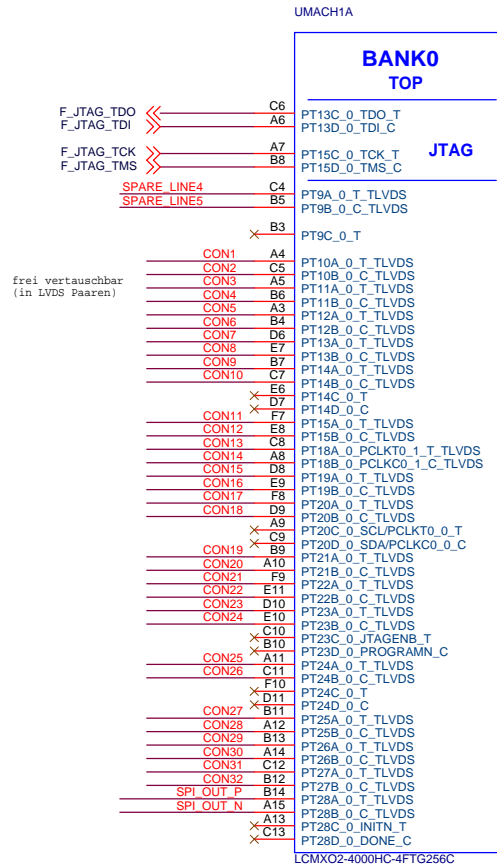
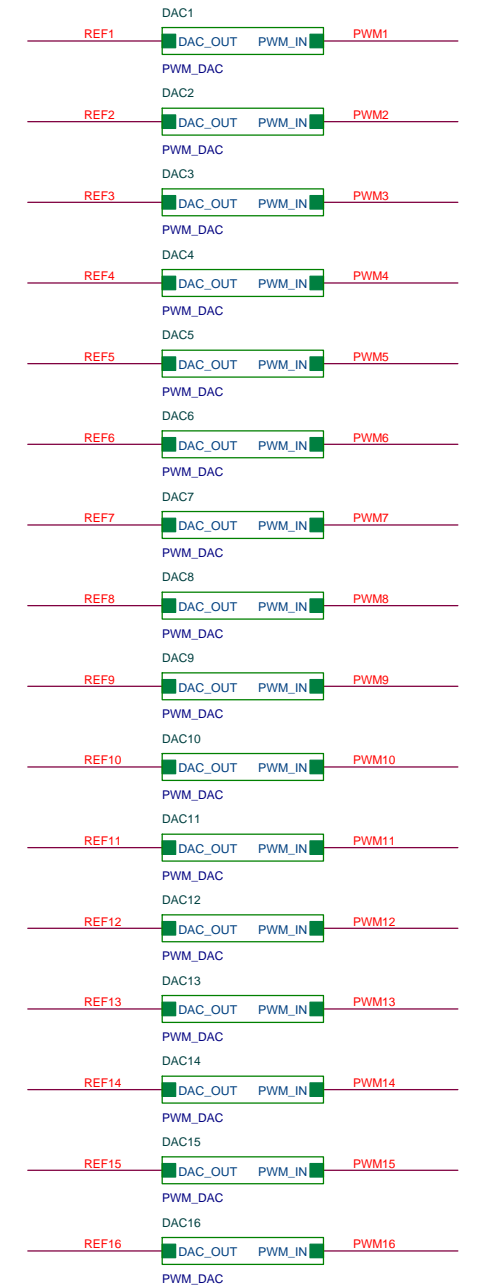
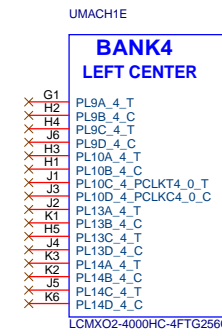
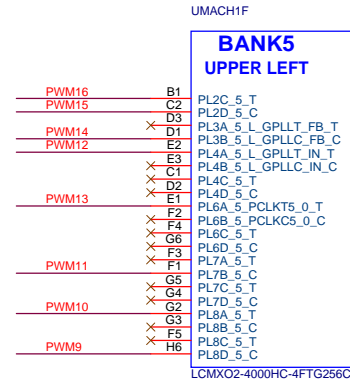
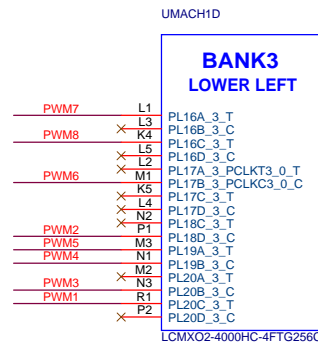
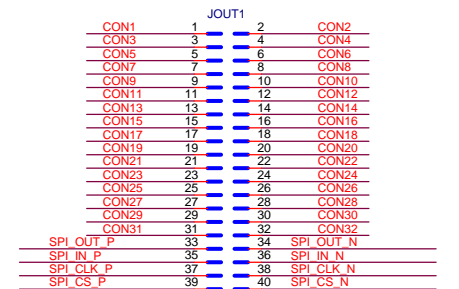
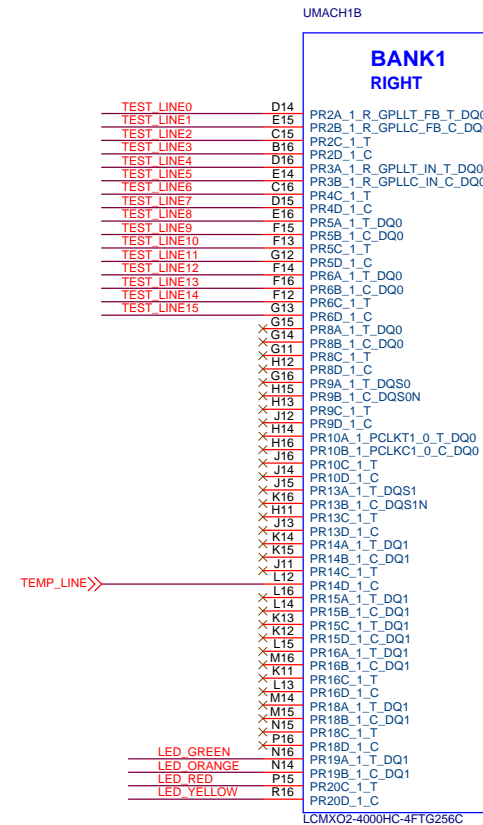
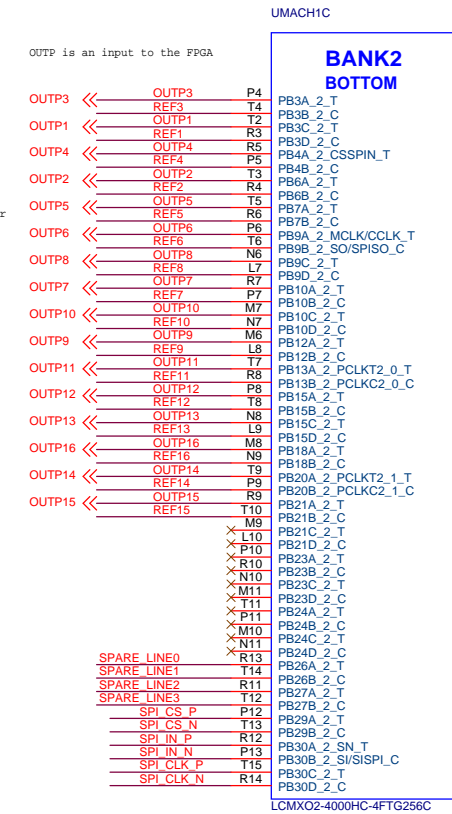


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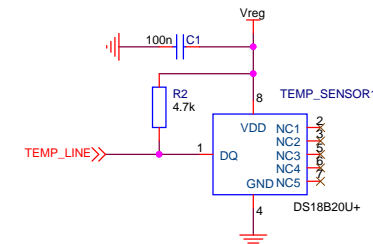
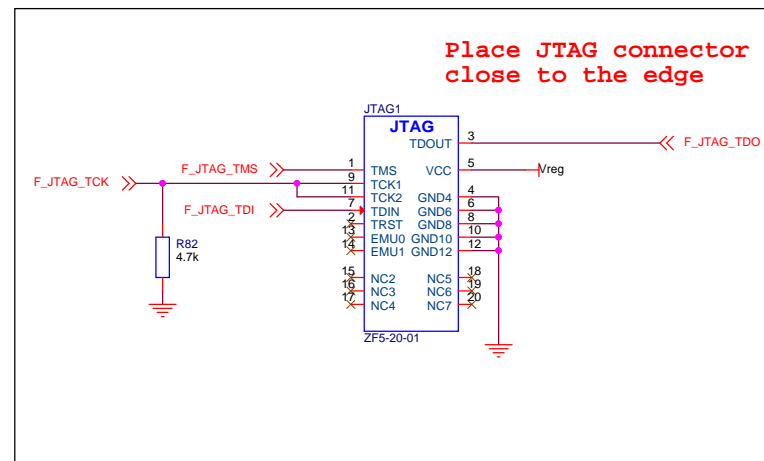
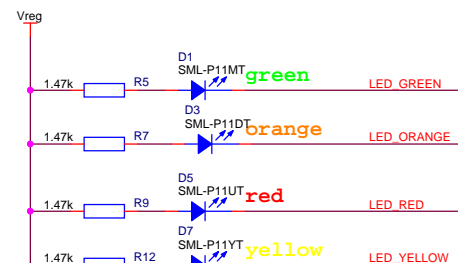
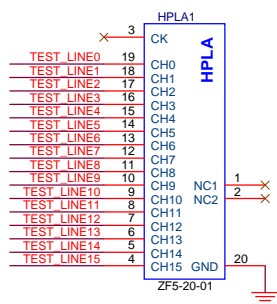
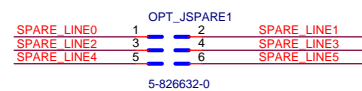
01_ERNI-Connector



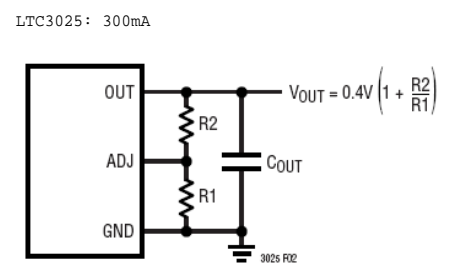
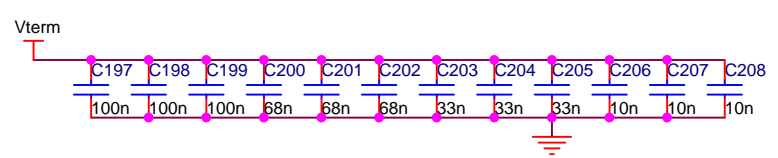
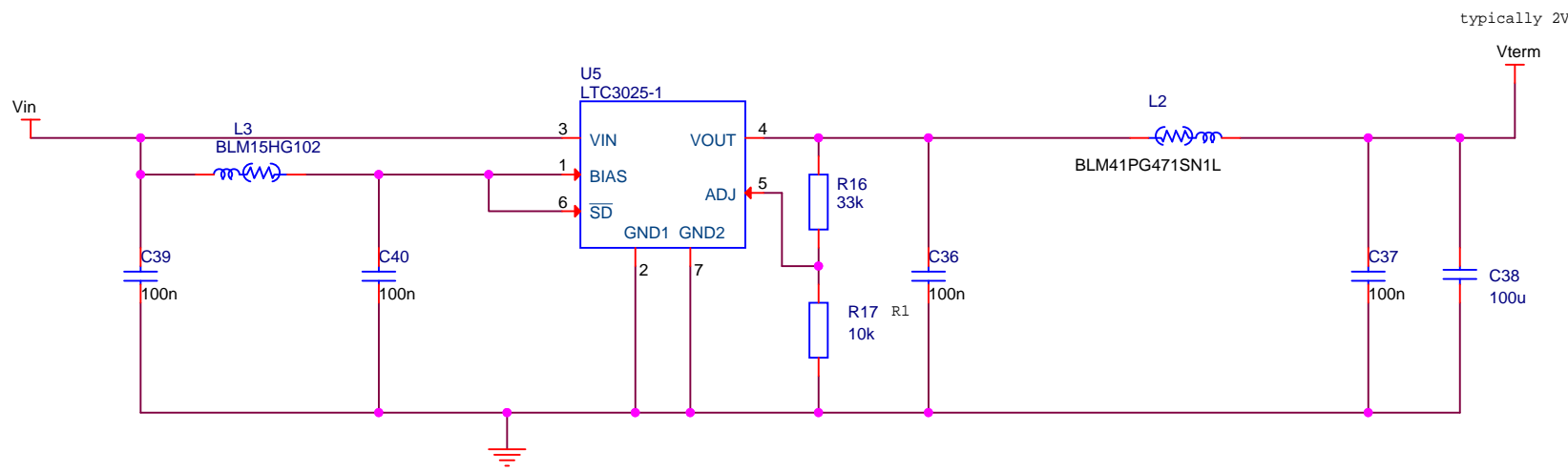
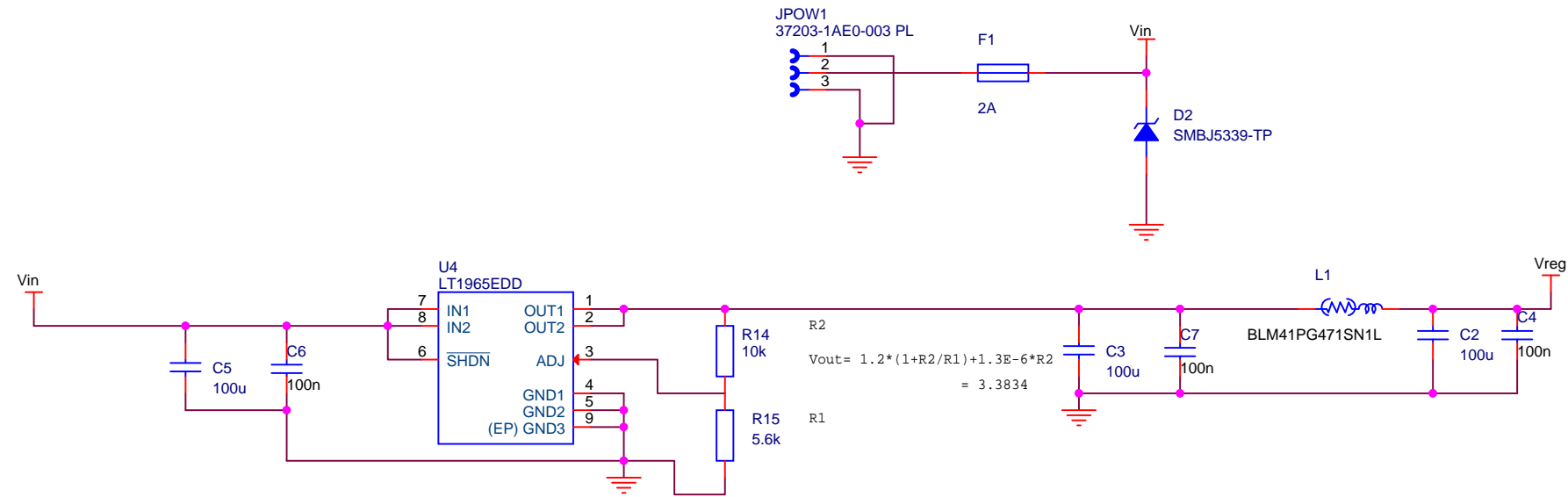
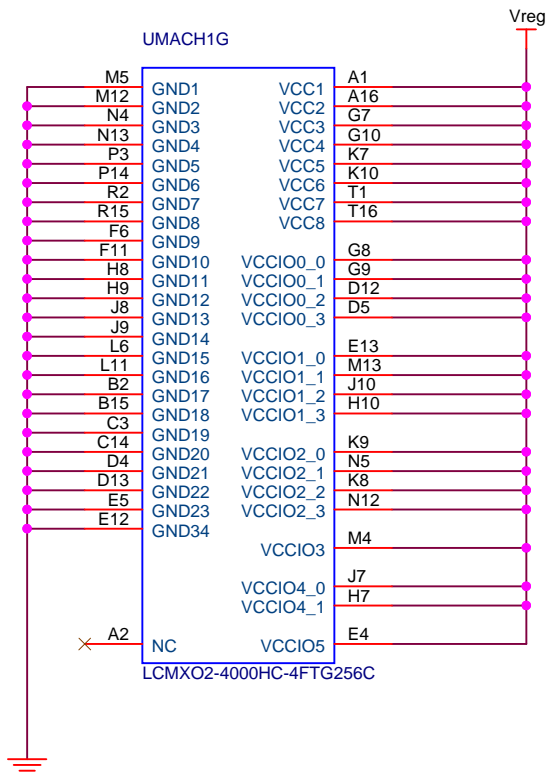
Bottom side: All LVDS receiver can have a termination resistors.



Nur bestücken nach Rücksprache



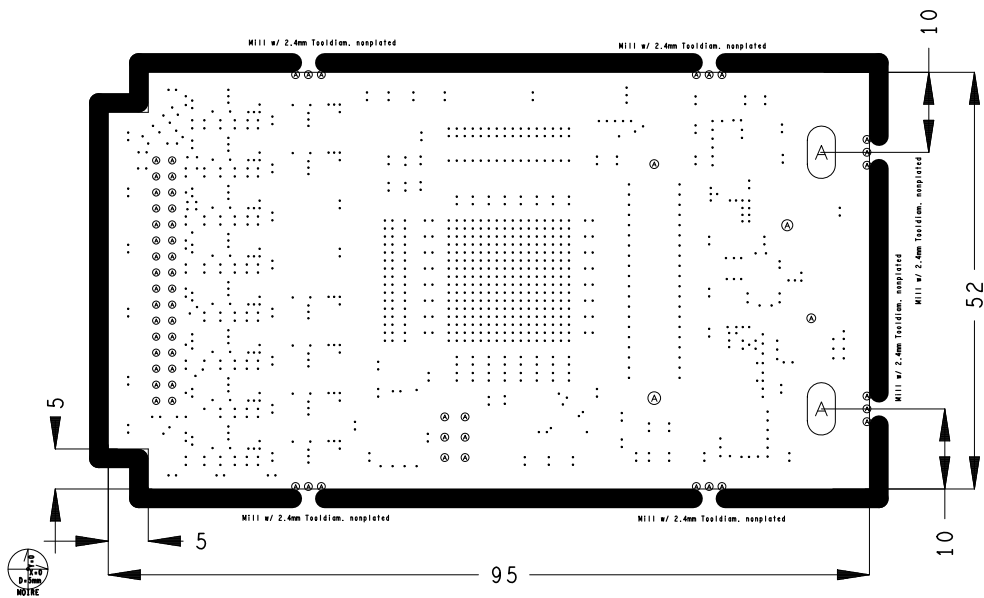
02_FPGA-Logic



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03_FPGA-Power

Design: K:\GSI\JOB\COME_AND_KISS\PANDA-DIRC-WASA\PANDA-DIRC-WASA
 Modified: Monday, December 10, 2012 Size: A3 Page: 3 / 35
 Designer: M.Traxler Layouter: S.Voltz



DRILL CHART: TOP to BOTTOM
ALL UNITS ARE IN MILLIMETERS

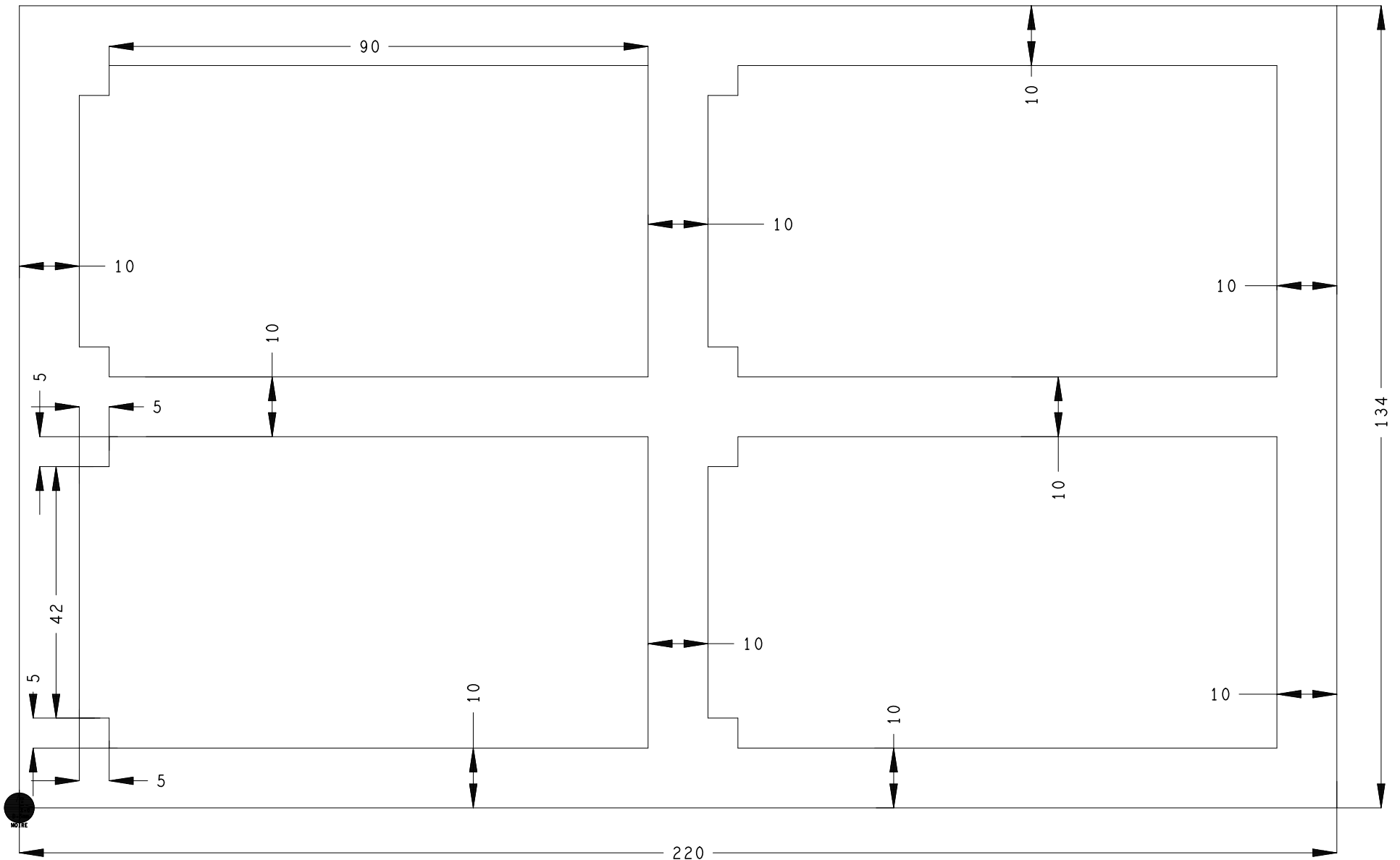
FIGURE	SIZE	PLATED	QTY
.	0.2	PLATED	1008
.	0.4	PLATED	1
⊙	0.9	PLATED	32
⊙	1.0	PLATED	6
⊙	1.0	NON-PLATED	18
⊙	1.1	NON-PLATED	2
⊙	1.4	NON-PLATED	1
⊙	1.6	NON-PLATED	1
⊙	2.4	NON-PLATED	12
(A)	6.5 x 3.5	NON-PLATED	2

TOTAL HOLES: 1083

Jobname PADIWA3 Date 12.2012 Designer M.Traxler Layouter S.Voltz

Layer Nickname

Drd



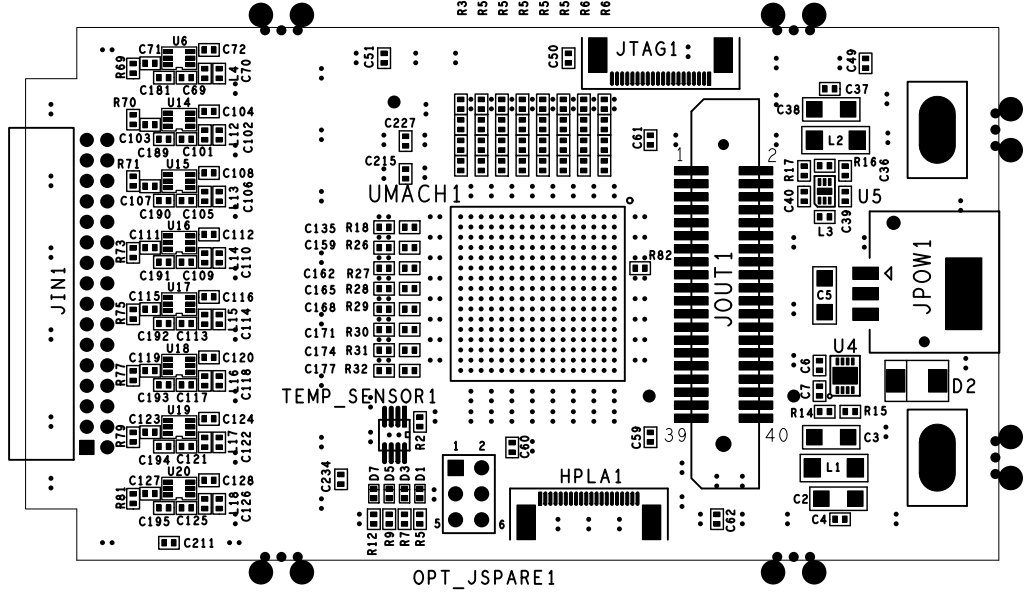
Jobname	Date	Designer	Layouter
PADIWA3	12.2012	M.Traxler	S.Voltz

Layer Nickname

Fab

GSI-Da
 PADIWA3
 MT/SV/12.2012 AST

R34 C133 R35 C134
 R50 C157 R51 C158
 R52 C160 R53 C161
 R54 C163 R55 C164
 R56 C166 R57 C167
 R58 C169 R59 C170
 R60 C172 R61 C173
 R62 C175 R63 C176

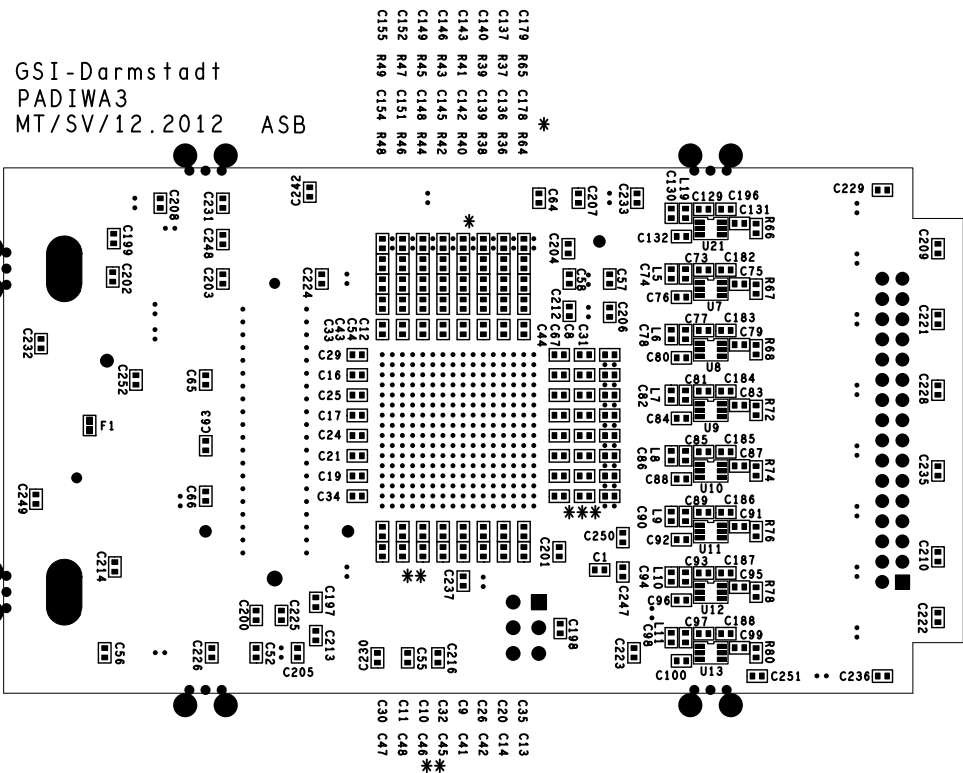


Jobname	Date	Designer	Layouter
PADIWA3	12.2012	M.Traxler	S.Voltz

Layer Nickname

Ast

 C28 R33 C180
 C18 R19 C138
 C23 R20 C141
 C68 R21 C144
 C22 R22 C147
 C53 R23 C150
 C15 R24 C153
 C27 R25 C156



GSI-Darmstadt
 PADIWA3
 MT/SV/12.2012 ASB

*
 C179 R65 C178 R64
 C137 R37 C136 R36
 C140 R39 C139 R38
 C143 R41 C142 R40
 C146 R43 C145 R42
 C149 R45 C148 R44
 C152 R47 C151 R46
 C155 R49 C154 R48

C35 C13
 C20 C14
 C26 C42
 C9 C41
 C32 C45*
 C10 C48*
 C11 C48
 C30 C47

эмашкншн 19ydJ

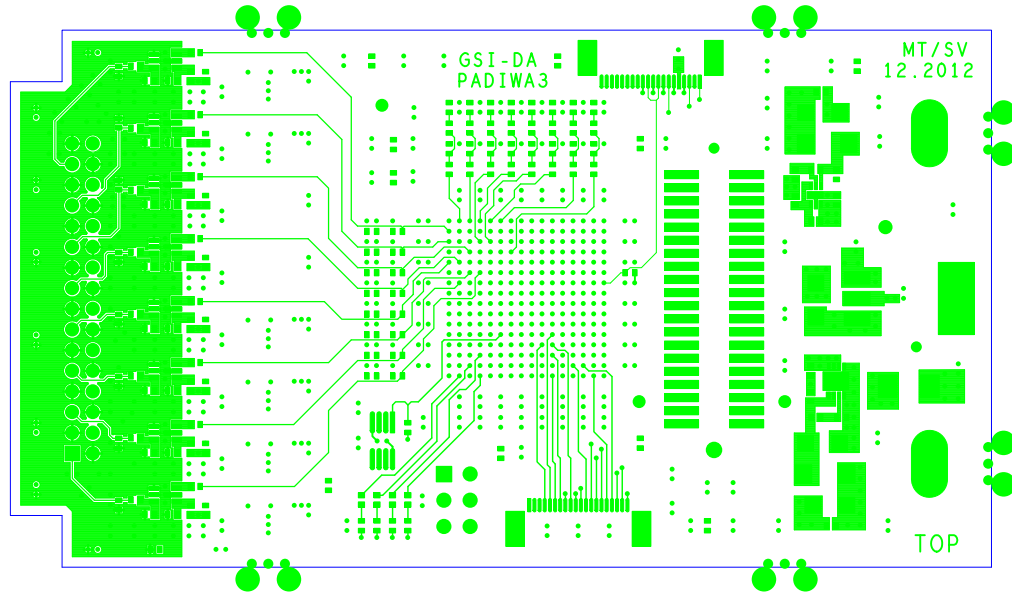
Jobname PADIWA3

Date 12.2012

Designer M.Traxler

Layouter S.Voltz

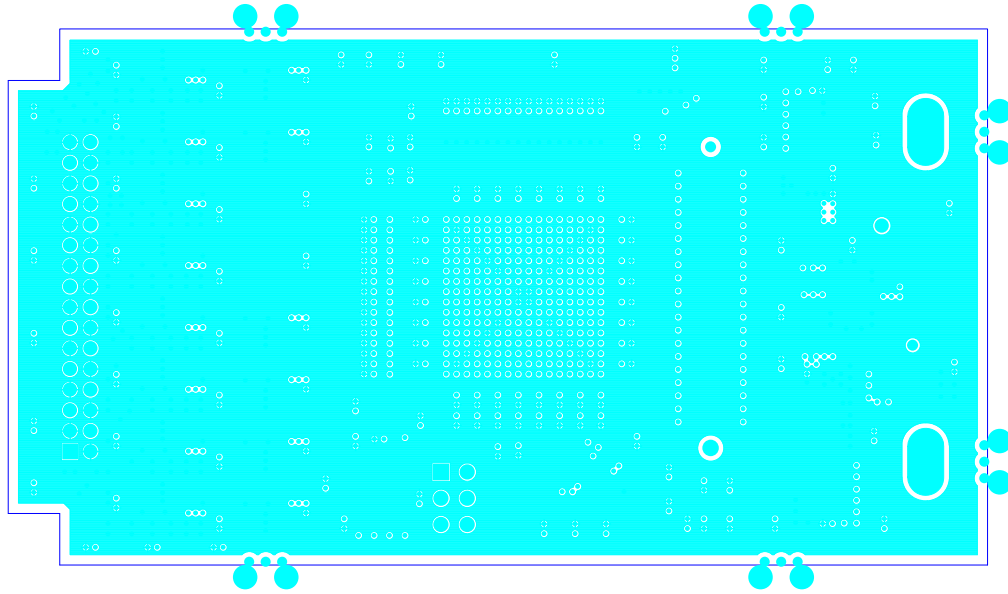
Signals



Jobname	Date	Designer	Layouter
PADIWA3	12.2012	M.Traxler	S.Voltz

Layer Nickname Top

GND-Plane



Jobname
PADIWA3

Date
12.2012

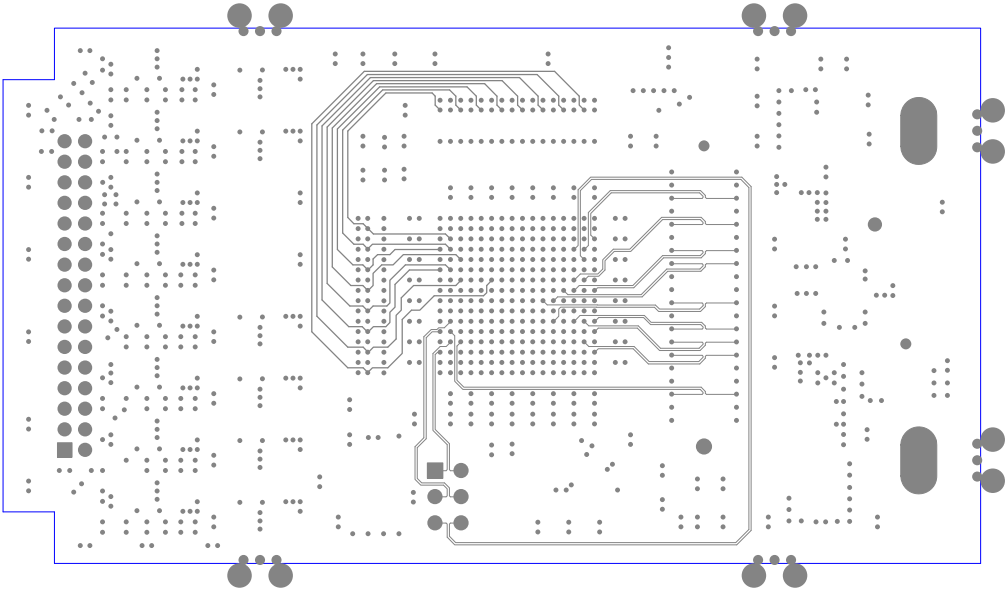
Designer
M.Traxler

Layouter
S.Voltz

Layer Nickname

I01

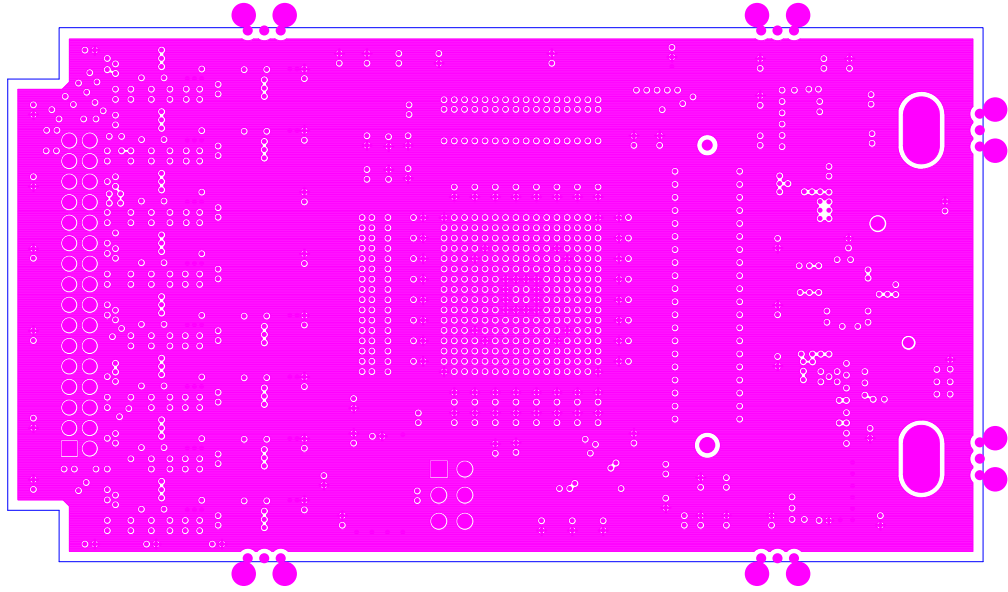
Diff.Pairs



Jobname	Date	Designer	Layouter
PADIWA3	12.2012	M.Traxler	S.Voltz

Layer Nickname
I02

VREG-Plane



Jobname
PADIWA3

Date
12.2012

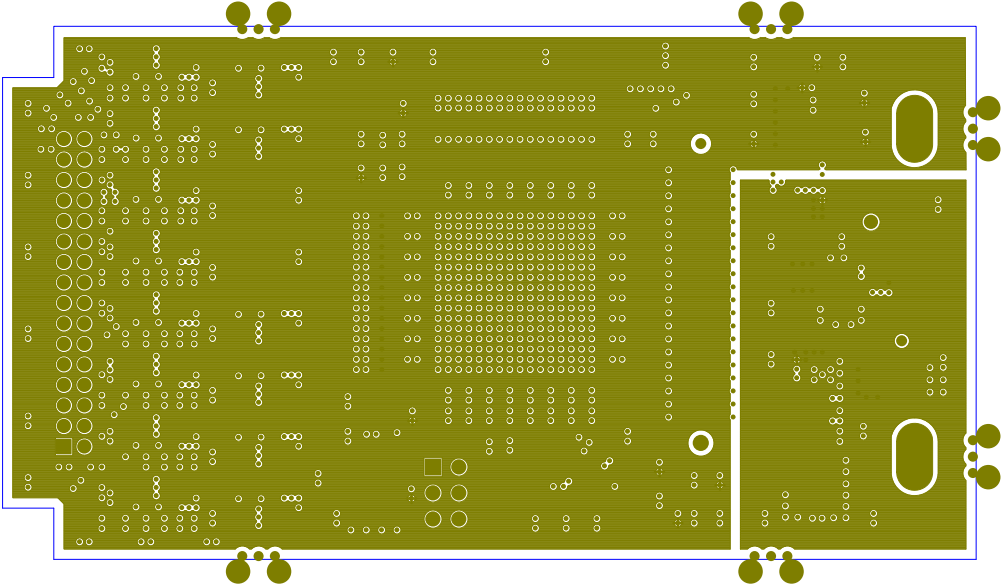
Designer
M.Traxler

Layouter
S.Voltz

Layer Nickname

I03

VTERM-Plane, VIN-Plane

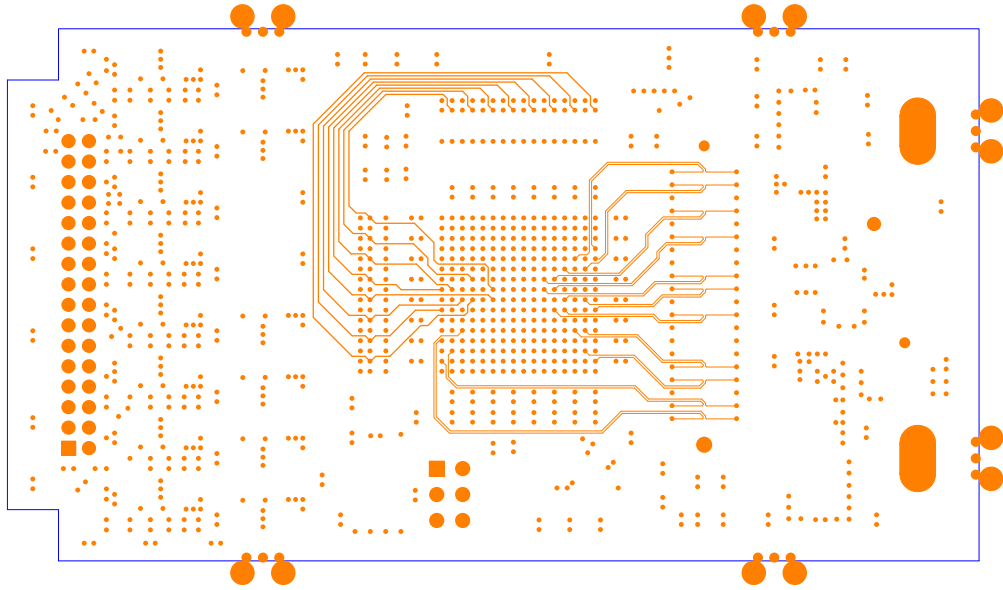


Jobname PADIWA3 Date 12.2012 Designer M.Traxler Layouter S.Voltz

Layer Nickname

I04

Diff.Pairs



Jobname
PADIWA3

Date
12.2012

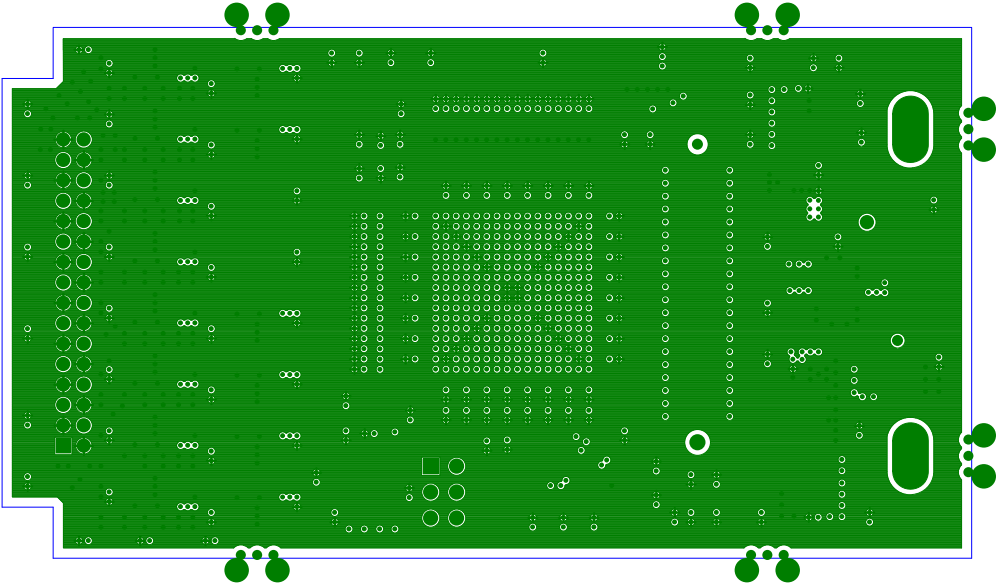
Designer
M.Traxler

Layouter
S.Voltz

Layer Nickname

I05

GND - Plane



Jobname
PADIWA3

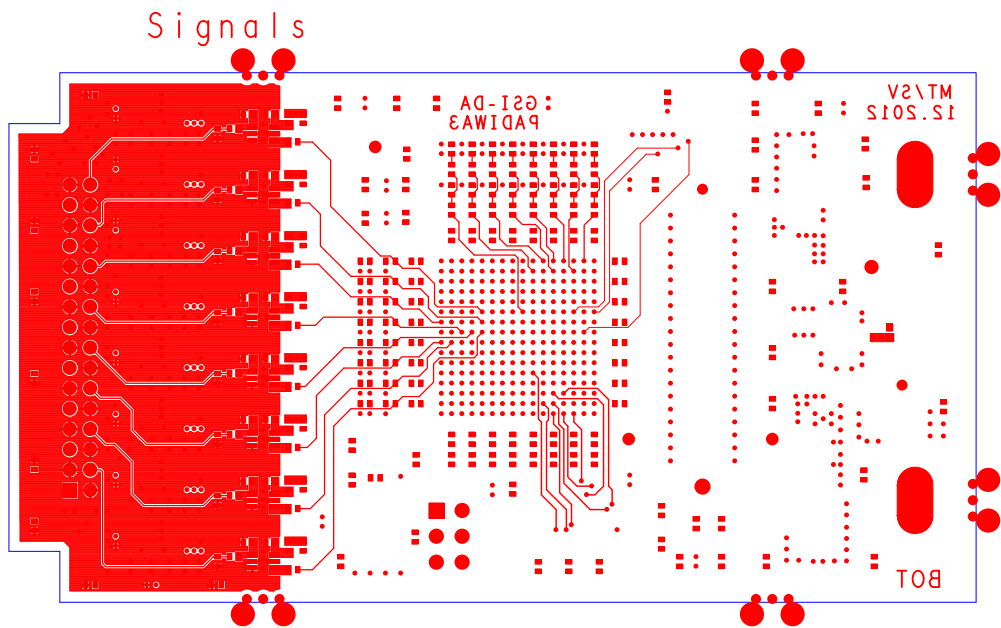
Date
12.2012

Designer
M.Traxler

Layouter
S.Voltz

Layer Nickname

I06



Jobname
PADIWA3

















Date
12.2012

Designer
M.Traxler

Layouter
S.Voltz

Layer Nickname

Bot

LAGENAUFBAU (Impedanz)									
8 - Lagen									
Kern: mm Cu / µm									
WE-Artikel Nr.:					8 - Lagen				
KUNDE:		GSI PADIWA2							
LAGENBEZEICHNUNG		AUFBAU			BASIS-Material	CU	PREPREG ANZAHL/TYP	ENDDICKE	KUNDEN-FORDERUNG
KUNDE	WE							[µm]	[µm]
1	TOP/VS				Folie	9 µm	1)	9	
							1x 2113	94	
2	2					18 µm		18	
					0,15 mm			150	
3	3					18 µm		18	
							2x 2116	214	
4	4					18 µm		18	
					0,51 mm			510	
5	5					18 µm		18	
							2x 2116	214	
6	6					18 µm		18	
					0,15 mm			150	
7	7					18 µm		18	
							1x 2113	94	
8	BOT/RS				Folie	9 µm		9	
	Imp	Imp.-Lage	LBBR	ISO	ISO z. Masse				
	Zdiff	L3/L6 = 100,10 Ohm	100µm	120µm					
	Zdiffcopl	L3/L6 = 100,30 Ohm	100µm	130µm	150µm				
	Zo	VS/RS =49,30 Ohm	150 µm						1) Kupferenddicke Außenlagen nach IPC (35µm Forderung)
	Zo copl	VS/RS =49,90 Ohm	130µm		150µm				
		Material TG 150 hf							
					Gesamtdicke Material:			1552	
		Anmerkung: Werte für Prepreg sind Mittelwerte (der genaue Wert ist von den Leiterbildstrukturen abhängig)							
MATERIALDICKE:		1,53	+/-	0,16	mm	Index	Datum:	Bearbeiter:	
DICKE über galv. Endoberfläche		1,60	+/-	0,17	mm		05.12.2012	A.Wodke	
DICKE über LSM incl.galv.-Kupfer		1,64	+/-	0,18	mm				
Kundenforderung:			+/-		mm	Messstelle:			
Erstellt am	von	Geprüft am	von	Freigegeben am	von	Revision			
28.09.2006	M.Kress	24.10.2006	S.Baumann	25.10.2006	R.Taurus	00	Seite:	1+	

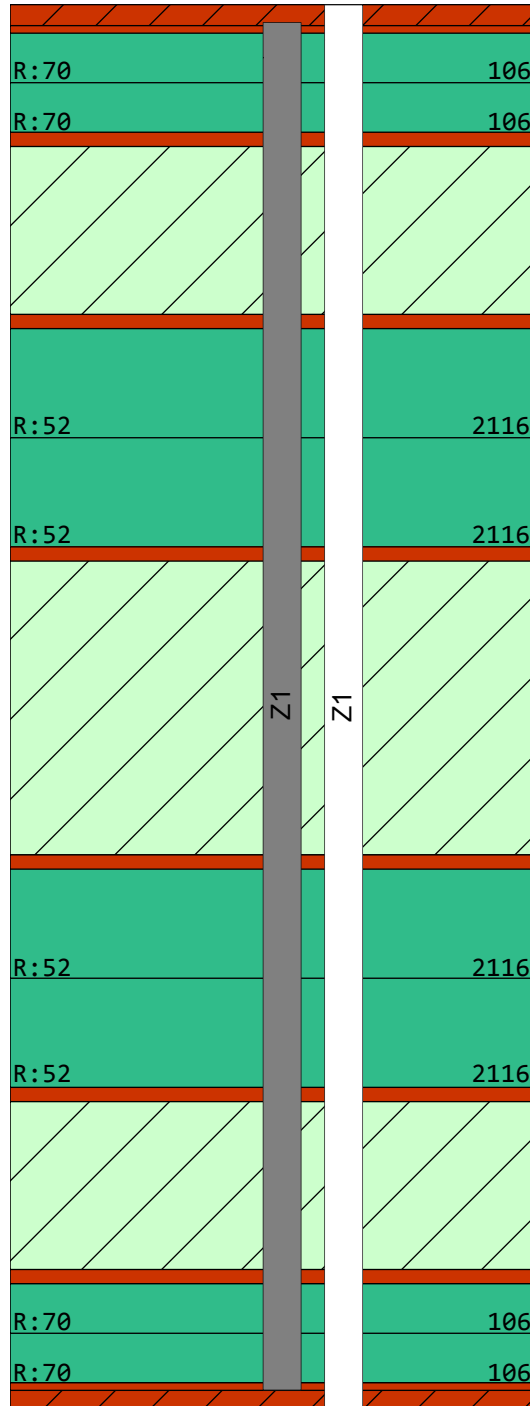
Material (µm)

Stack up

File

Assembly

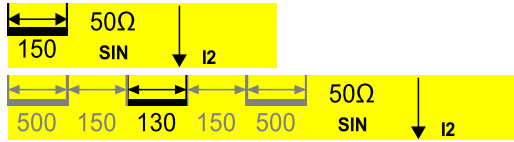
25 Galvanic Cu
 9 Copper
 50 NP-155F-B
 43 NP-155F-B
 17 Copper
 200 NP-155F-TL
 17 Copper
 109 NP-155F-B
 113 NP-155F-B
 17 Copper
 350 NP-155F-TL
 17 Copper
 113 NP-155F-B
 109 NP-155F-B
 17 Copper
 200 NP-155F-TL
 17 Copper
 43 NP-155F-B
 50 NP-155F-B
 9 Copper
 25 Galvanic Cu



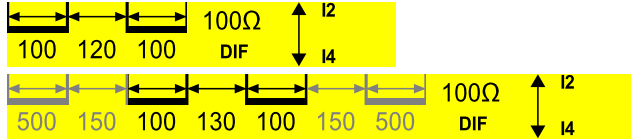
BS ⓘ
 I2
 I3 ⓘ
 I4
 I5
 I6 ⓘ
 I7
 LS ⓘ

A1

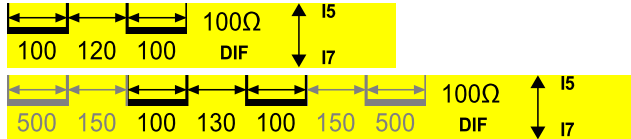
bs



i3



i6



Is

