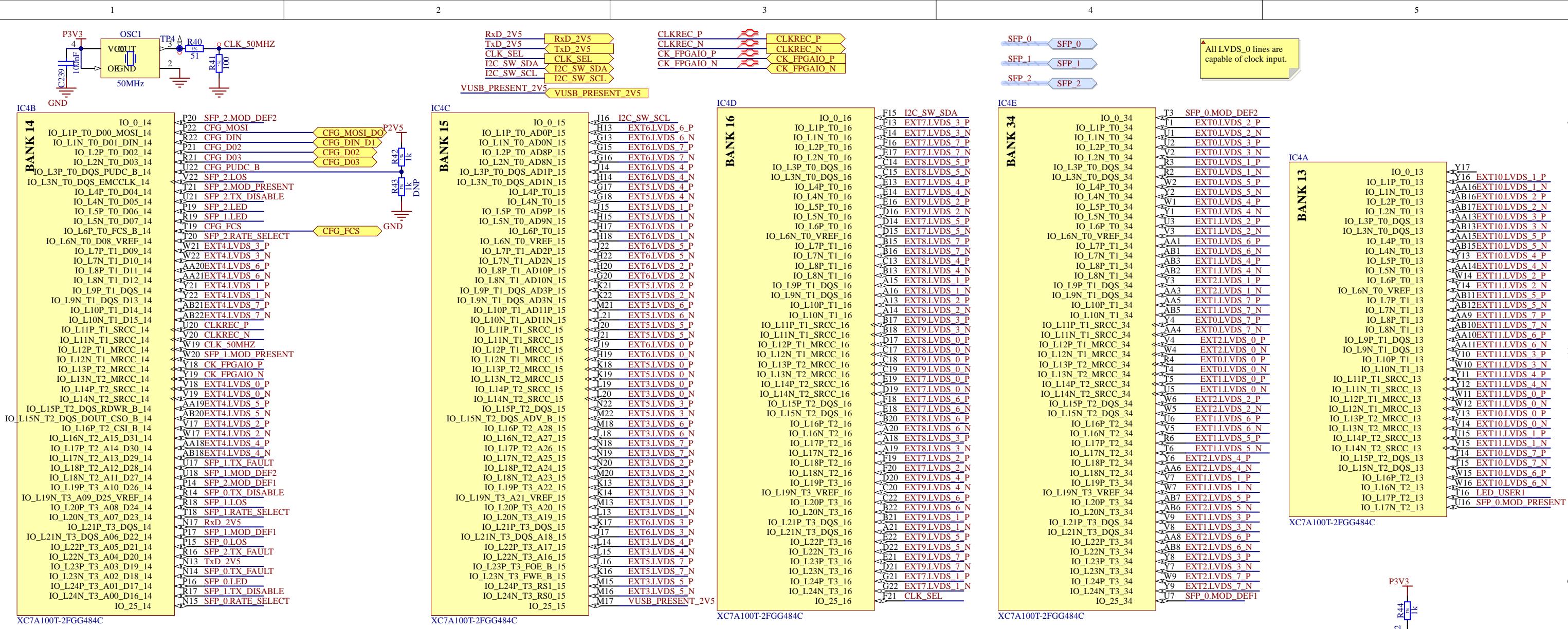
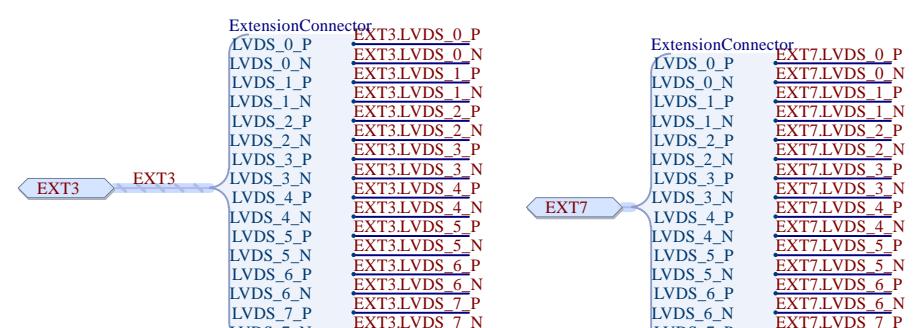
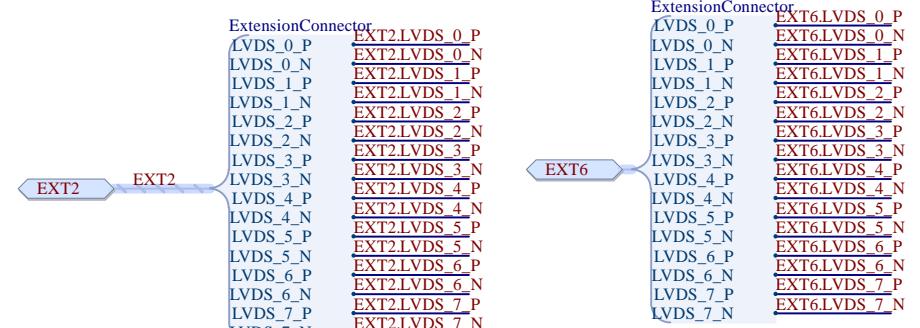
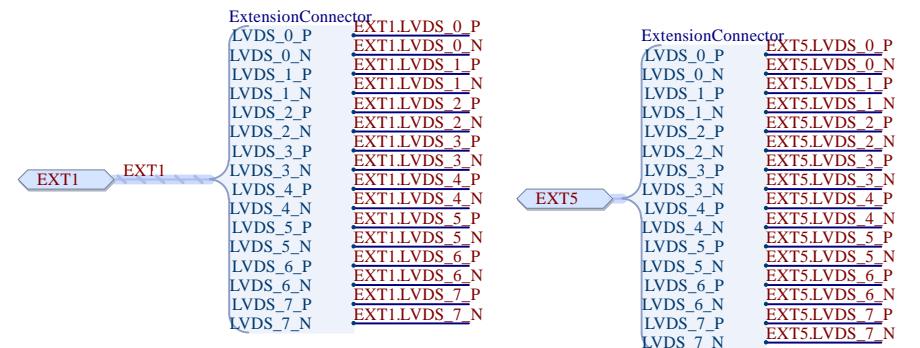
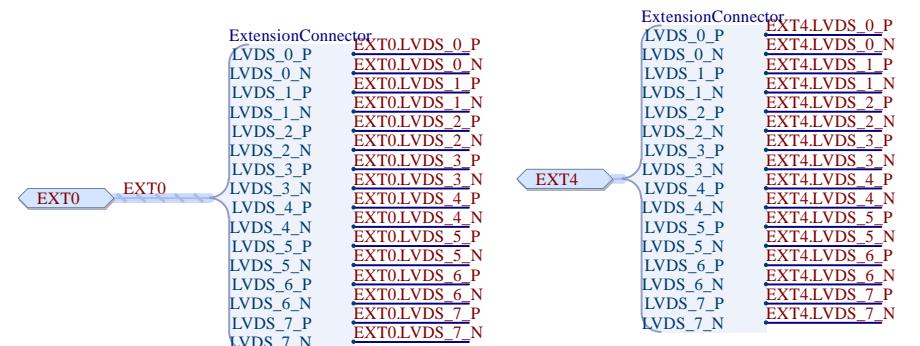
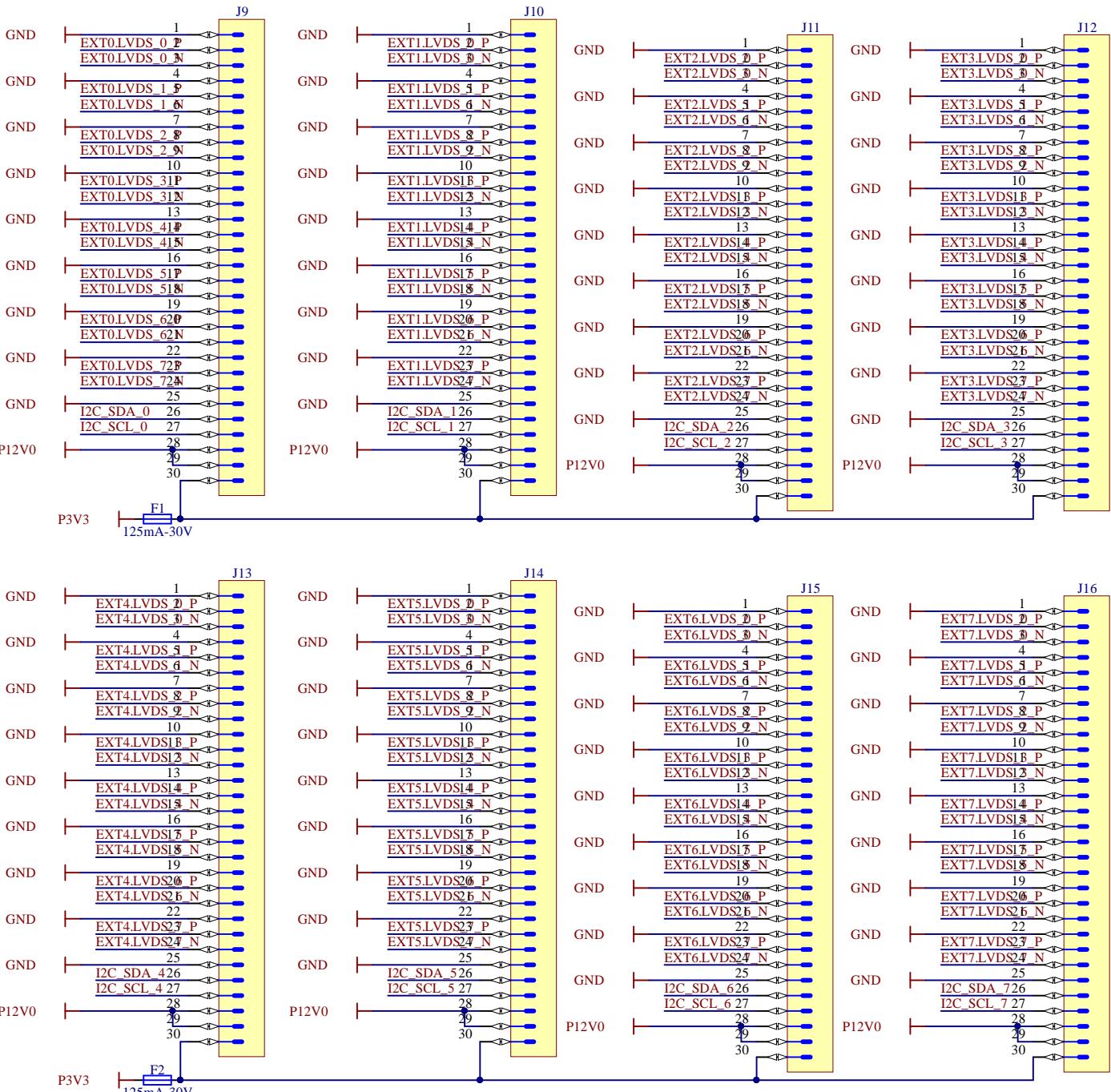


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		Warsaw University of Technology ISE Nowowiejska 15/19	Size A3 Rev -

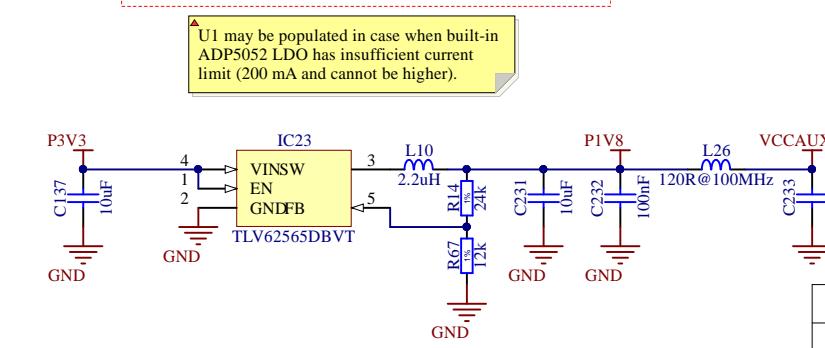
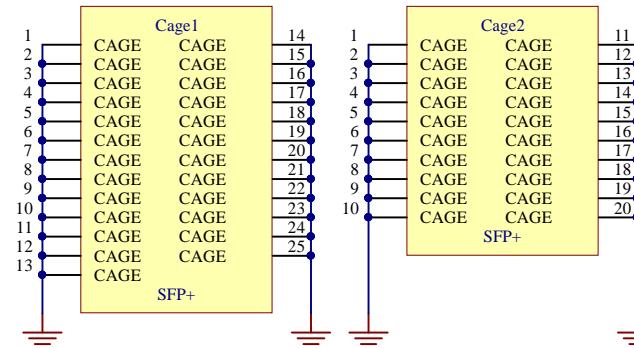
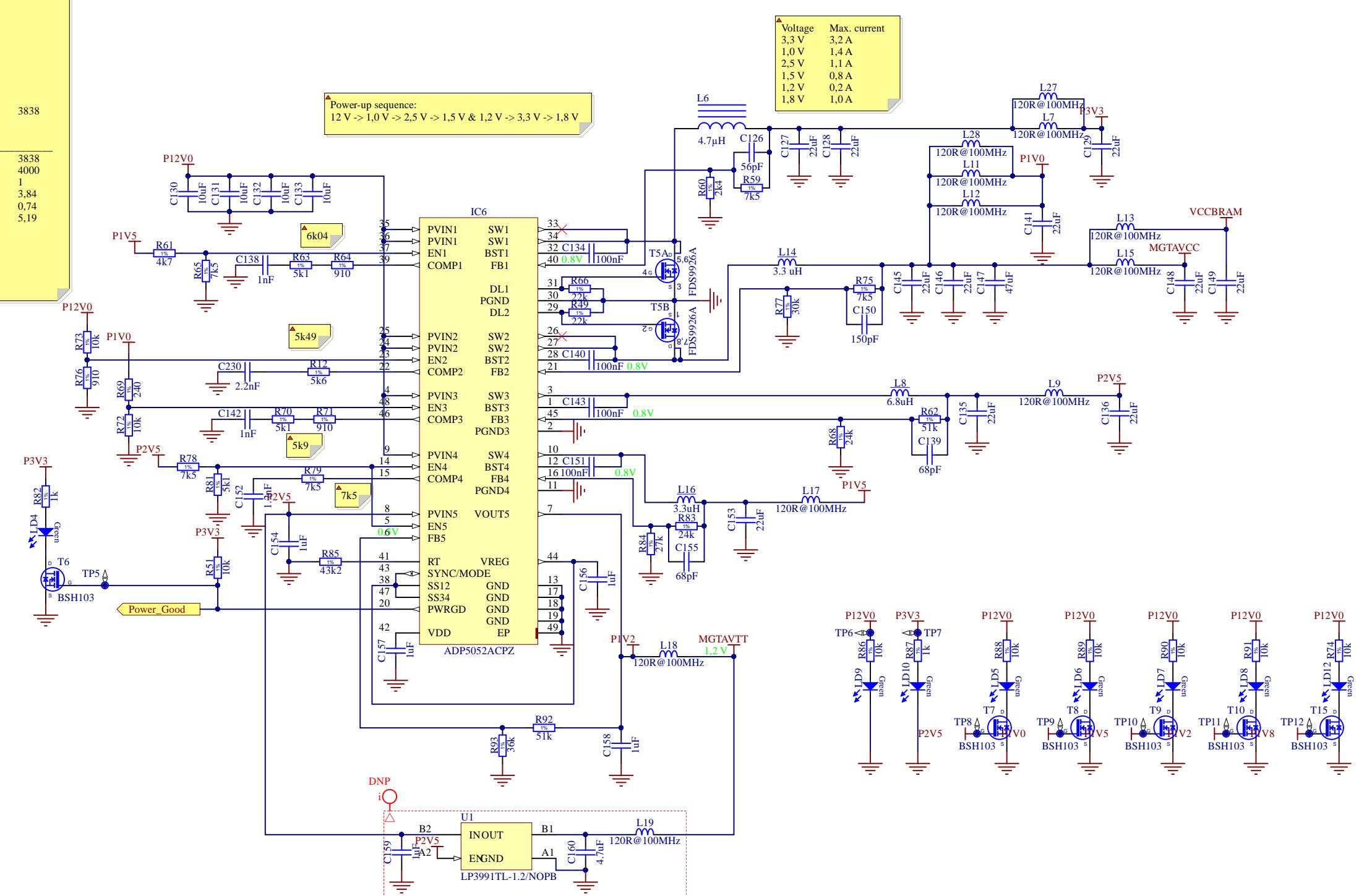
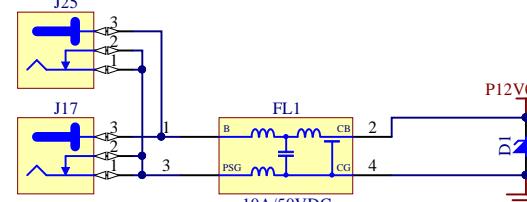




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	P3V3	P2V5	P1V8	LDO PIV5	P1V2	P1V0
LED SFP1-3	27					
LED user1, power good, fpga done, 3V3 LED	12					
Any Frequency Clock Multiplier/						
Jitter Attenuator	Si5324	279				
Clock Fanout Buffer	ADCLK944B	138				
Clock Fanout Buffer	ADCLK948B	330				
Extensions, powered by Kasli (I2C power) x12		240				
DDR Termination Regulator	TPS51200	40				
SFP+ 6.25gb 3x		900				
Level-Shifting I2C Repeater	TCA9517 x4	20				
I2C Switch	TCA9548	80				
Level-Shifting Bus Transceiver	SN74AVC2T245 x9	216				
50 MHz Oscillator	636L3I050M00000	25				
FPGA memory	S25FL128SAGBHIA	100				
125 MHz LVDS clock510FBA125M000		23				
RAM x16, rev E	MT41K256M16					
Artix 7 FPGA	XC7A100T					
LDO 1V2		167				
1V8 buck	TLV62565	595				
SUM [mA]	3169	790	971	429	167	3838
Current available [mA]	3500	1100	1000	800	200	4000
Voltage [V]	3,3	2,5	1,8	1,5	1,2	1
POWER [W]	10,46	1,98	1,75	0,64	0,20	3,84
Efficiency	0,88	0,78	0,89	0,76	1	0,74
POWER [W]	11,88	2,53	1,96	0,85	0,20	5,19
Total power: 22,61 W						
Total P12V0 current: 1,70 A						
Maximum P12V0 current: 5 A						
P12V0 current left for EEMs: 3,30 A						
Maximum P12V0 EEM current via ribbon cable: 1 A						

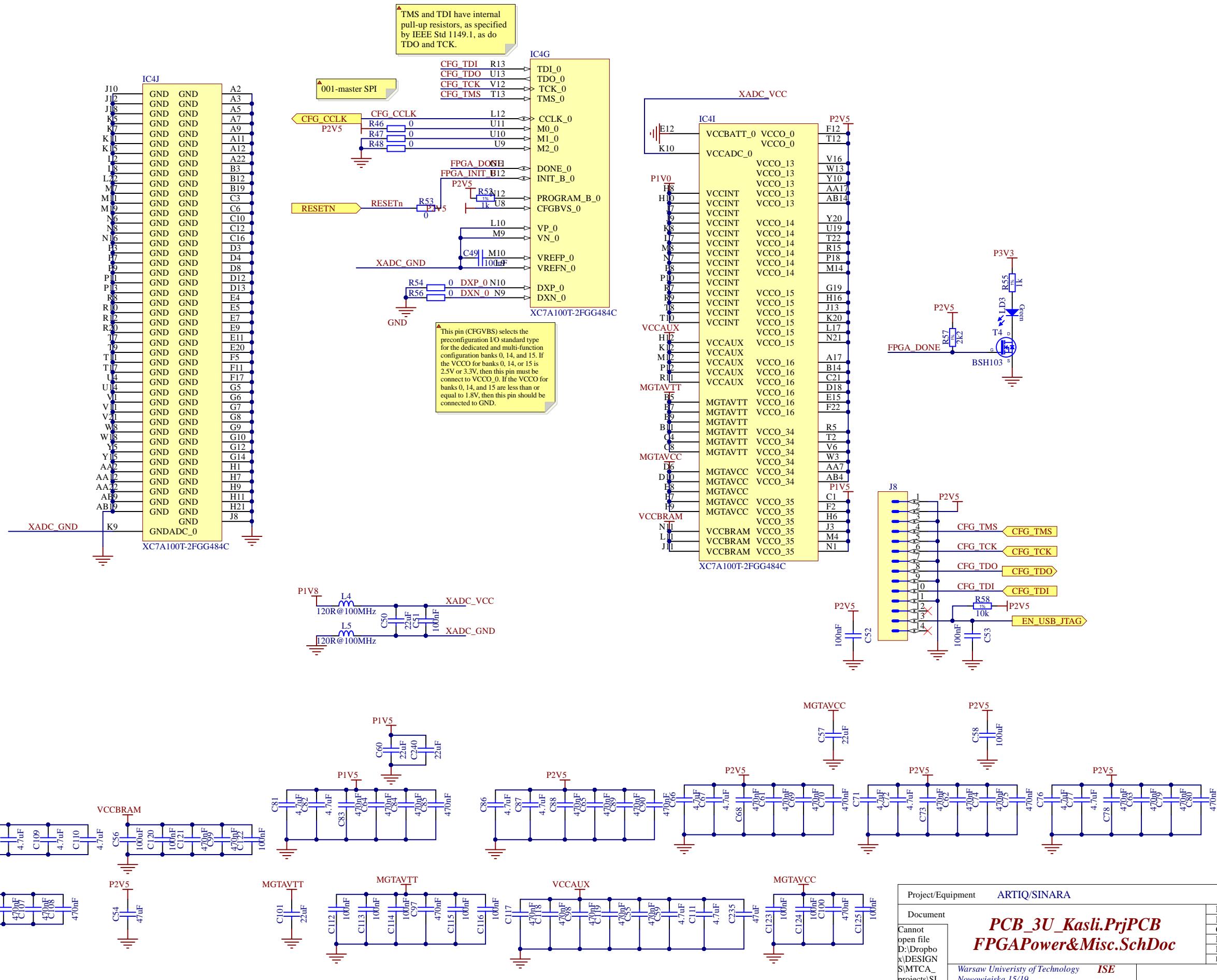


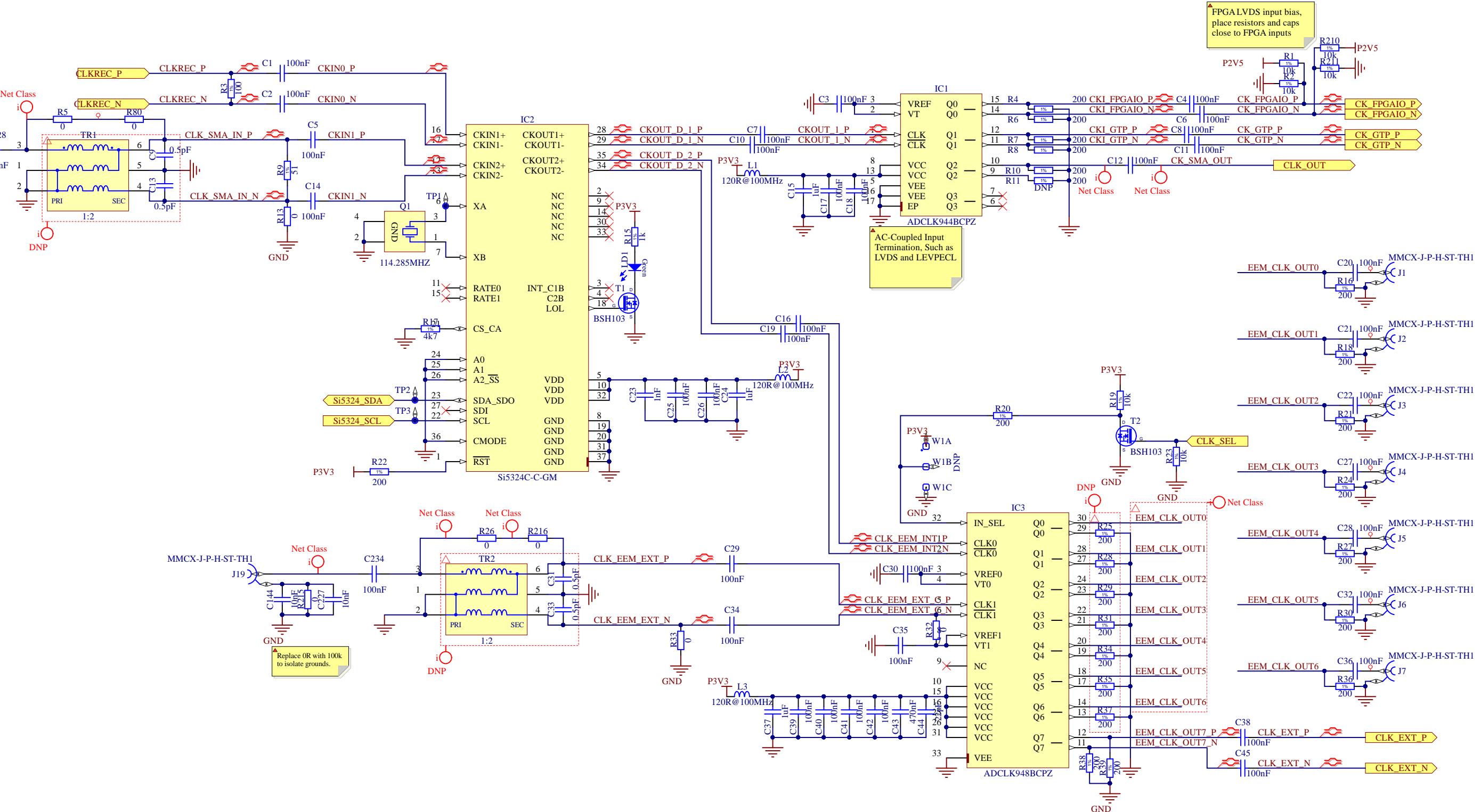
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Size A3 Rev -

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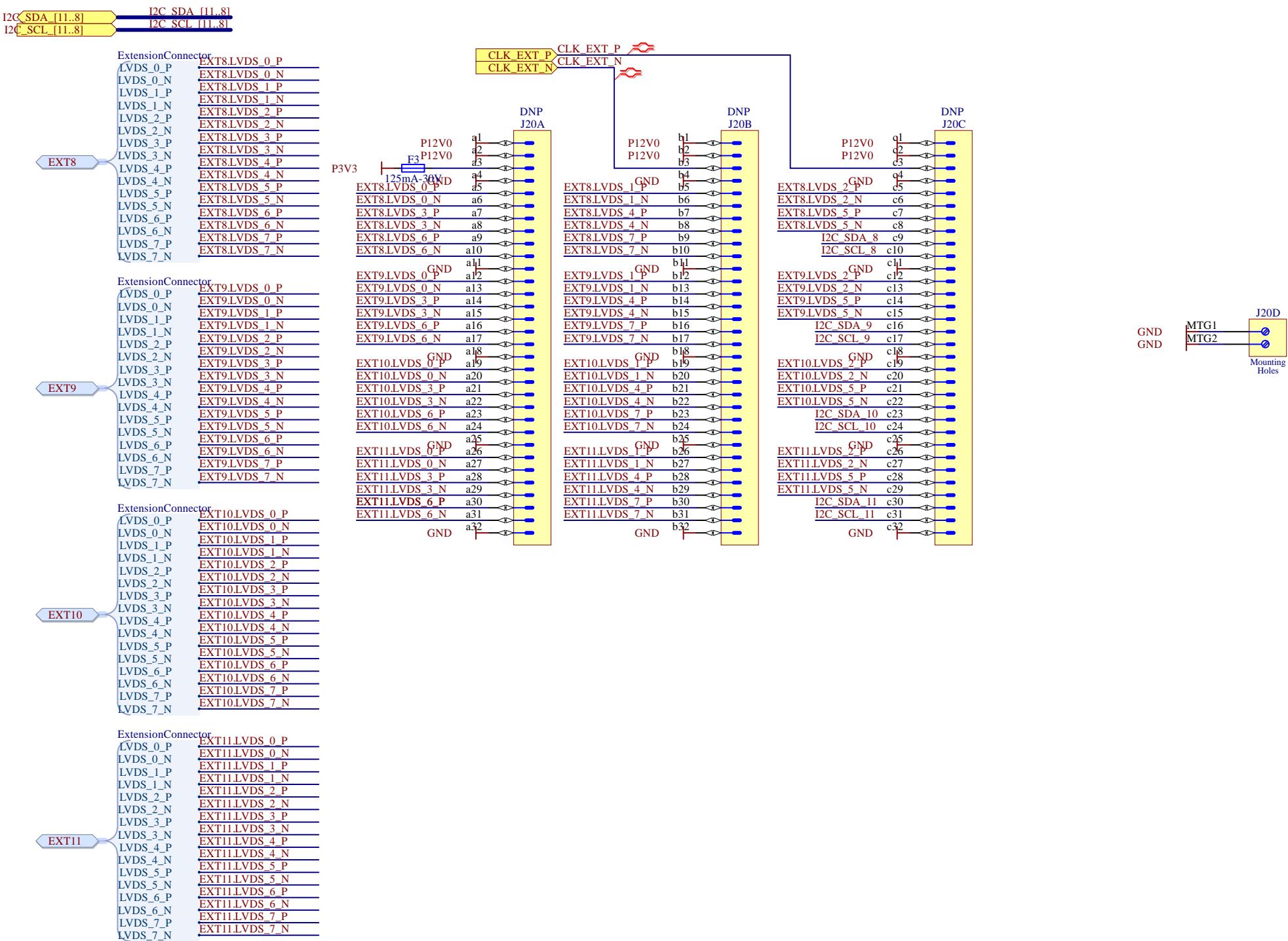
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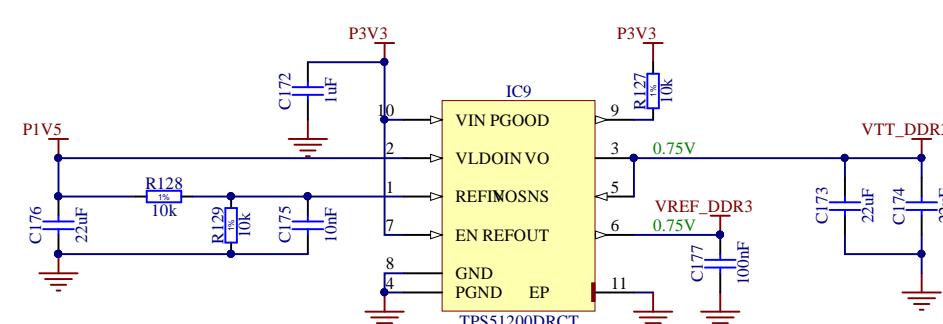
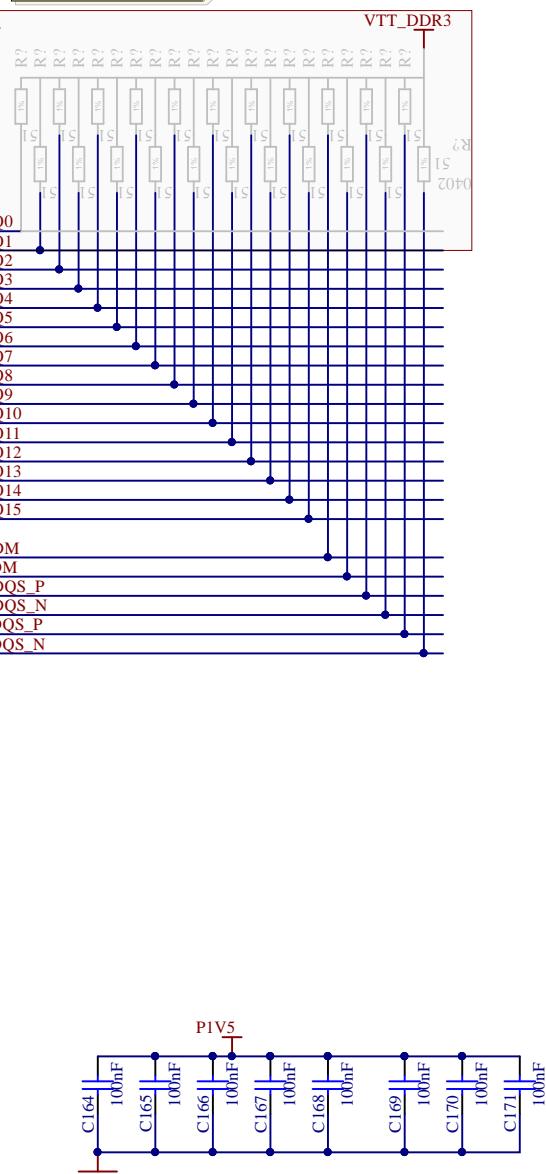
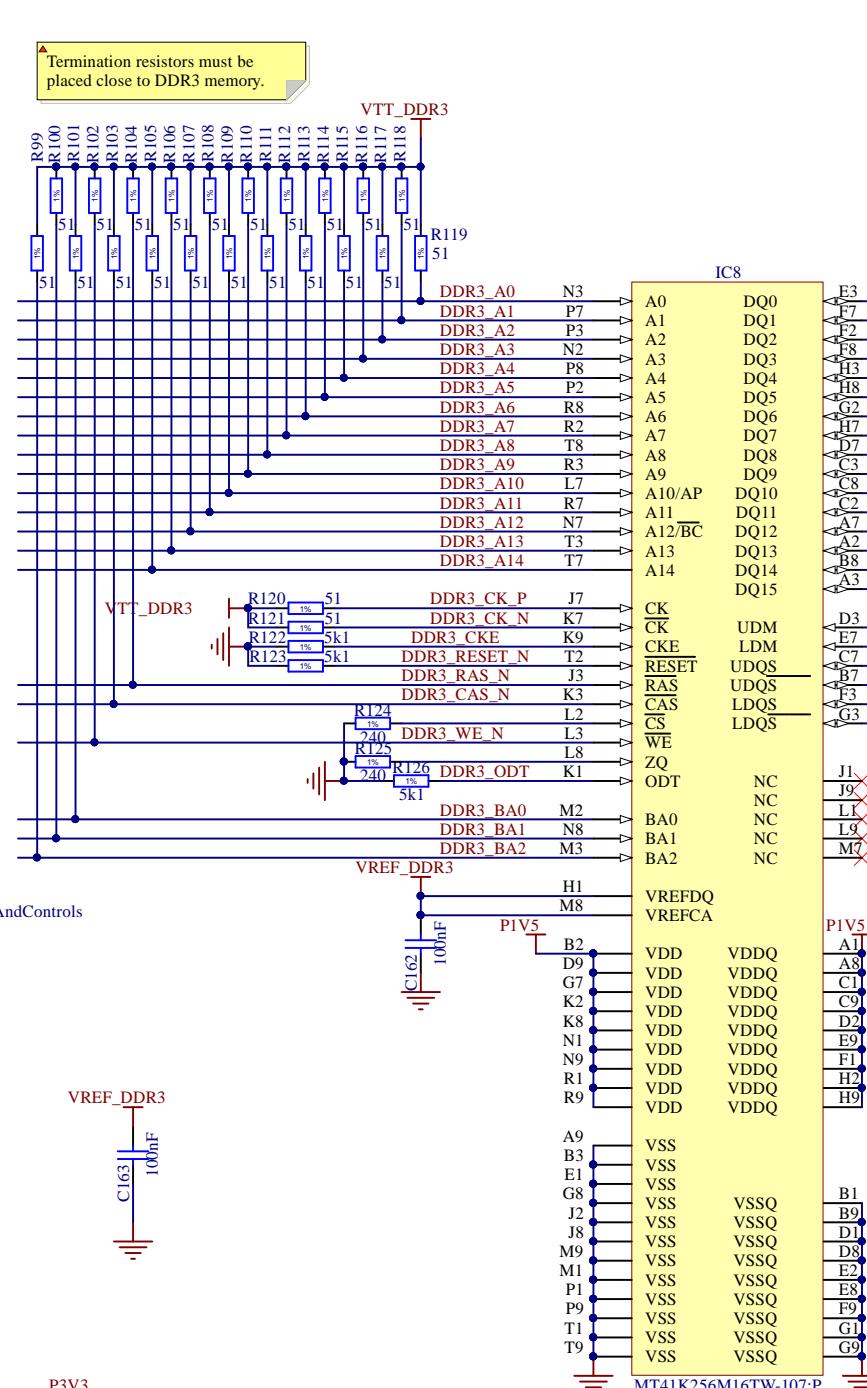
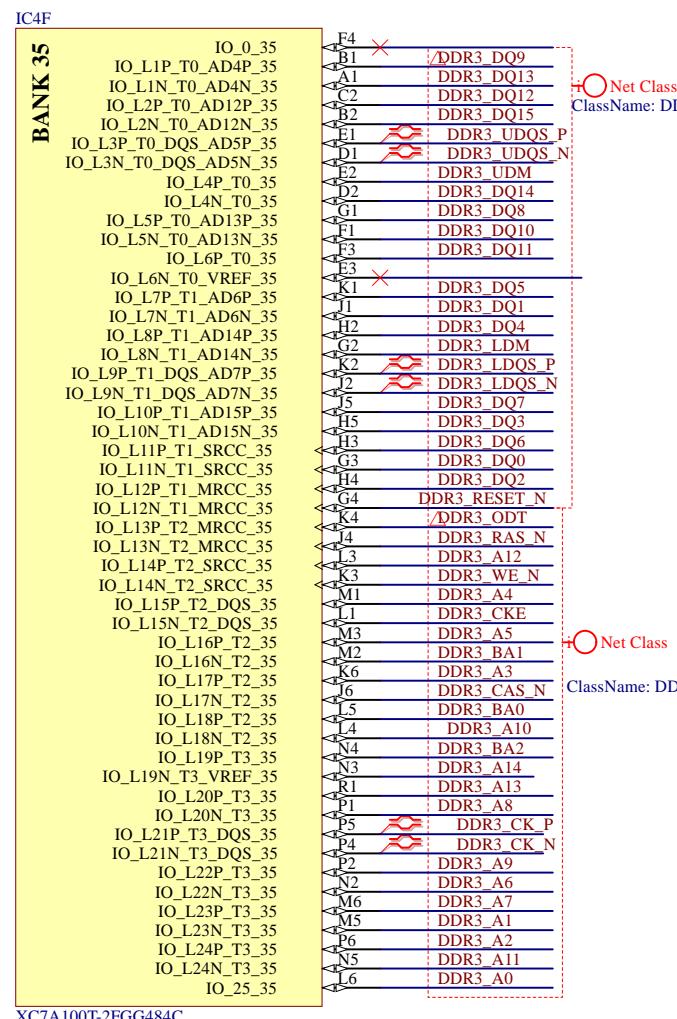


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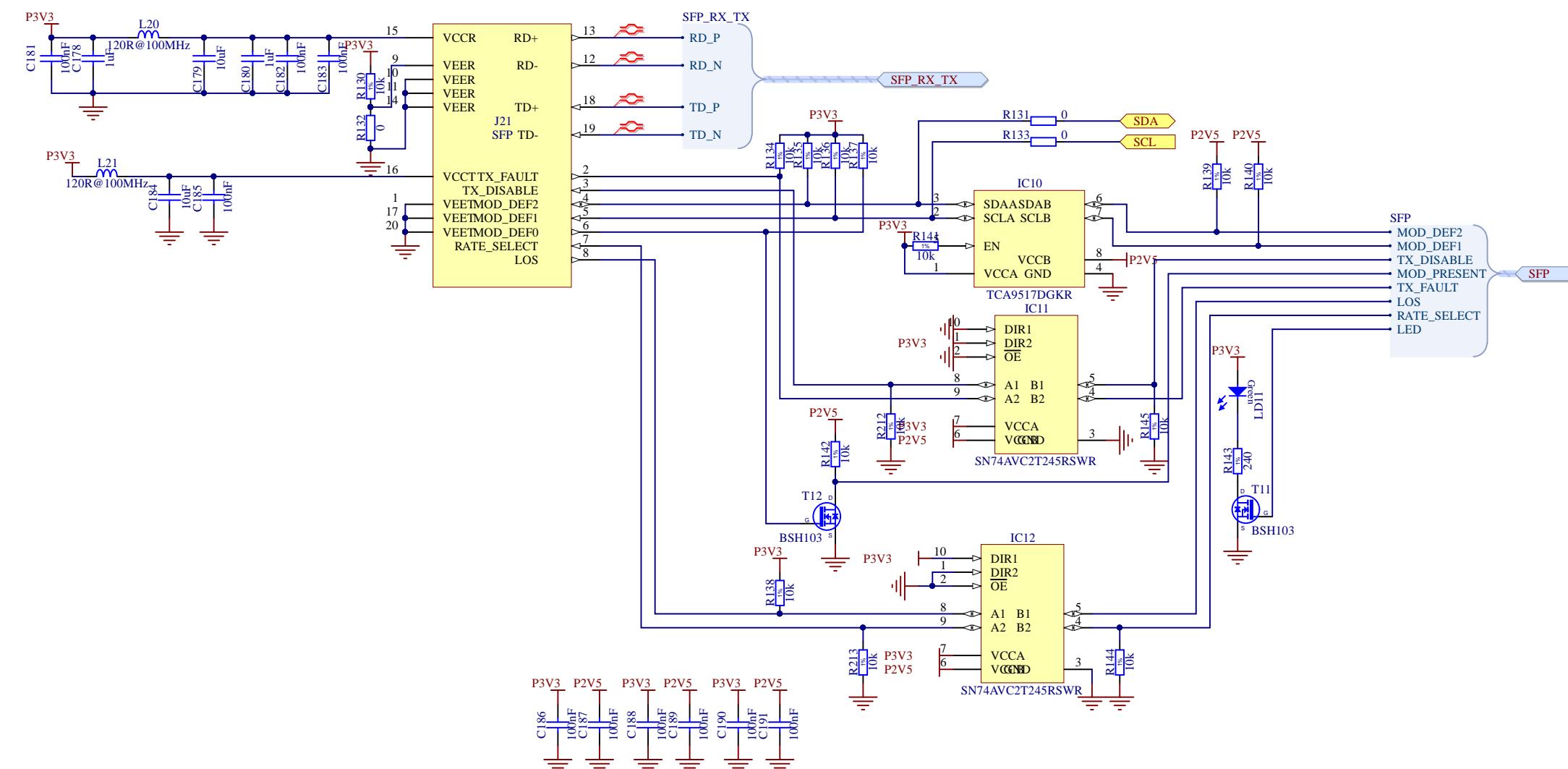
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Nowowiejska 15/19

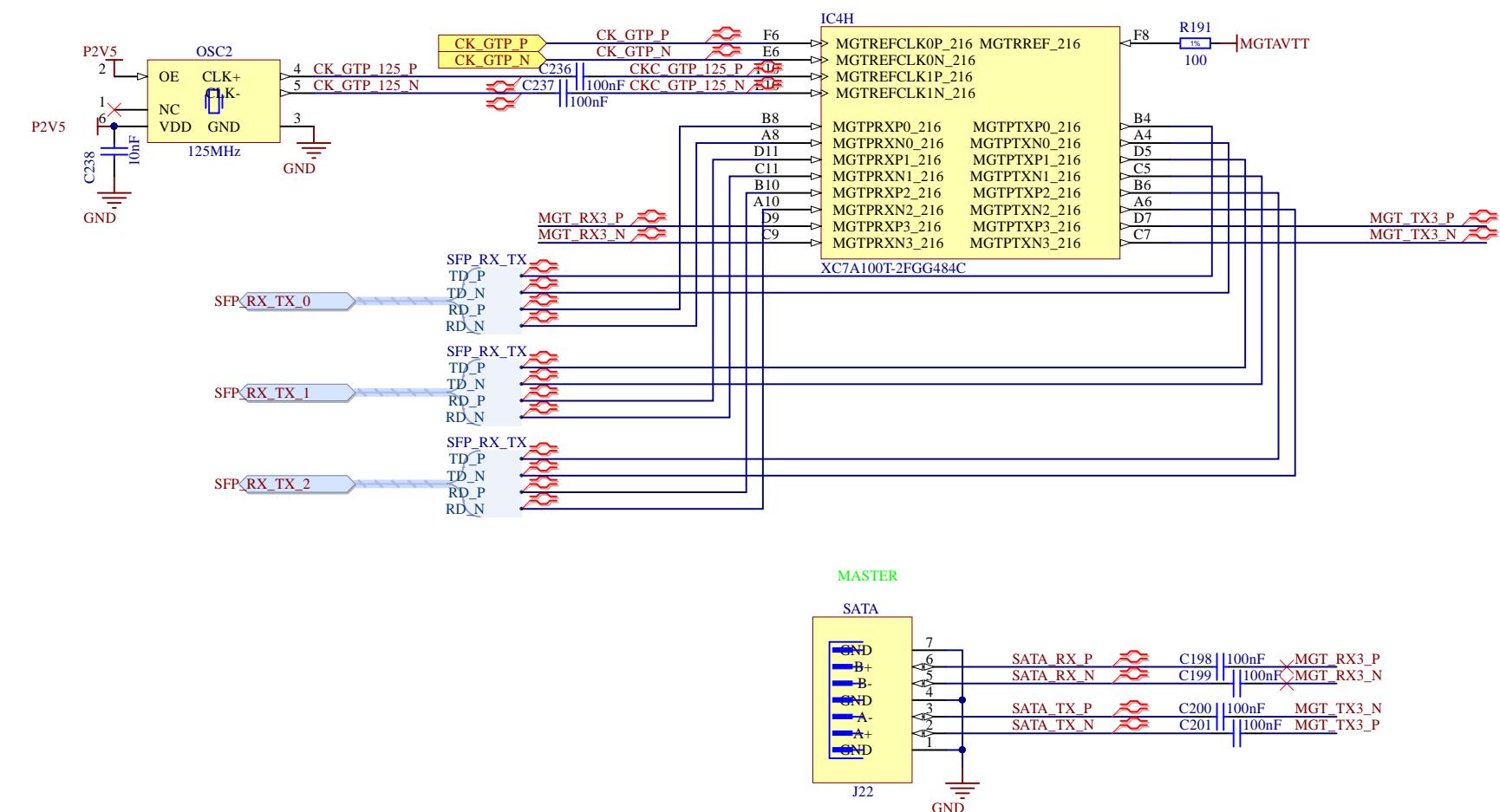
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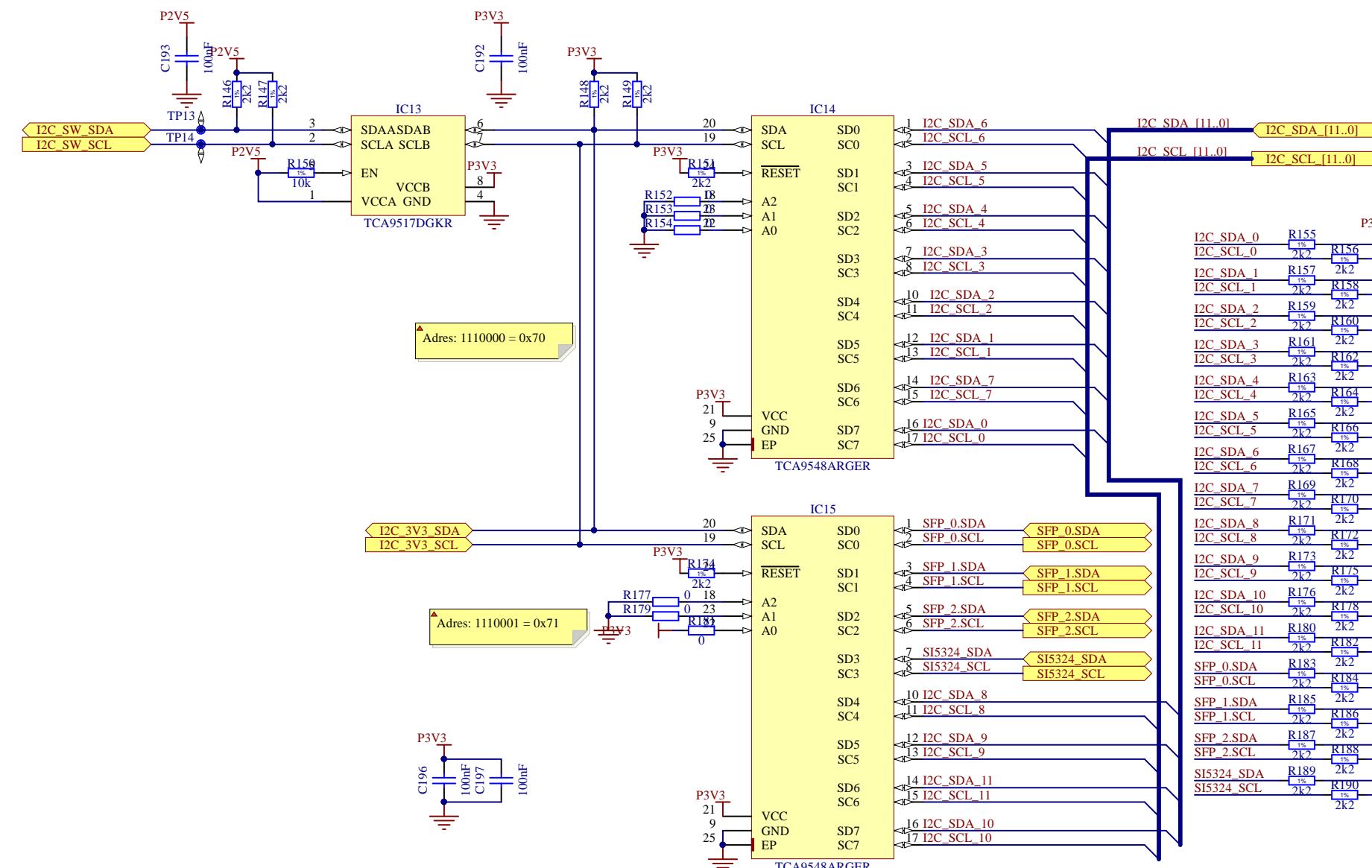
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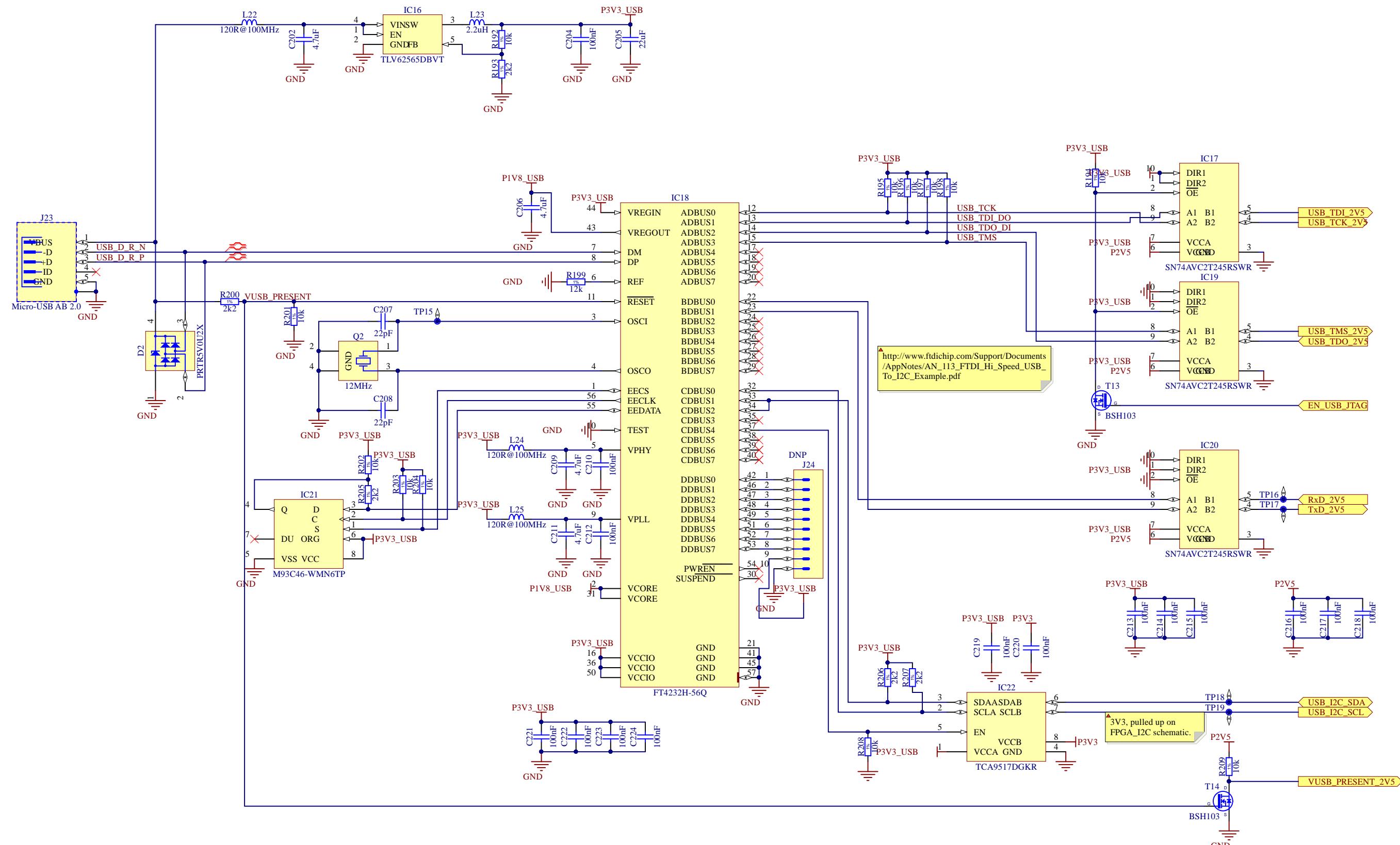


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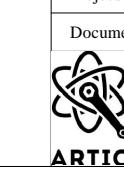
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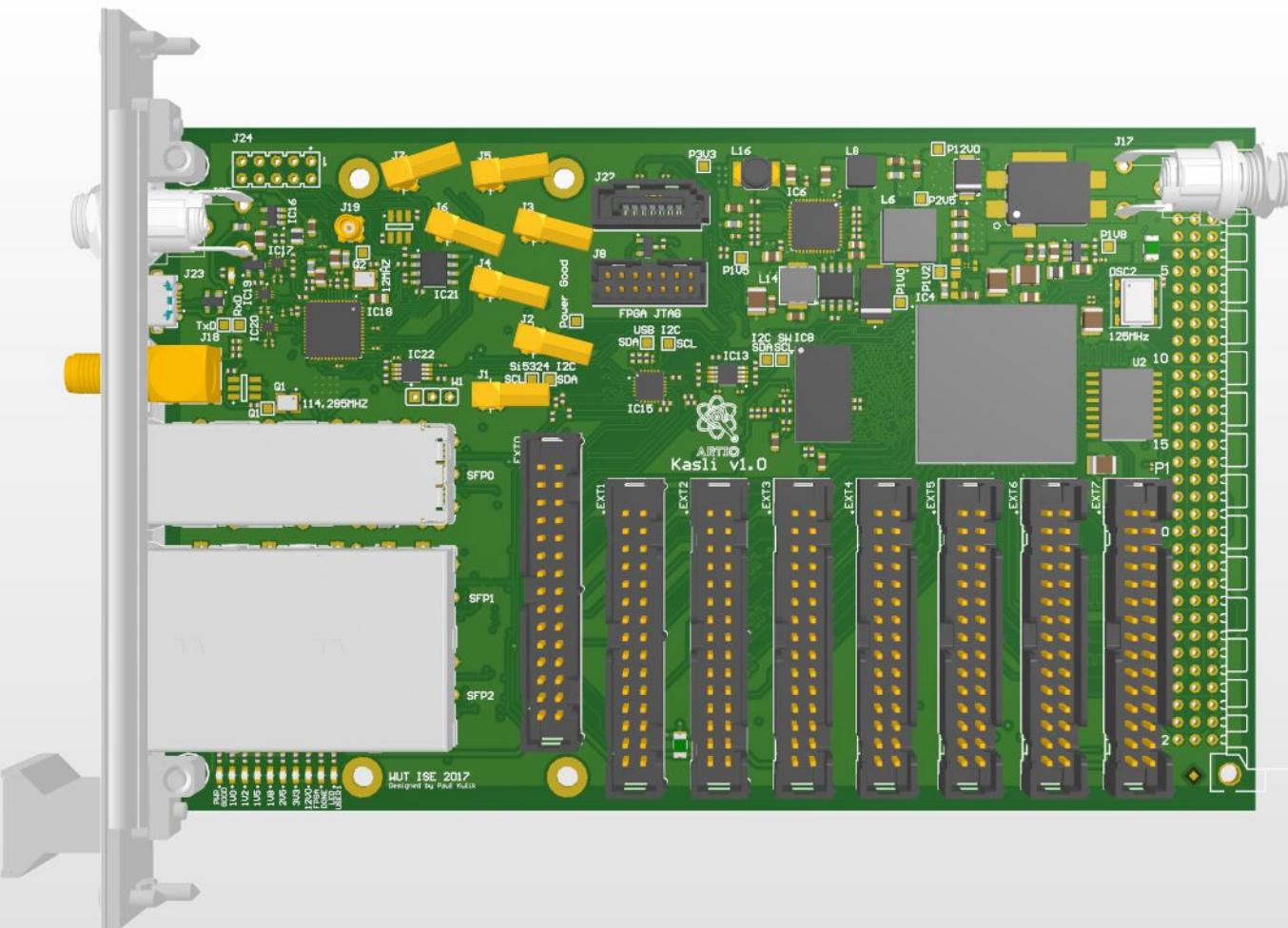
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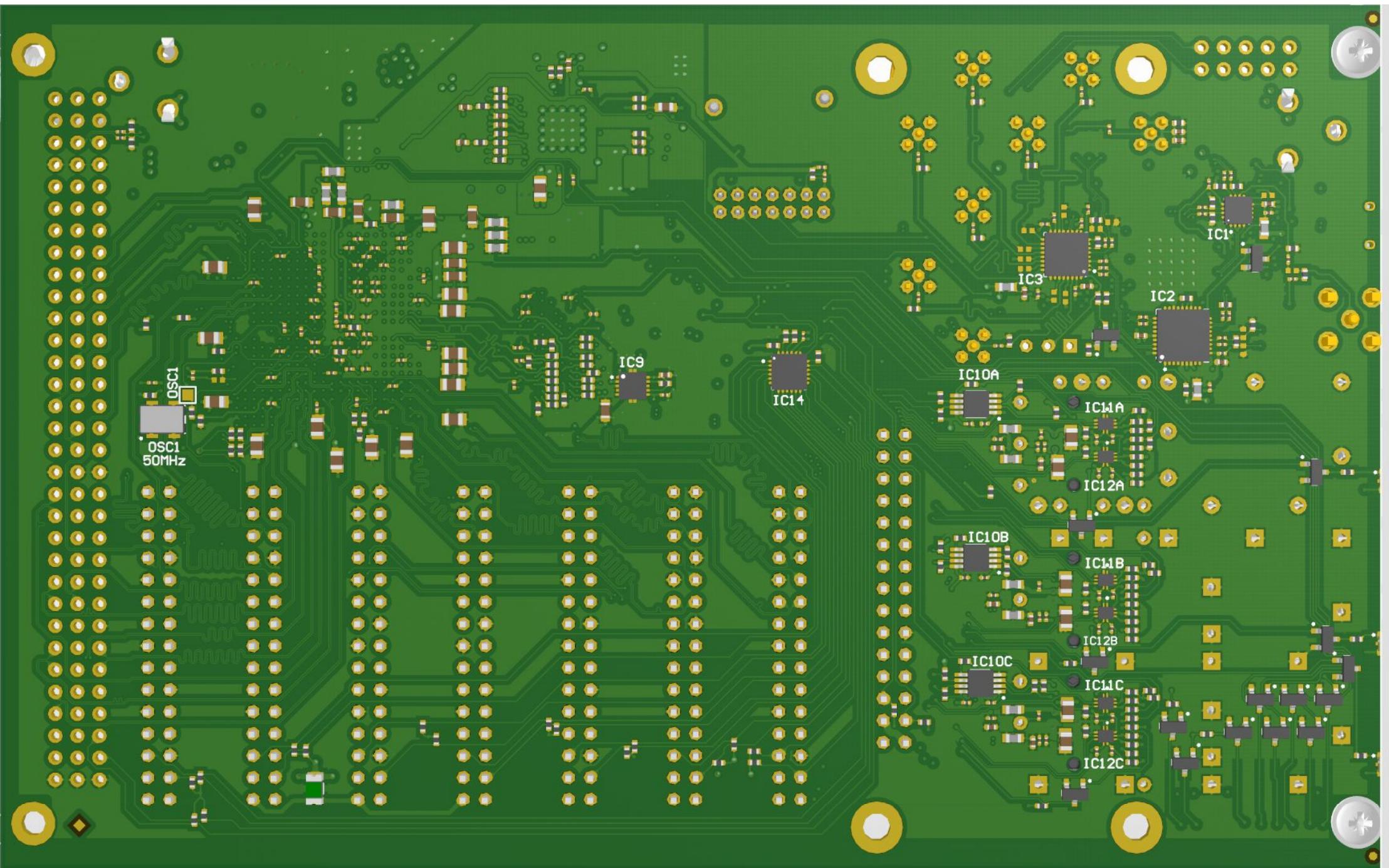
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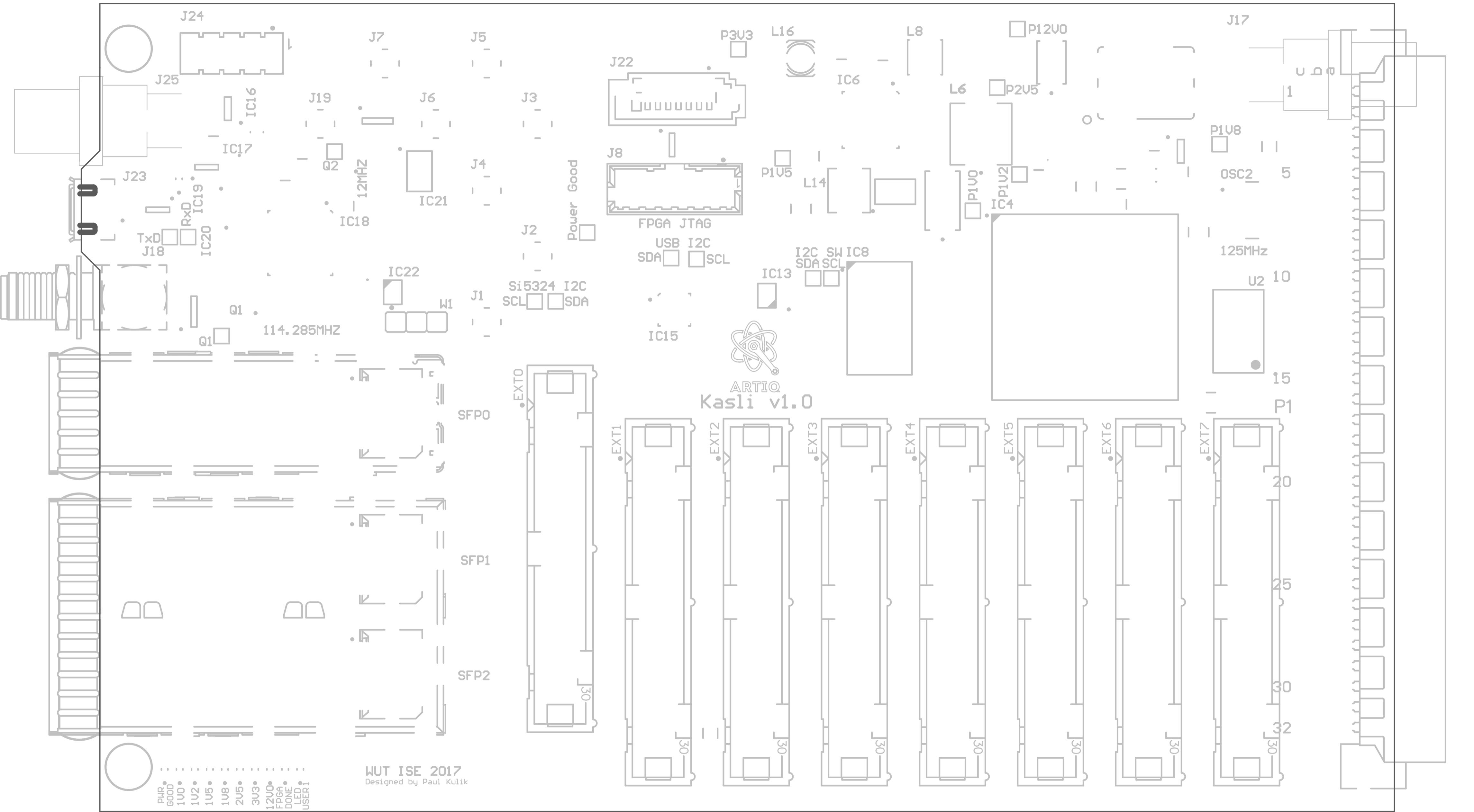
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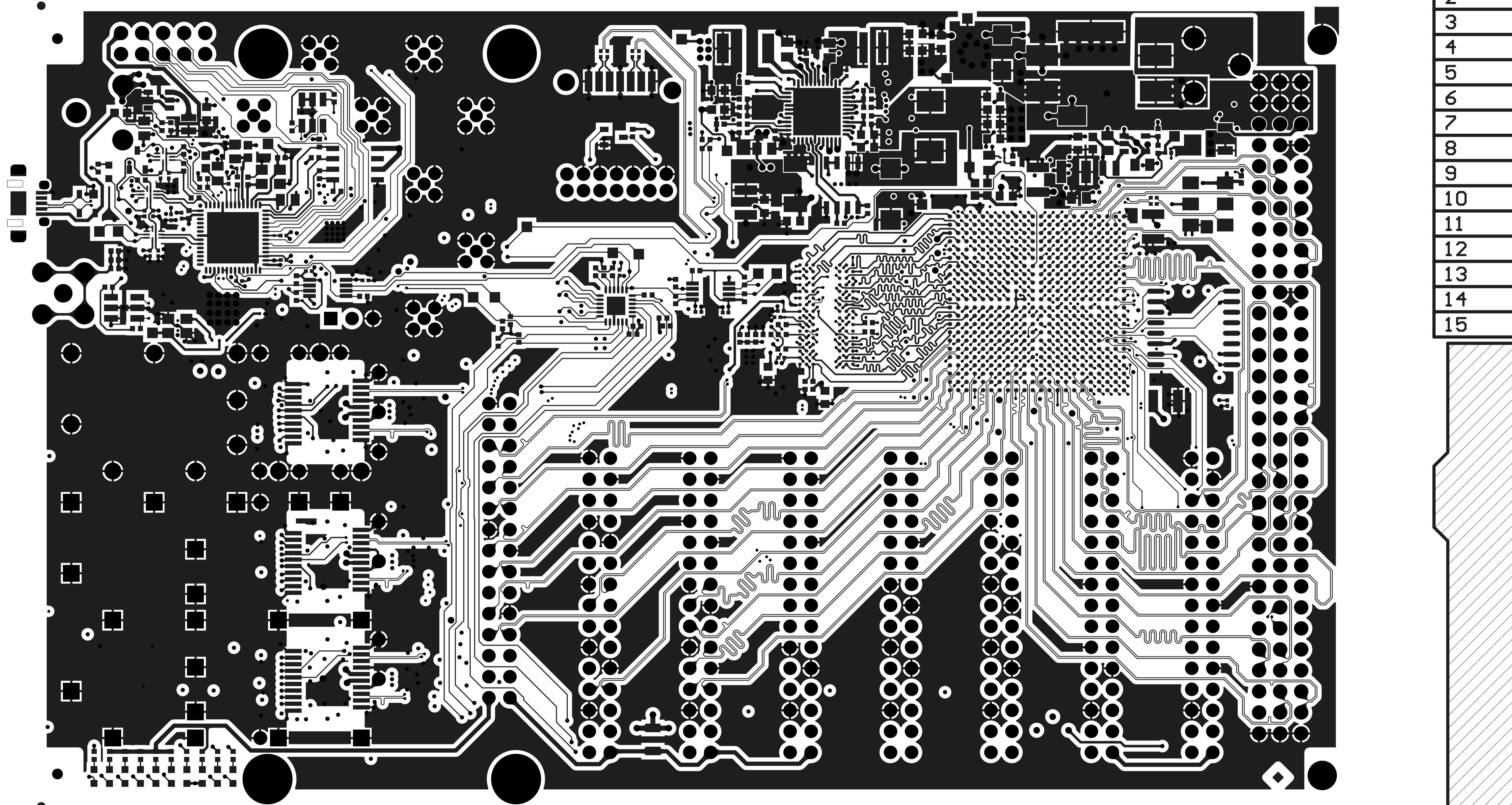
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Layer	Name	Material	Thickness
1	TopOverlay		
2	TopSolder	Solder Resist	0,89m
3	TopLayer	Copper	2,09m
4	Dielectric1	FR-4	4,33m
5	MidLayer1	Copper	0,71m
6	Dielectric2	FR-4	7,82m
7	MidLayer2	Copper	0,71m
8	Dielectric3	FR-4	28,74m
9	SignalLayer1	Copper	0,71m
10	Dielectric4	FR-4	7,82m
11	Internal Plane 1	Copper	0,71m
12	Dielectric5	FR-4	4,33m
13	BottomLayer	Copper	2,09m
14	BottomSolder	Solder Resist	0,89m
15	BottomOverlay		







Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	TopOverlay				
2	TopSolder	Solder Resist	0,89mil	3,5	
3	TopLayer	Copper	2,09mil		
4	Dielectric1	FR-4	4,33mil	4,2	
5	MidLayer1	Copper	0,71mil		
6	Dielectric2	FR-4	7,87mil	4,2	
7	MidLayer2	Copper	0,71mil		
8	Dielectric3	FR-4	28,74mil	4,2	
9	SignalLayer1	Copper	0,71mil		
10	Dielectric4	FR-4	7,87mil	4,2	
11	Internal Plane 1	Copper	0,71mil		
12	Dielectric5	FR-4	4,33mil	4,2	
13	BottomLayer	Copper	2,09mil		
14	BottomSolder	Solder Resist	0,89mil	3,5	
15	BottomOverlay				

