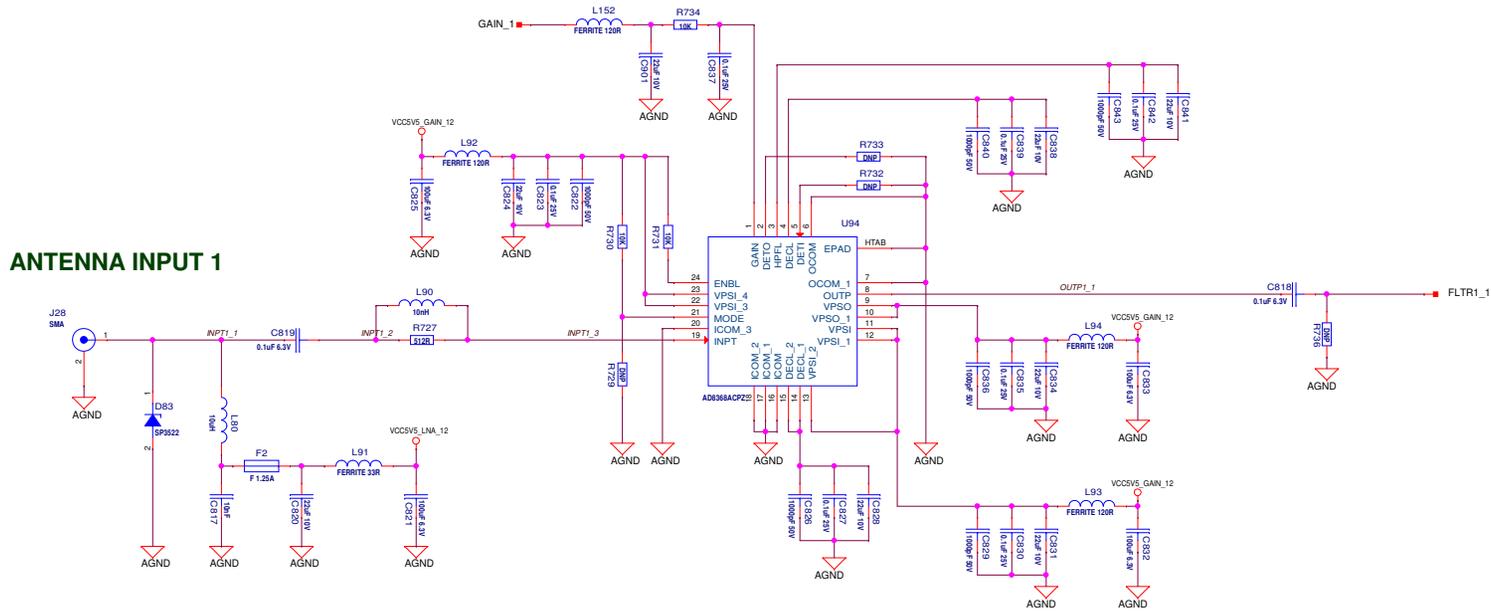


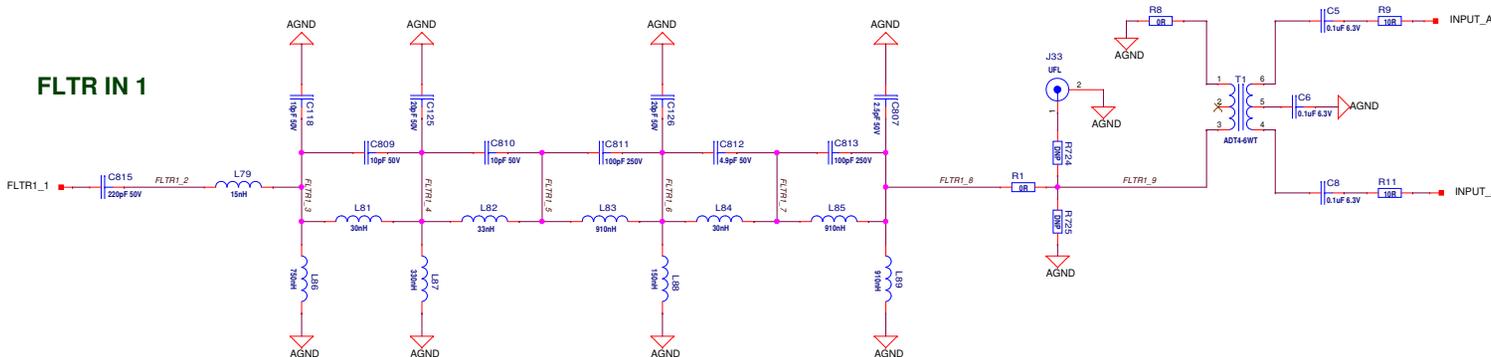
Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 01_BLOCKDIAGRAM			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Tuesday, September 29, 2020	Print (pcb) nr. 150133 V2.2	Sheet 1 of 59	

### ANTENNA INPUT 1

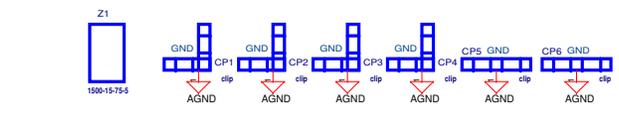


### FLTR IN 1

### FLTR IN 1



### FLTR OUT 1 (to ADC)

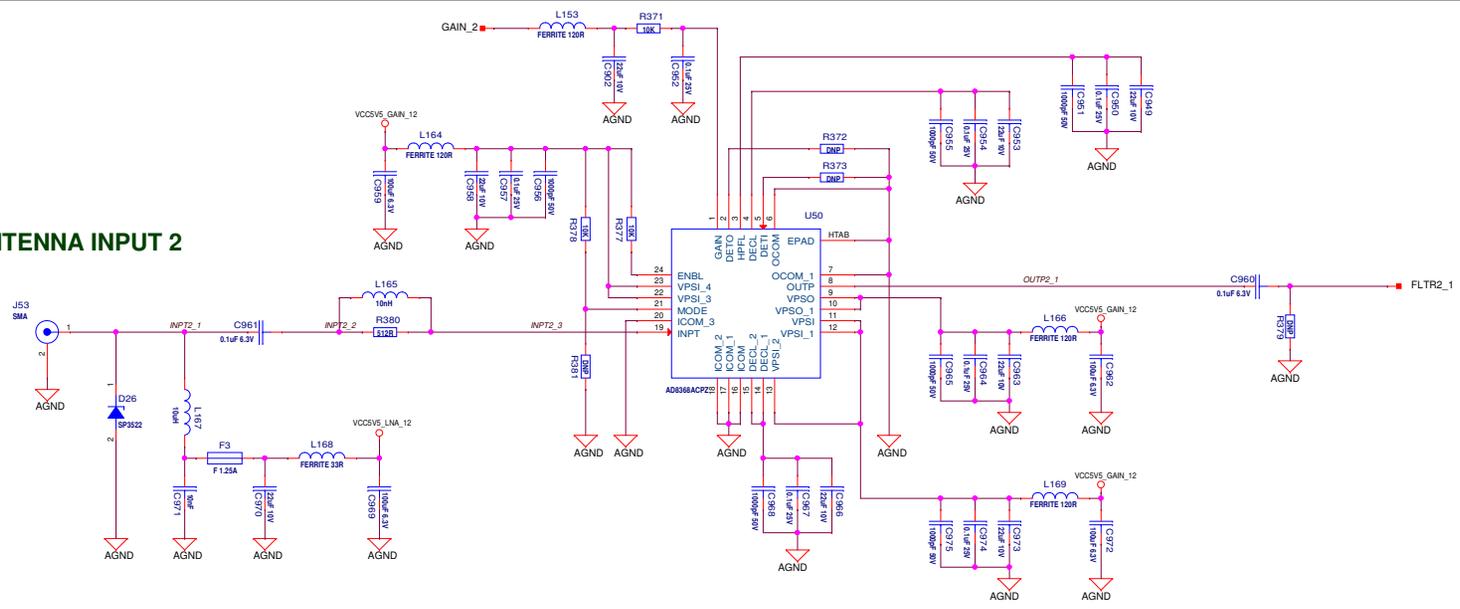


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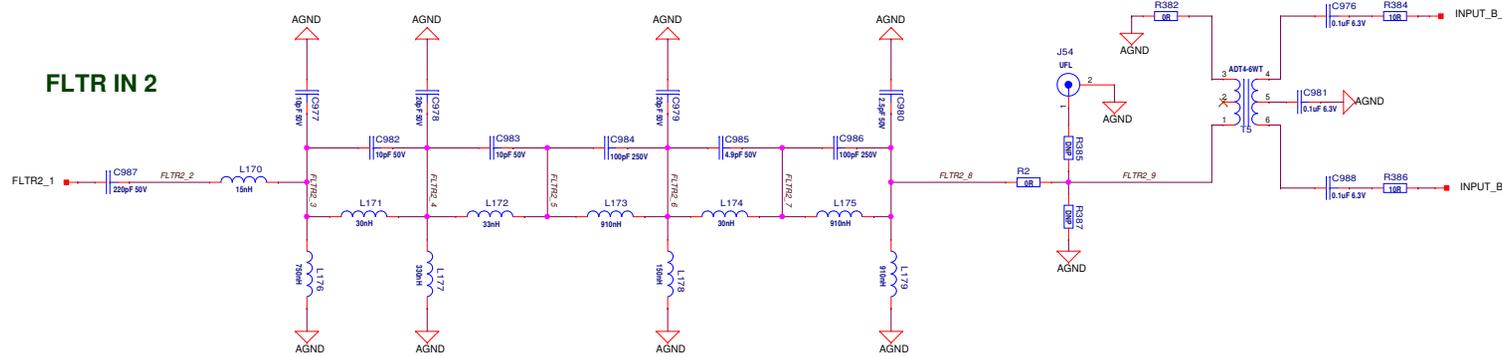
Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title <b>GRAND PROTO300_DIGITIZER V2</b>			
Page 02_FRONT_END_1			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Sheet 2	Print (pcb) nr. 150133 V2.2	of 225

ANTENNA INPUT 2

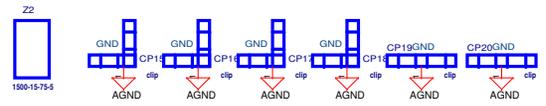


FLTR IN 2

FLTR IN 2



FLTR OUT 2  
(to ADC)

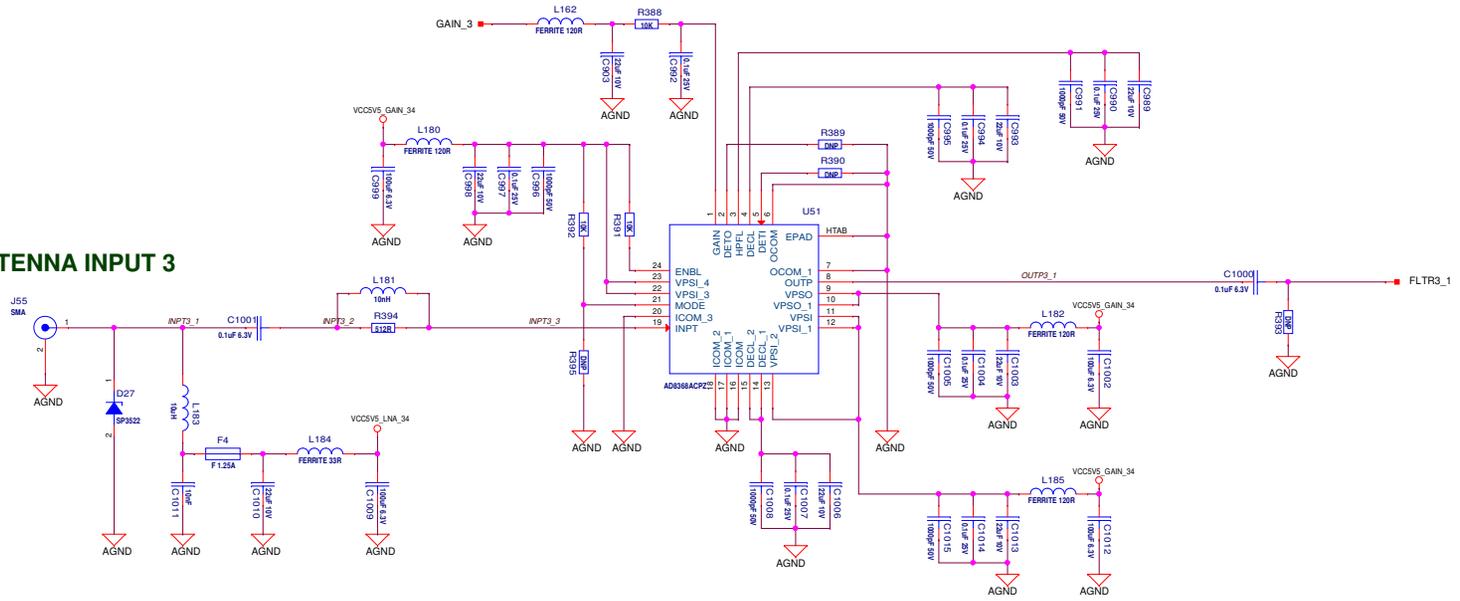


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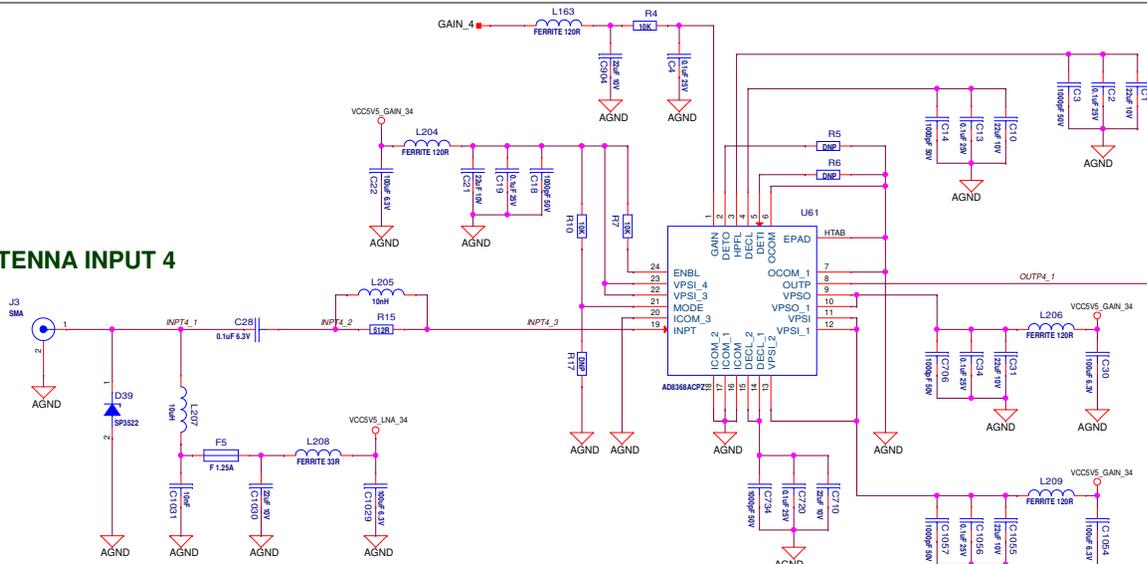


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	03_FRONT_END_2		
Size	A3	Project nr.	GRAND PROTO300
Print (pcb) nr.	150133 V2.2	Drawing by	F.Hahn
Date:	Wednesday, September 23, 2020	Sheet	3 of 1

**ANTENNA INPUT 3**

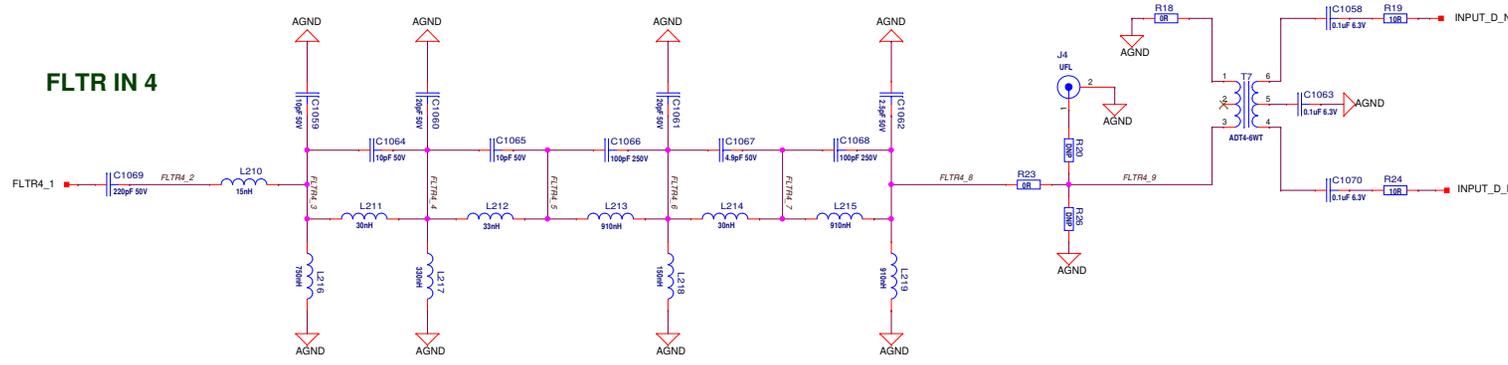


**ANTENNA INPUT 4**

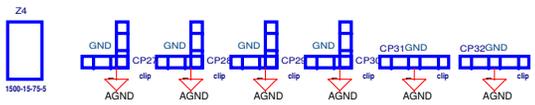


**FLTR IN 4**

**FLTR IN 4**



**FLTR OUT 4 (to ADC)**

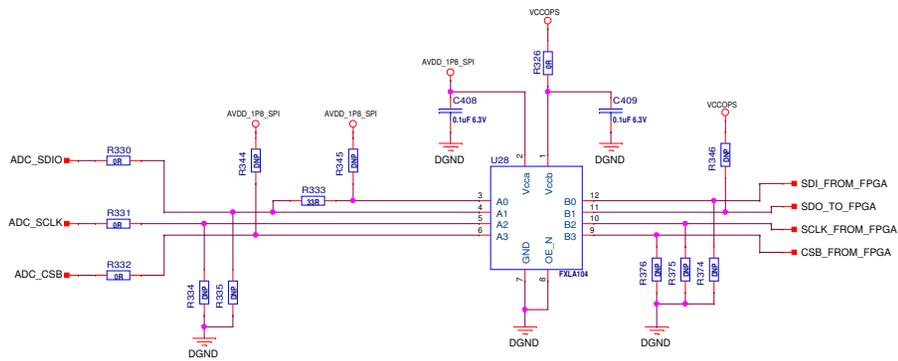
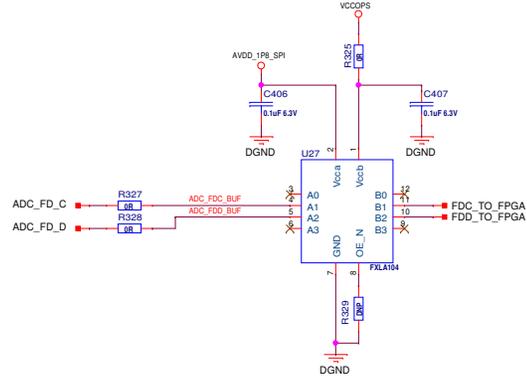
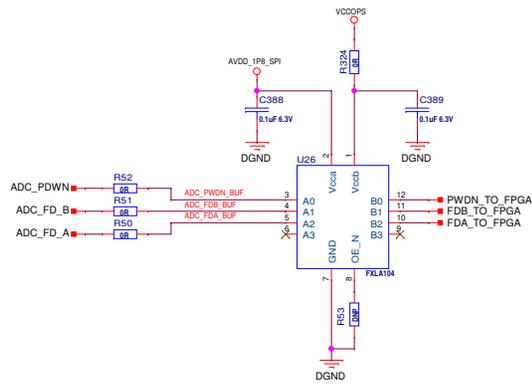


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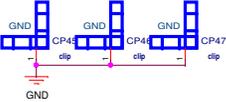
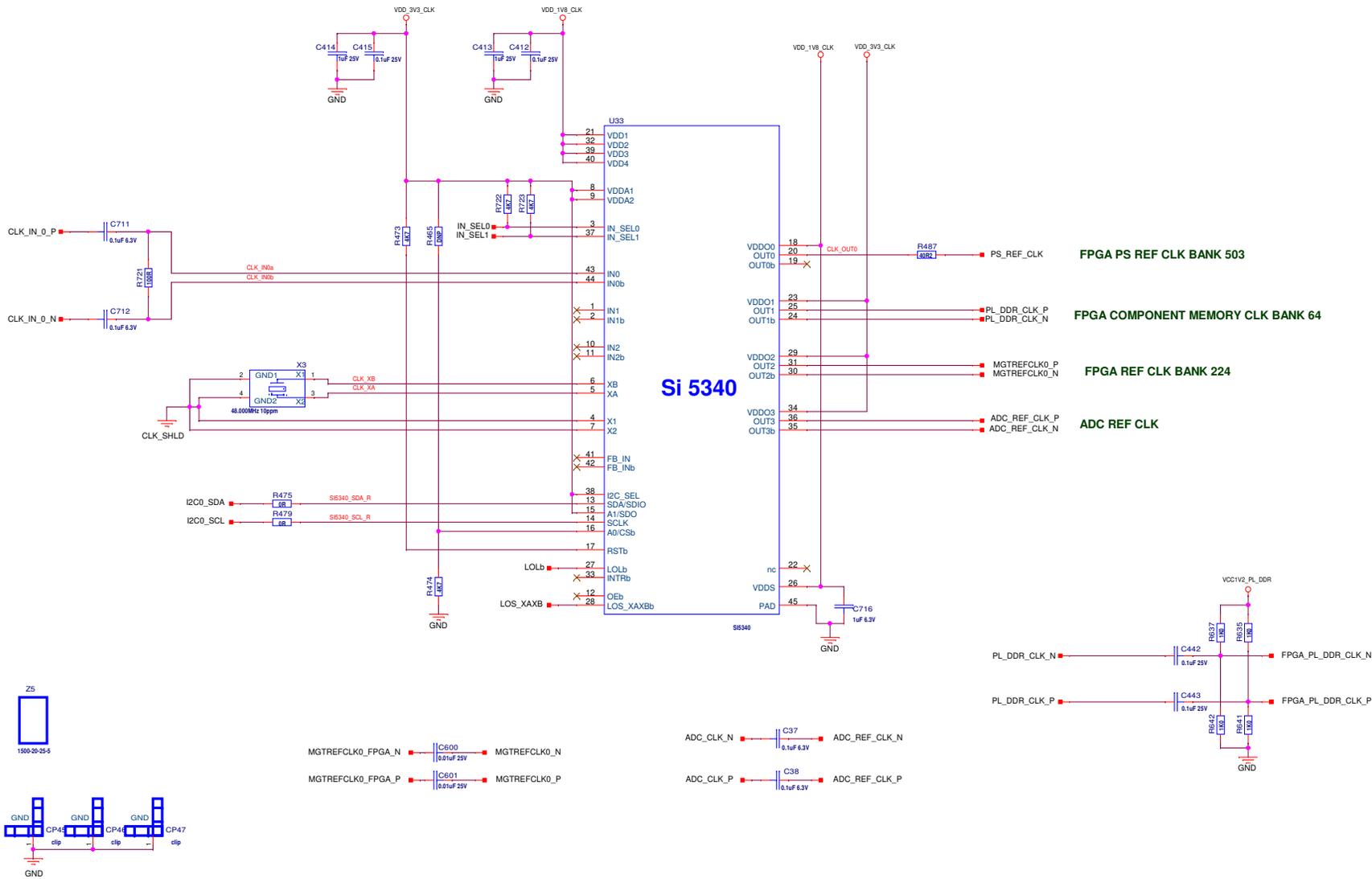
Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	05_FRONT_END_4		
Size	A3	Project nr.	GRAND PROTO300
		Print (pcb) nr.	150133 V2.2
Date:	Wednesday, September 23, 2020	Sheet	5 of 1
		Rev	2.0





Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	07_ADC_SPI	Drawn by	F.Hahn
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Print (pcb) nr.	150133 V2.2
		Sheet	7 of 59
		Rev	2.0

# CLOCK SIGNALS



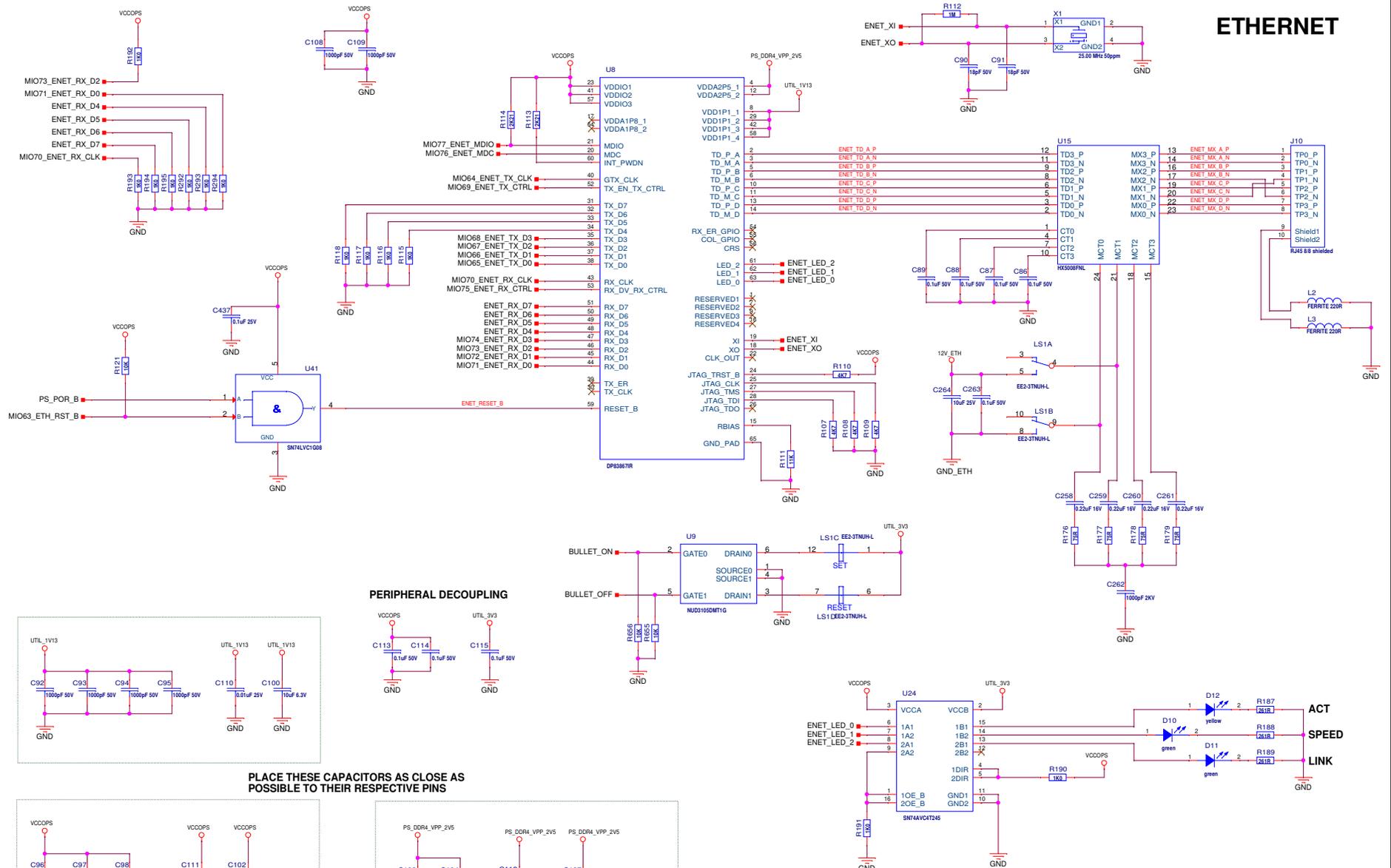
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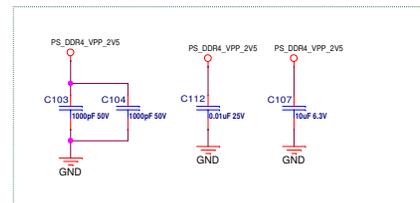
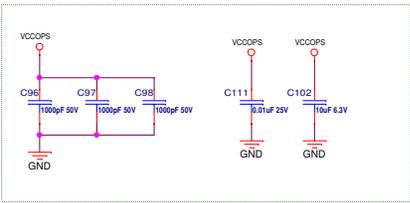
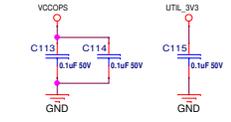
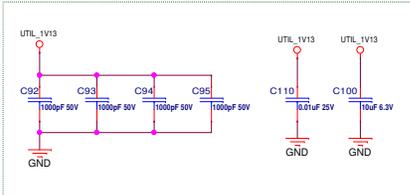
Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	08_CLOCKS		
Size	Project nr.	GRAND PROTO300	Drawing by
A3			F.Hahn
Date:	Wednesday, September 23, 2020	Print (pcb) nr.	150133 V2.2
		Sheet	8 of 59

Rev 2.0

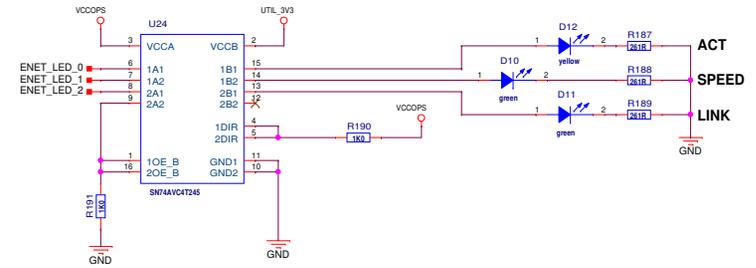
# ETHERNET



## PERIPHERAL DECOUPLING



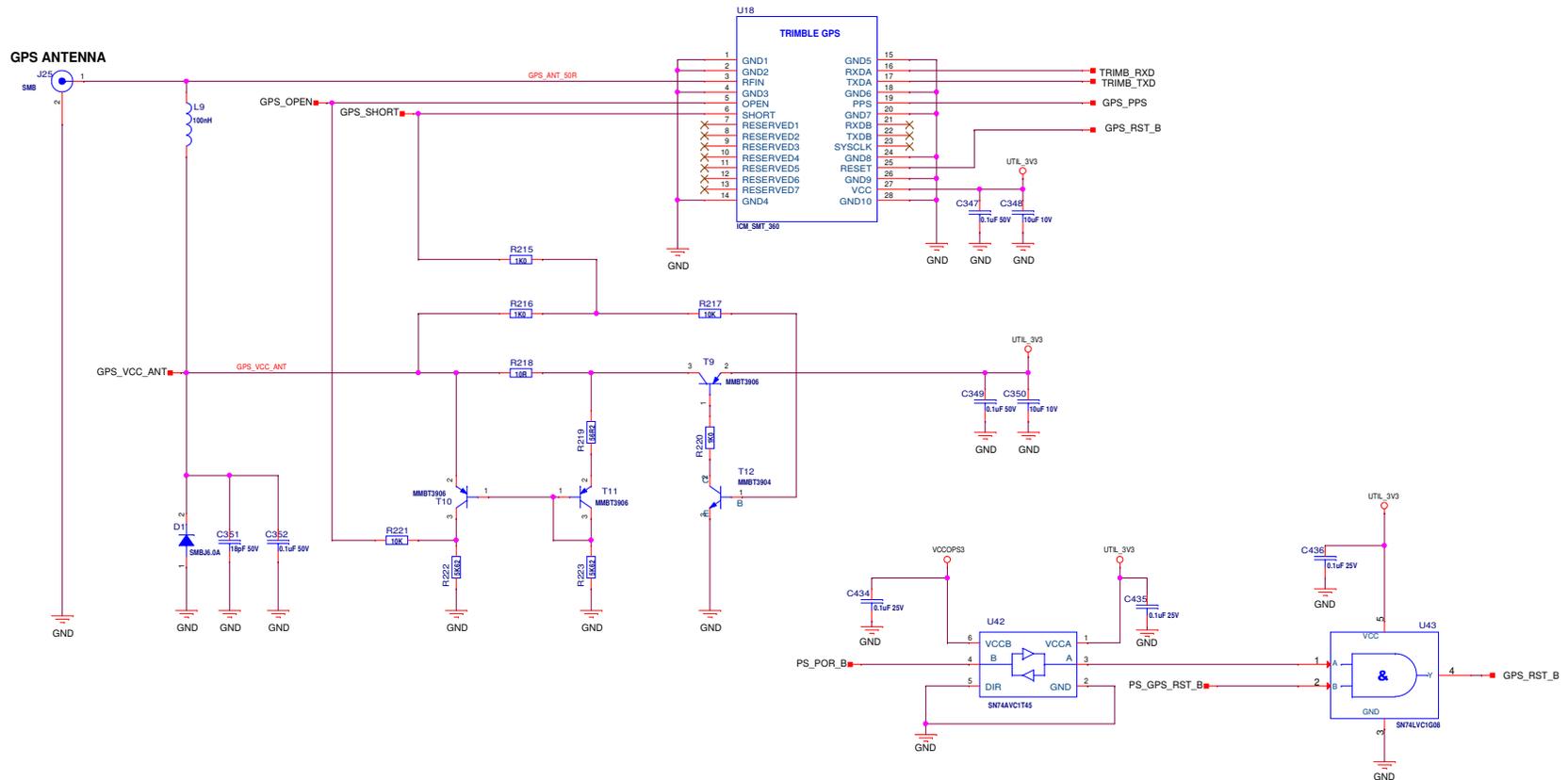
PLACE THESE CAPACITORS AS CLOSE AS POSSIBLE TO THEIR RESPECTIVE PINS



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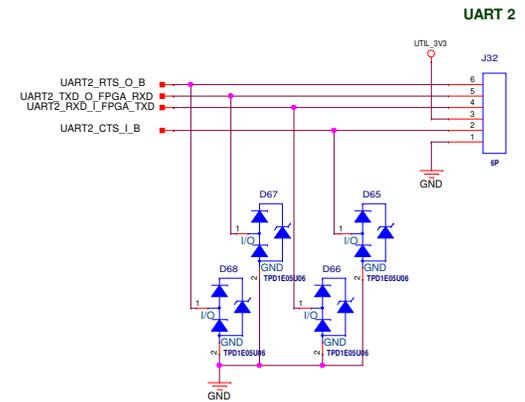
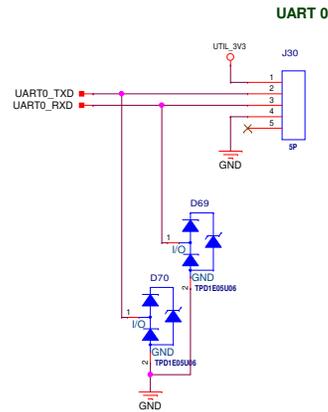
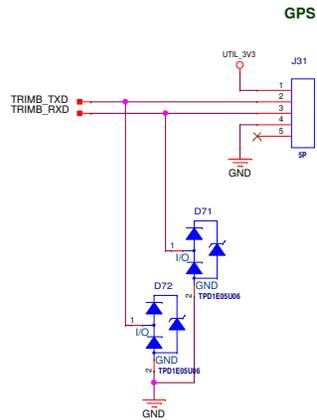
Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 09_ETHERNET			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Sheet 9	Print (pcb) nr. 150133 V2.2	of 59

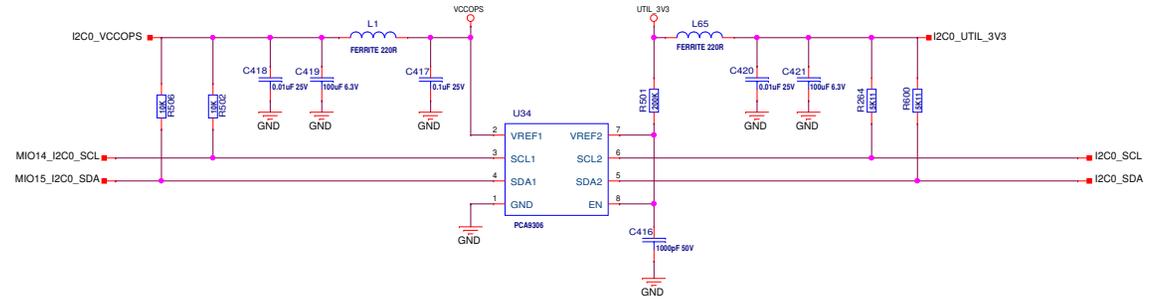


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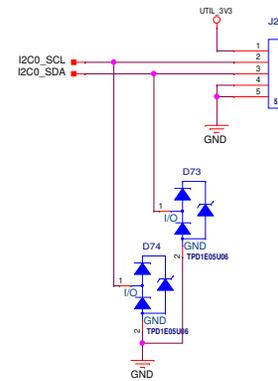


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	10_GPS		
Size	A3	Project nr.	GRAND PROTO300
		Drawing by	F.Hahn
		Print (pcb) nr.	150133_V2.2
Date:	Thursday, September 24, 2020	Sheet	10 of 59
			Rev 2.0

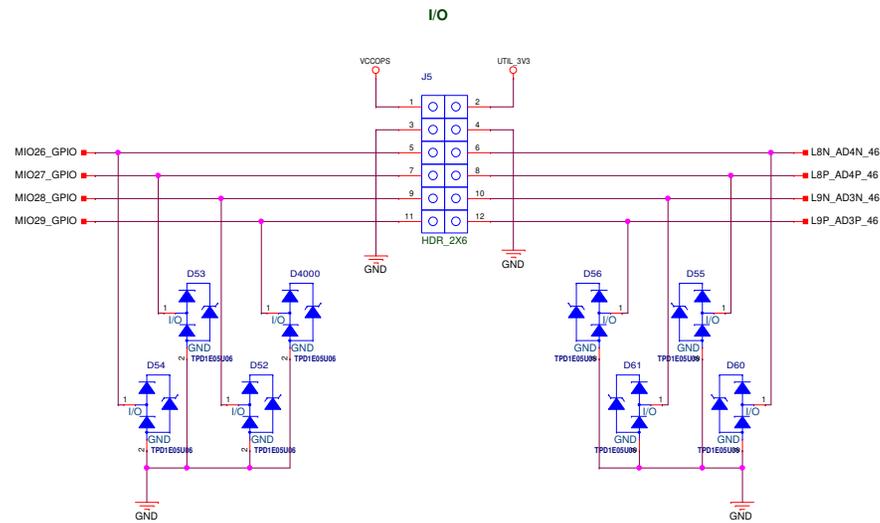




I2C 0



# USER I/O

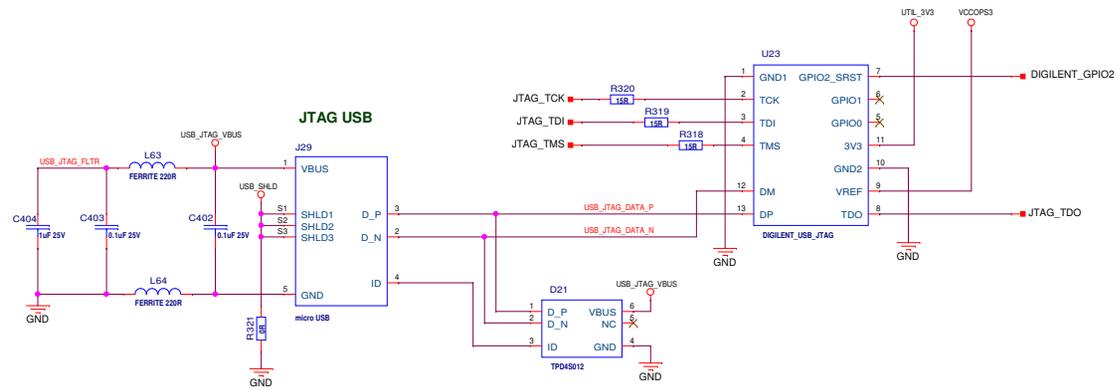
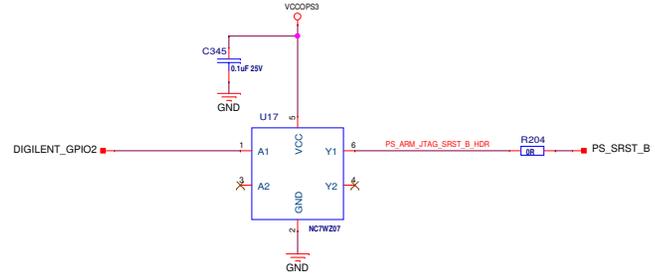


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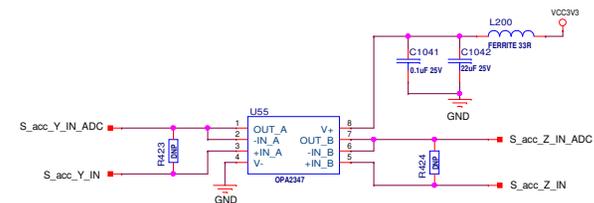
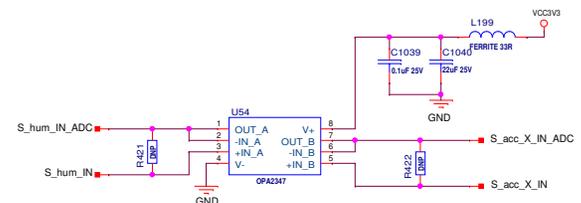
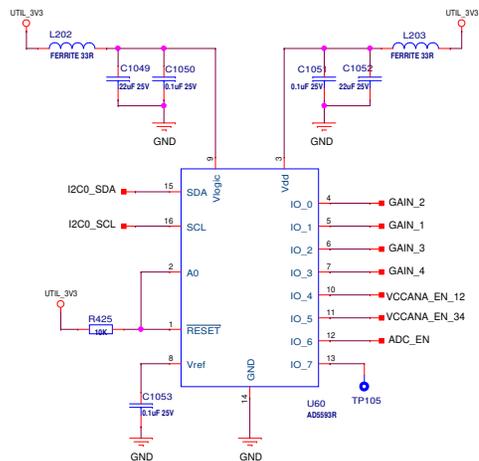
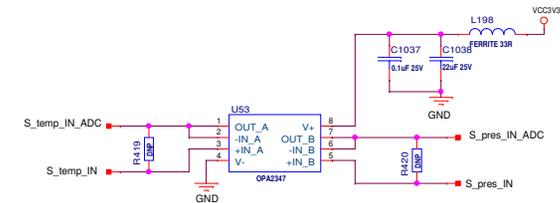
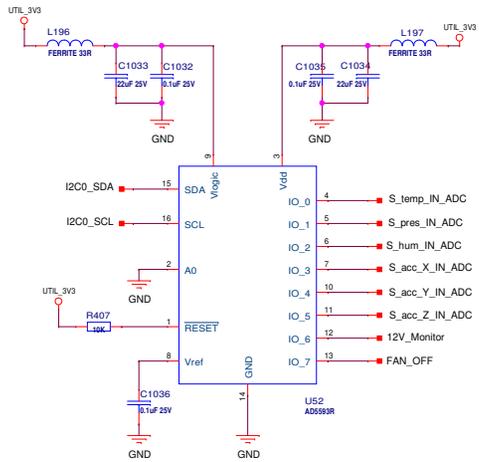
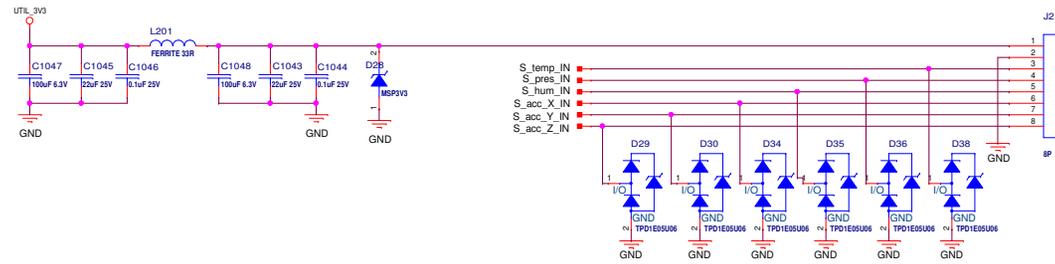


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	13_IO		
Size	A3	Project nr.	GRAND PROTO300
		Drawing by	F.Hahn
		Print (pcb) nr.	150133 V2.2
Date:	Wednesday, September 23, 2020	Sheet	13 of 59
		Rev	2.0

# JTAG



Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas			
Title	GRAND PROTO300_DIGITIZER V2					
Page	14_JTAG					
Size	Project nr.	GRAND PROTO300	Drawing by	F.Hahn	Rev	2.0
A3			Print (pcb) nr.	150133_V2.2		
Date:	Wednesday, September 23, 2020	Sheet	14	of	59	

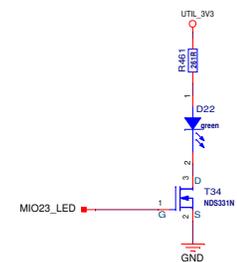
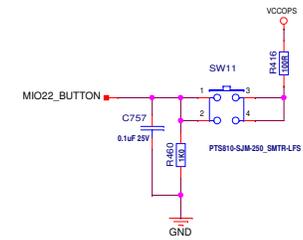
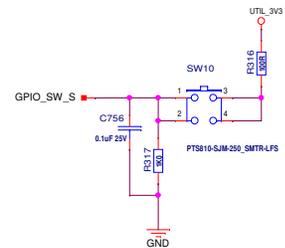
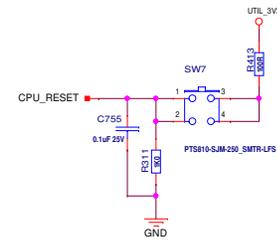
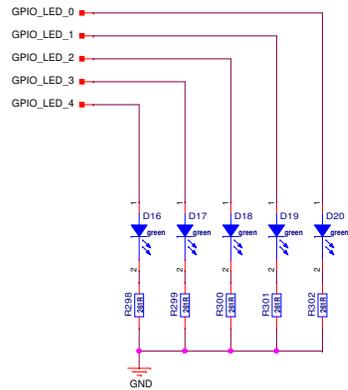


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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	15_SENSORS		
Size	A3	Project nr.	GRAND PROTO300
Size		Print (pcb) nr.	150133_V2.2
Date:	Wednesday, September 23, 2020	Sheet	15 of 1
		Drawing by	F.Hahn
		Rev	2.0

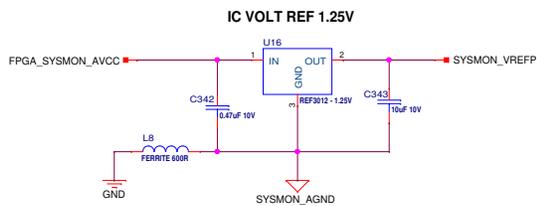
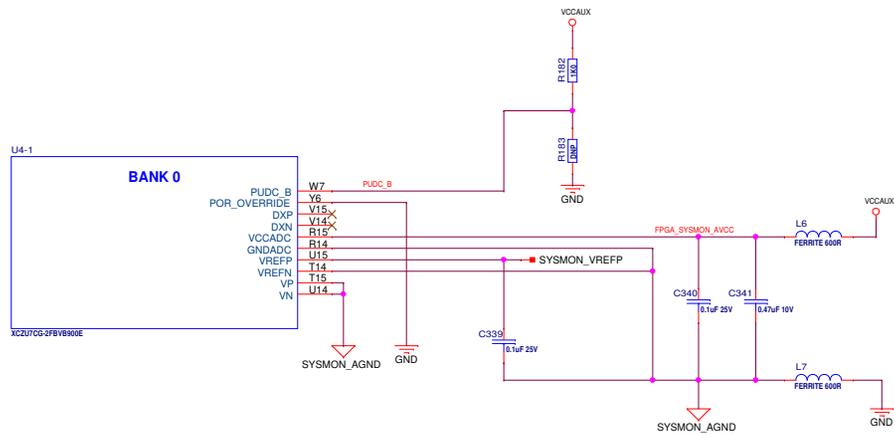
# BUTTONS & LEDES

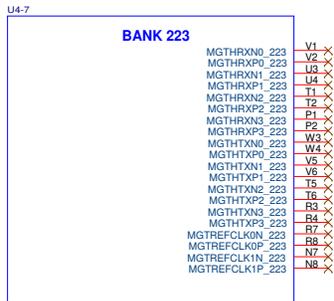


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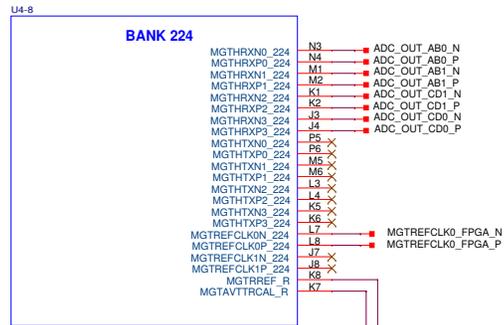


Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 16_BUTTONS_LEDS			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Print (pcb) nr. 150133 V2.2	Sheet 16	of 59

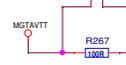




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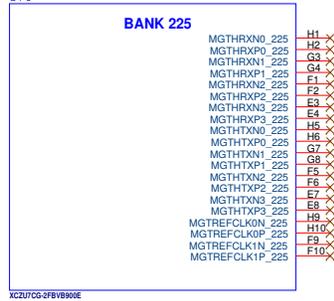


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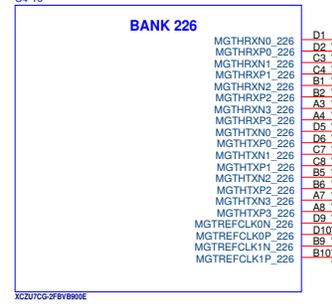


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	18_FPGA_BANK_223_224		
Size	Project nr.	Drawing by	Rev
A3	GRAND PROTO300	F.Hahn	2.0
Date:	Wednesday, September 23, 2020	Print (pcb) nr.	150133_V2.2
Sheet	18	of	59

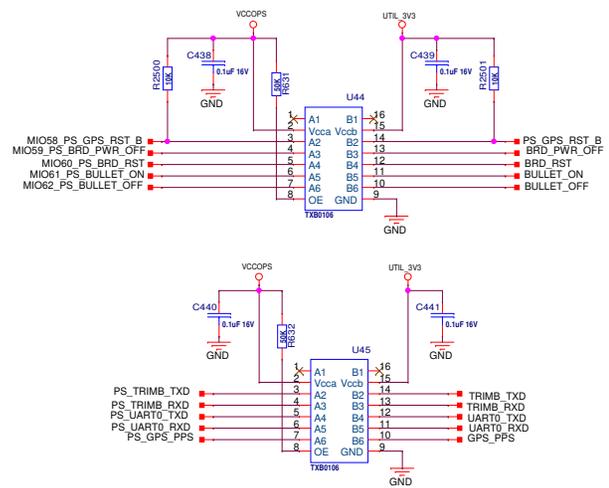
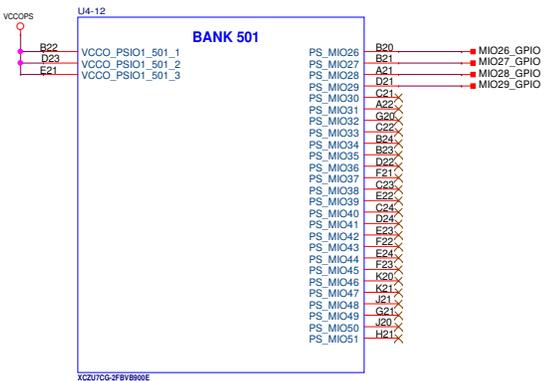
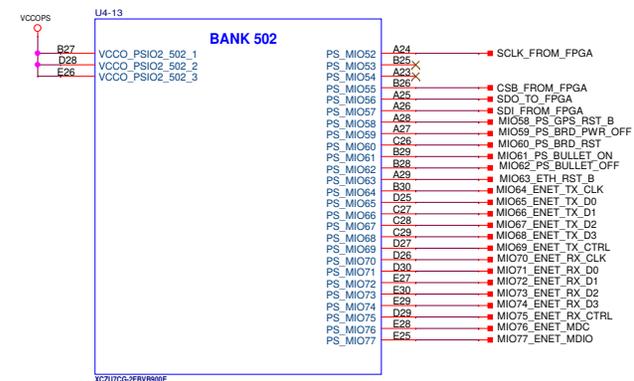
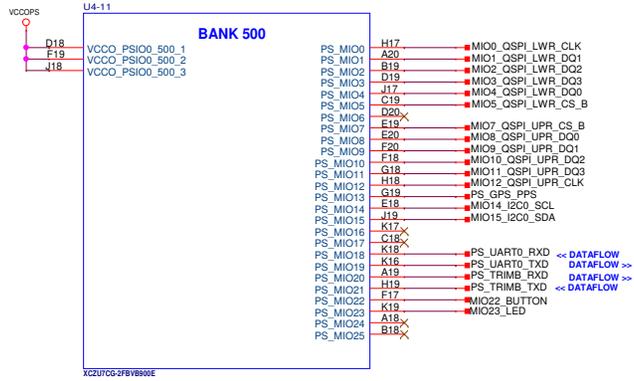
U4-9



U4-10



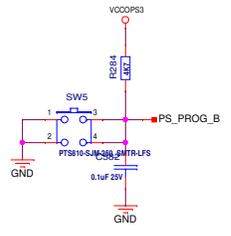
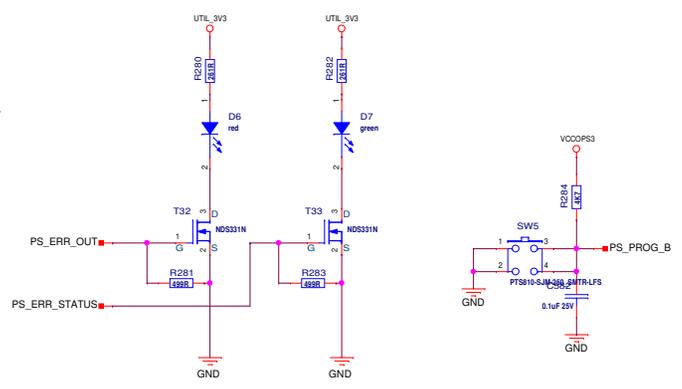
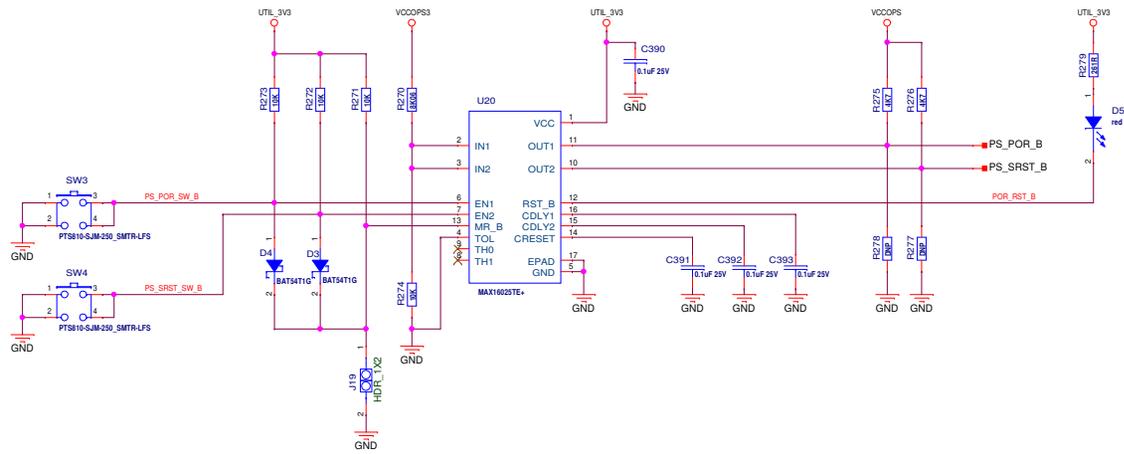
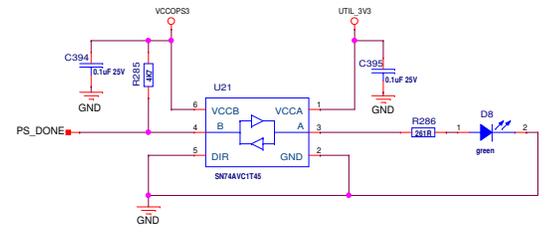
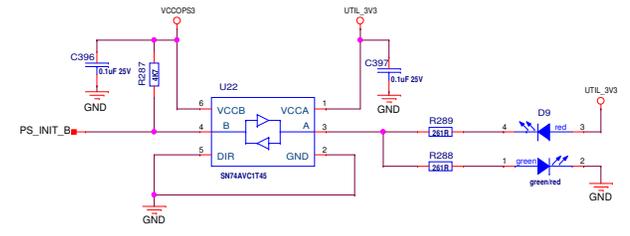
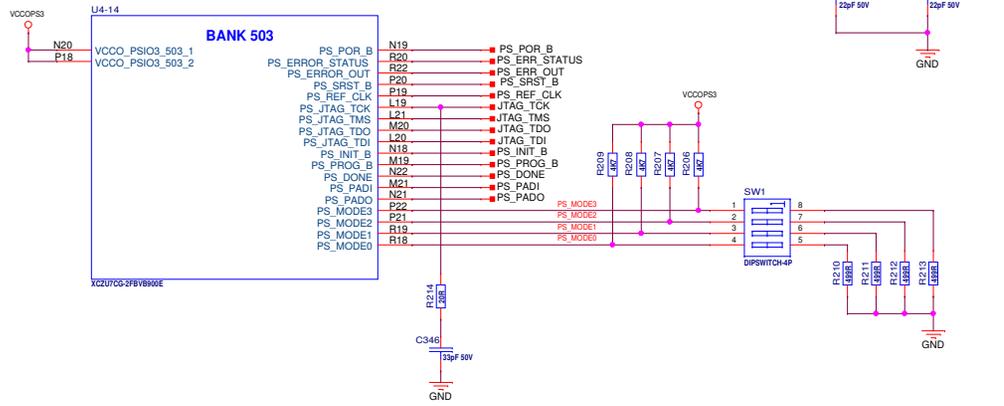
Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	19_FPGA_BANK_225_226	Drawing by	F.Hahn
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Print (pcb) nr.	150133_V2.2
		Sheet	19 of 59
		Rev	2.0



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Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 20_FPGA_BANK_500_501_502			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Sheet 20	Print (pcb) nr. 150133_V2.2	of 59



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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	21_FPGA_BANK_503		
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Drawing by	F.Hahn
		Print (pcb) nr.	150133_V2.2
		Sheet	21 of 59

Rev 2.0



U4-16

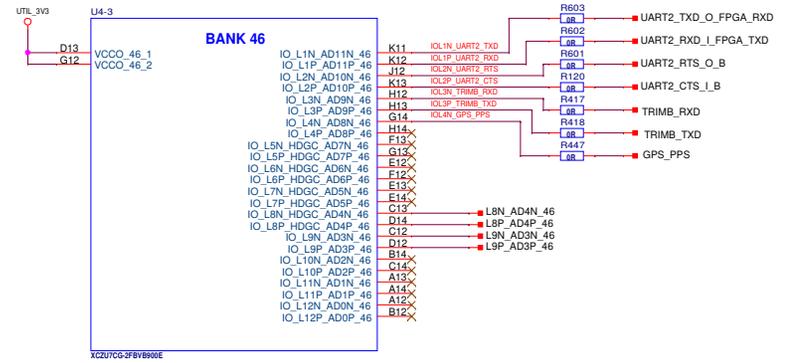
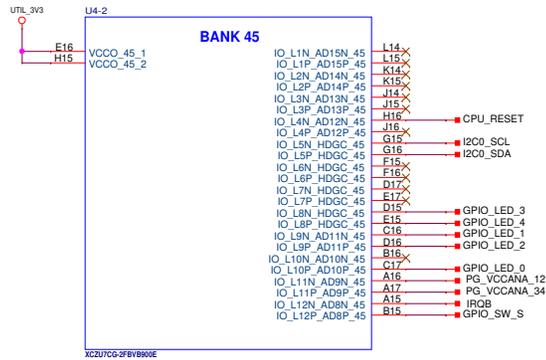
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PS_MGTREFCLK1P_505	L25
PS_MGTRRX0_505	L26
PS_MGTREFCLK1N_505	L27
PS_MGTRRX0_505	L28
PS_MGTREFCLK2P_505	K23
PS_MGTRTX1_505	K24
PS_MGTREFCLK2N_505	K25
PS_MGTRRX1_505	K26
PS_MGTREFCLK3P_505	H23
PS_MGTRRX1_505	H24
PS_MGTREFCLK3N_505	J23
PS_MGTRRX1_505	J24
PS_MGTRTX2_505	J25
PS_MGTRRX2_505	J26
PS_MGTRTX2_505	H27
PS_MGTRRX2_505	H28
PS_MGTRTX3_505	G25
PS_MGTRRX3_505	G26
PS_MGTRTX3_505	G27
PS_MGTRRX3_505	G28
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KC21TCG-2F8V88ME

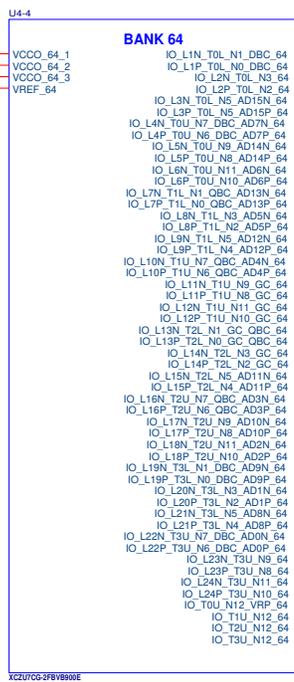
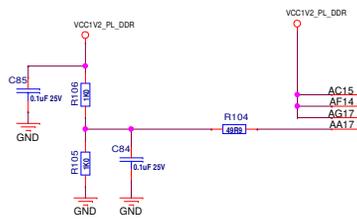
Radboud University



Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas			
Title	GRAND PROTO300_DIGITIZER V2					
Page	23_FPGA_BANK_505					
Size	Project nr.	GRAND PROTO300	Drawing by	F.Hahn	Rev	2.0
A3			Print (pcb) nr.	150133_V2.2		
Date:	Wednesday, September 23, 2020	Sheet	23	of	59	



Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 24_FPGA_BANK_45_46			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Sheet 24	Print (pcb) nr. 150133_V2.2	of 59



- BANK 64**
- IO\_L1N\_T0L\_N1\_DBC\_64
  - IO\_L1P\_T0L\_N0\_DBC\_64
  - IO\_L2N\_T0L\_N3\_64
  - IO\_L2P\_T0L\_N2\_64
  - IO\_L3N\_T0L\_N5\_AD15N\_64
  - IO\_L3P\_T0L\_N6\_AD15P\_64
  - IO\_L4N\_T0U\_N7\_DBC\_AD7N\_64
  - IO\_L4P\_T0U\_N6\_DBC\_AD7P\_64
  - IO\_L5N\_T0U\_N9\_AD14N\_64
  - IO\_L5P\_T0U\_N8\_AD14P\_64
  - IO\_L6N\_T0U\_N11\_AD6N\_64
  - IO\_L6P\_T0U\_N10\_AD6P\_64
  - IO\_L7N\_T1L\_N1\_OBC\_AD13N\_64
  - IO\_L7P\_T1L\_N0\_OBC\_AD13P\_64
  - IO\_L8N\_T1L\_N3\_AD5N\_64
  - IO\_L8P\_T1L\_N2\_AD5P\_64
  - IO\_L9N\_T1L\_N5\_AD12N\_64
  - IO\_L9P\_T1L\_N4\_AD12P\_64
  - IO\_L10N\_T1U\_N7\_OBC\_AD4N\_64
  - IO\_L10P\_T1U\_N6\_OBC\_AD4P\_64
  - IO\_L11N\_T1U\_N9\_GC\_64
  - IO\_L11P\_T1U\_N8\_GC\_64
  - IO\_L12N\_T1U\_N11\_GC\_64
  - IO\_L12P\_T1U\_N10\_GC\_64
  - IO\_L13N\_T2L\_N1\_GC\_OBC\_64
  - IO\_L13P\_T2L\_N0\_GC\_OBC\_64
  - IO\_L14N\_T2L\_N3\_GC\_64
  - IO\_L14P\_T2L\_N2\_GC\_64
  - IO\_L15N\_T2L\_N5\_AD11N\_64
  - IO\_L15P\_T2L\_N4\_AD11P\_64
  - IO\_L16N\_T2U\_N7\_OBC\_AD3N\_64
  - IO\_L16P\_T2U\_N6\_OBC\_AD3P\_64
  - IO\_L17N\_T2U\_N9\_AD10N\_64
  - IO\_L17P\_T2U\_N8\_AD10P\_64
  - IO\_L18N\_T2U\_N11\_AD2N\_64
  - IO\_L18P\_T2U\_N10\_AD2P\_64
  - IO\_L19N\_T3L\_N1\_DBC\_AD9N\_64
  - IO\_L19P\_T3L\_N0\_DBC\_AD9P\_64
  - IO\_L20N\_T3L\_N3\_AD1N\_64
  - IO\_L20P\_T3L\_N2\_AD1P\_64
  - IO\_L21N\_T3L\_N5\_AD8N\_64
  - IO\_L21P\_T3L\_N4\_AD8P\_64
  - IO\_L22N\_T3U\_N7\_DBC\_AD0N\_64
  - IO\_L22P\_T3U\_N6\_DBC\_AD0P\_64
  - IO\_L23N\_T3U\_N9\_64
  - IO\_L23P\_T3U\_N8\_64
  - IO\_L24N\_T3U\_N11\_64
  - IO\_L24P\_T3U\_N10\_64
  - IO\_T0U\_N12\_VRP\_64
  - IO\_T1U\_N12\_64
  - IO\_T2U\_N12\_64
  - IO\_T3U\_N12\_64

- AB13
- AA13
- AE13
- AE14
- AD14
- AC14
- AB14
- AA14
- AB15
- AA15
- AE15
- AD15
- AH13
- AG13
- AK12
- AK13
- AK14
- AJ14
- AK15
- AJ15
- AH14
- AG14
- AG15
- AE15
- AE17
- AE16
- AD17
- AD16
- AC16
- AB16
- AA16
- AC18
- AC17
- AE19
- AD19
- AH16
- AG16
- AK16
- AJ16
- AJ17
- AH17
- AK18
- AK17
- AH18
- AG18
- AF18
- AE18
- AC13
- AC19
- AG19

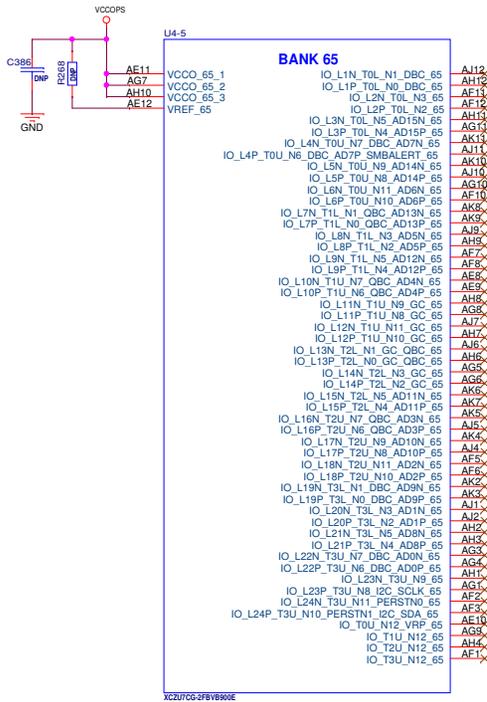
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- DDR4\_BA1
- DDR4\_A12
- DDR4\_A13
- DDR4\_A10
- DDR4\_A11
- DDR4\_A8
- DDR4\_A9
- DDR4\_A6
- DDR4\_A7
- DDR4\_A4
- DDR4\_A5
- DDR4\_A2
- DDR4\_A3
- DDR4\_A0
- DDR4\_A1
- DDR4\_ODT
- DDR4\_A16\_RAS\_B
- DDR4\_CK\_C
- DDR4\_CK\_T
- DDR4\_BG0
- DDR4\_ACT\_B
- DDR4\_A15\_CAS\_B
- DDR4\_DM0
- DDR4\_DQ6
- DDR4\_DQ7
- DDR4\_DQ4
- DDR4\_DQ5
- DDR4\_DQS0\_C
- DDR4\_DQS0\_T
- DDR4\_DQ0
- DDR4\_DQ1
- DDR4\_DQ3
- DDR4\_DQ2
- DDR4\_CS\_B
- DDR4\_DM1
- DDR4\_DQ14
- DDR4\_DQ15
- DDR4\_DQ12
- DDR4\_DQ13
- DDR4\_DQS1\_C
- DDR4\_DQS1\_T
- DDR4\_DQ10
- DDR4\_DQ11
- DDR4\_DQ8
- DDR4\_DQ9
- VRP\_64
- DDR4\_A14\_WE\_B
- DDR4\_CKE
- DDR4\_PAR



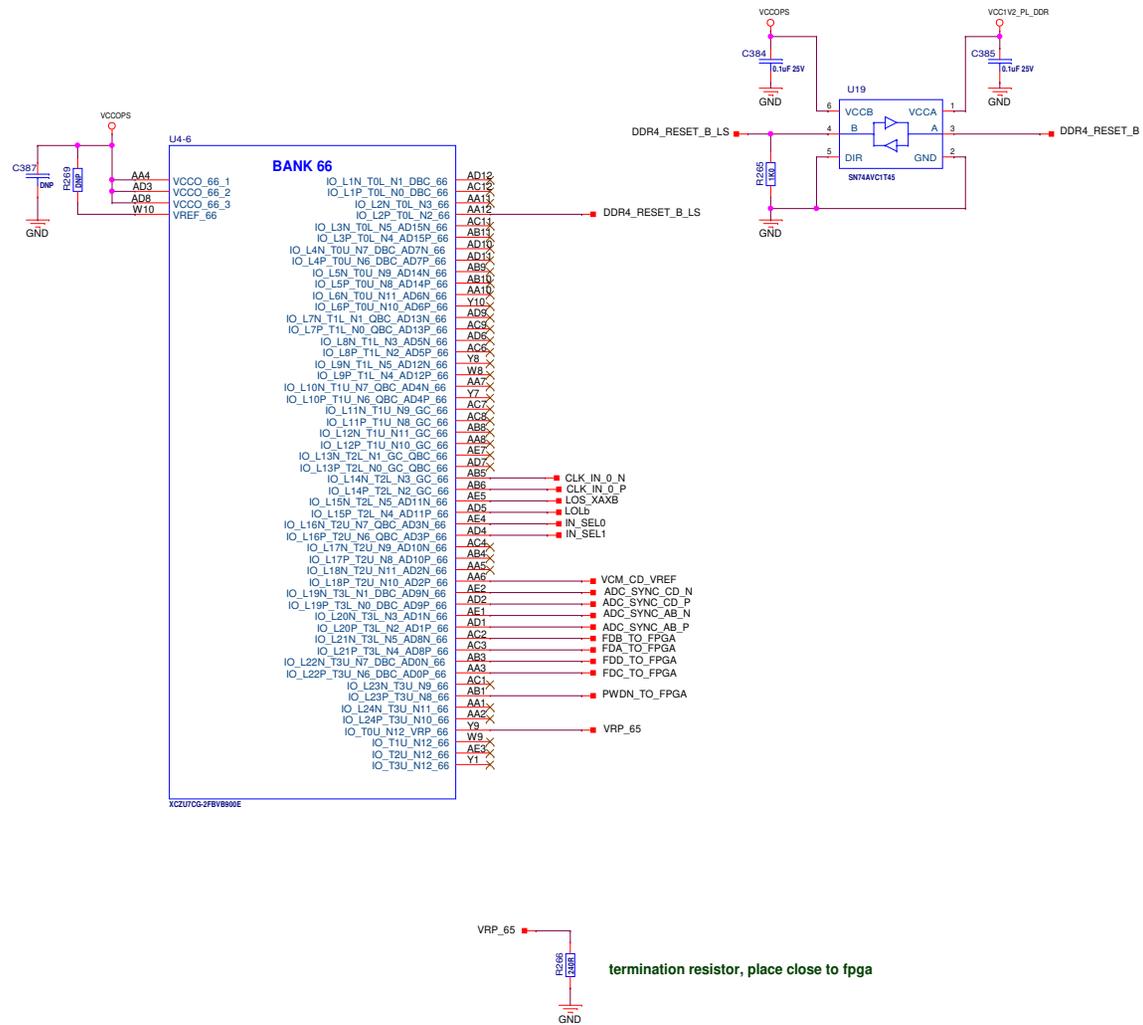
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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	25_FPGA_BANK_64	Drawing by	F.Hahn
Size	A3	Project nr.	GRAND PROTO300
		Print (pcb) nr.	150133_V2.2
Date:	Wednesday, September 23, 2020	Sheet	25 of 59
		Rev	2.0



Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 26_FPGA_BANK_65			
Size A3	Project nr. GRAND PROTO300	Drawn by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020		Print (pcb) nr. 150133_V2.2	Sheet 26 of 59



**BANK 66**

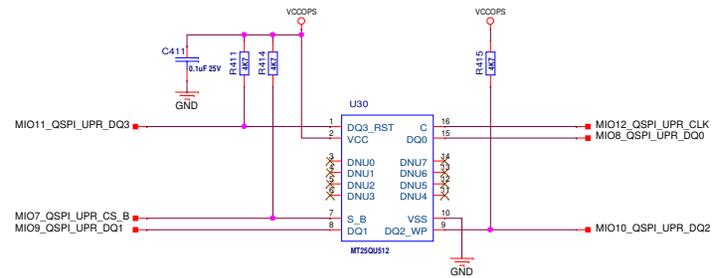
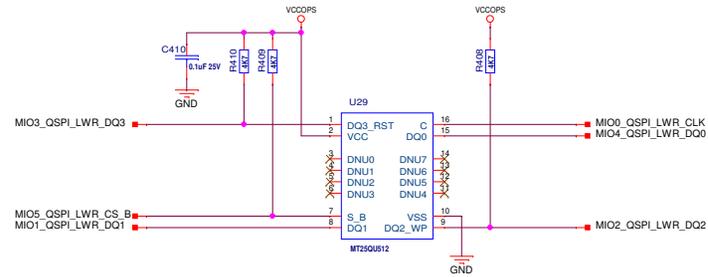
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IO_L1P_T0L_N0_DBC_66	AC12
IO_L2N_T0L_N3_66	AA13
IO_L2P_T0L_N2_66	AA12
IO_L3N_T0L_N5_AD15N_66	AC13
IO_L3P_T0L_N4_AD15P_66	AD10
IO_L4N_T0U_N7_DBC_AD7N_66	AD11
IO_L4P_T0U_N6_DBC_AD7P_66	AB8
IO_L5N_T0U_N9_AD14N_66	AB10
IO_L5P_T0U_N8_AD14P_66	AA10
IO_L6N_T0U_N11_AD9N_66	Y10
IO_L6P_T0U_N10_AD9P_66	AD9
IO_L7N_T1L_N1_OBC_AD13N_66	AC5
IO_L7P_T1L_N0_OBC_AD13P_66	AD6
IO_L8N_T1L_N3_AD5N_66	AC5
IO_L8P_T1L_N2_AD5P_66	Y8
IO_L9N_T1L_N5_AD12N_66	W8
IO_L9P_T1L_N4_AD12P_66	AA7
IO_L10N_T1U_N7_OBC_AD4N_66	V7
IO_L10P_T1U_N6_OBC_AD4P_66	AC7
IO_L11N_T1U_N9_GC_66	AC8
IO_L11P_T1U_N8_GC_66	AB8
IO_L12N_T1U_N11_GC_66	AA6
IO_L12P_T1U_N10_GC_66	AE7
IO_L13N_T2L_N1_GC_OBC_66	AD7
IO_L13P_T2L_N0_GC_OBC_66	AB5
IO_L14N_T2L_N3_GC_66	AB6
IO_L14P_T2L_N2_GC_66	AE5
IO_L15N_T2L_N5_AD11N_66	AD5
IO_L15P_T2L_N4_AD11P_66	AE4
IO_L16N_T2U_N7_OBC_AD3N_66	AD4
IO_L16P_T2U_N6_OBC_AD3P_66	AC4
IO_L17N_T2U_N9_AD10N_66	AB4
IO_L17P_T2U_N8_AD10P_66	AA5
IO_L18N_T2U_N11_AD2N_66	AA6
IO_L18P_T2U_N10_AD2P_66	AE2
IO_L19N_T3L_N1_DBC_AD9N_66	AD2
IO_L19P_T3L_N0_DBC_AD9P_66	AE1
IO_L20N_T3L_N3_AD1N_66	AD1
IO_L20P_T3L_N2_AD1P_66	AC2
IO_L21N_T3L_N5_AD8N_66	AC3
IO_L21P_T3L_N4_AD8P_66	AB3
IO_L22N_T3U_N7_DBC_AD0N_66	AA3
IO_L22P_T3U_N6_DBC_AD0P_66	AC1
IO_L23N_T3U_N9_66	AB1
IO_L23P_T3U_N8_66	AA1
IO_L24N_T3U_N11_66	AA2
IO_L24P_T3U_N10_66	Y9
IO_T0U_N12_VRP_66	W9
IO_T1U_N12_66	AE3
IO_T2U_N12_66	Y1
IO_T3U_N12_66	

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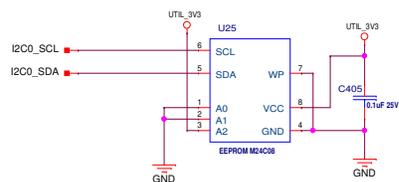


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	27_FPGA_BANK_66		
Size	A3	Project nr.	GRAND PROTO300
		Drawing by	F.Hahn
		Print (pcb) nr.	150133_V2.2
Date:	Wednesday, September 23, 2020	Sheet	27 of 59

# QSPI



# EEPROM

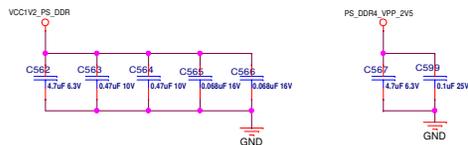
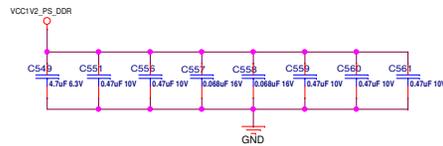
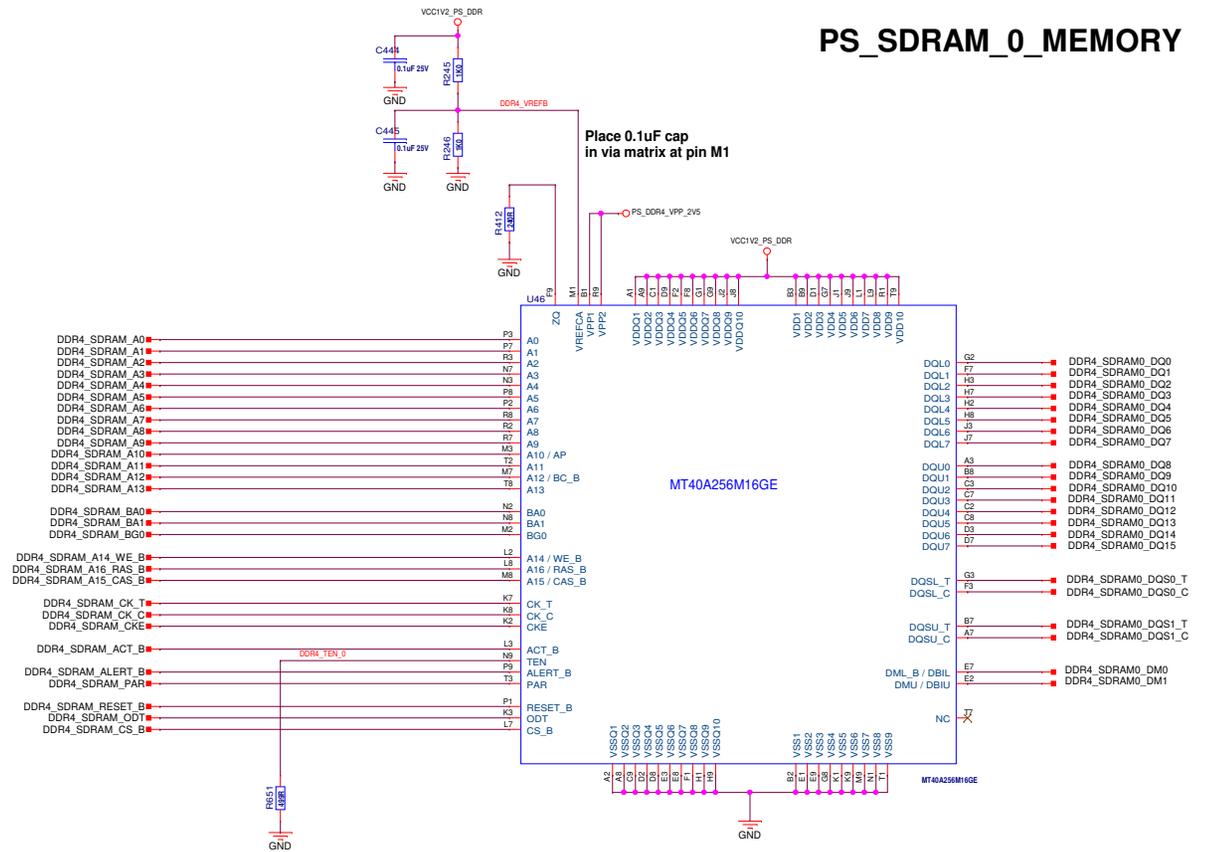


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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas			
Title	GRAND PROTO300_DIGITIZER V2					
Page	29_EEPROM					
Size	Project nr.	GRAND PROTO300	Drawing by	F.Hahn	Rev	2.0
A3			Print (pcb) nr.	150133_V2.2		
Date:	Wednesday, September 23, 2020	Sheet	29	of	59	

# PS\_SDRAM\_0\_MEMORY



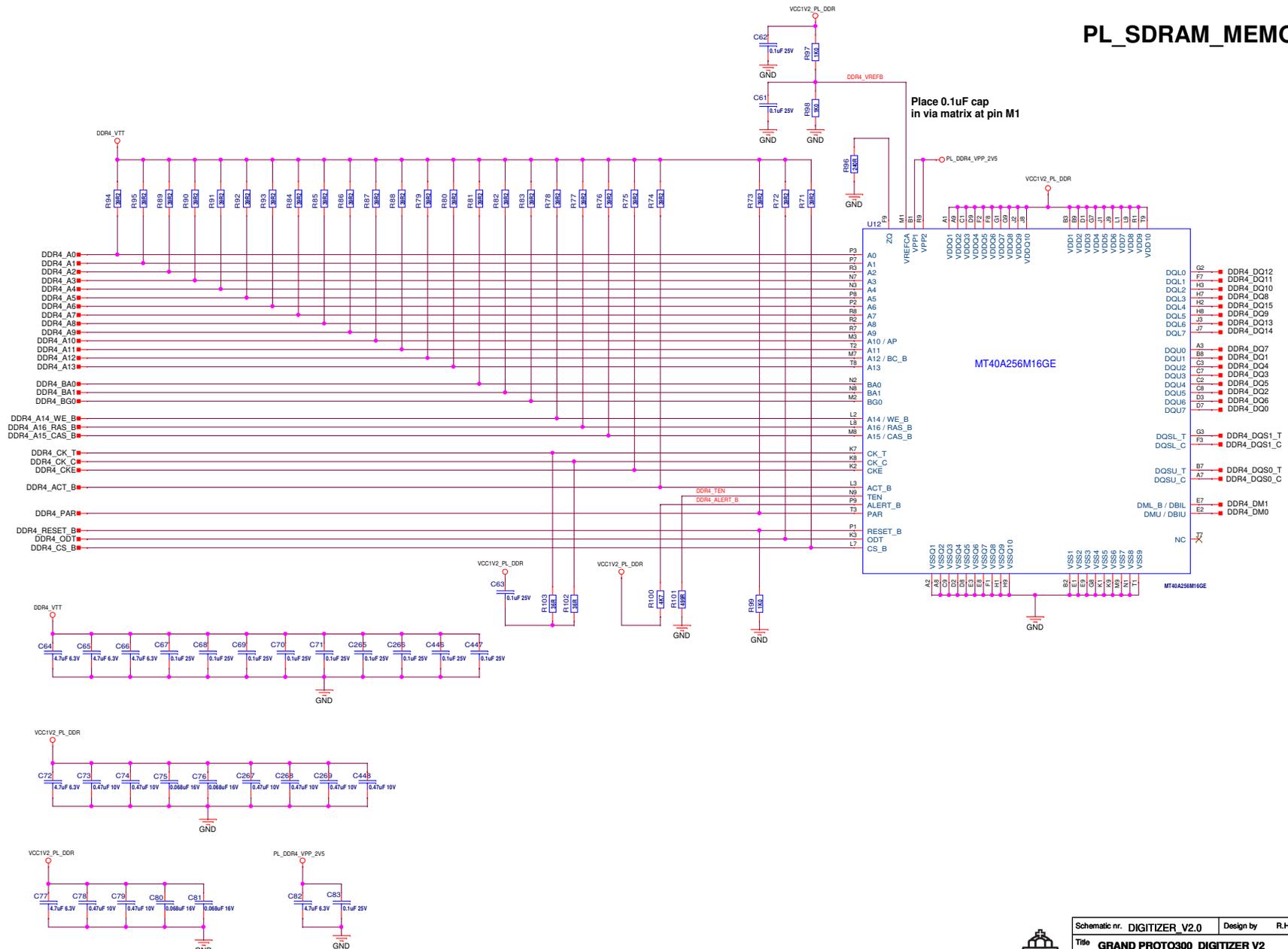
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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	30_PS_SDRAM_0_MEMORY		
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Sheet	30 of 59
Drawn by	F.Hahn	Print (pcb) nr.	150133_V2.2
Rev	2.0		



# PL\_SDRAM\_MEMORY



Place 0.1uF cap  
in via matrix at pin M1

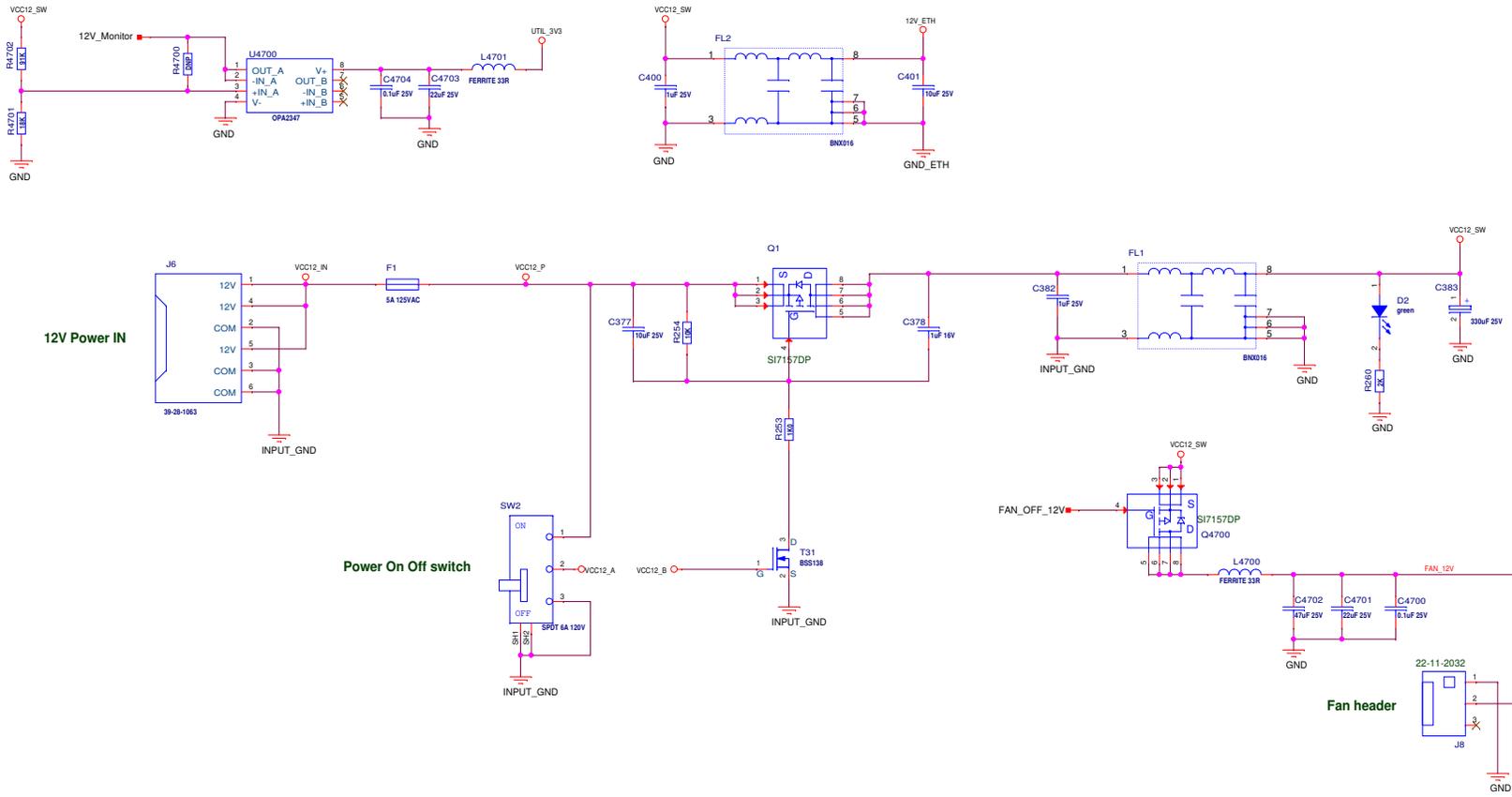
MT40A256M16GE

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Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	32_PL_SDRAM_MEMORY		
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Sheet	32 of 59
Print (pcb) nr.	150133 V2.2	Drawing by	F.Hahn
Rev	2.0		

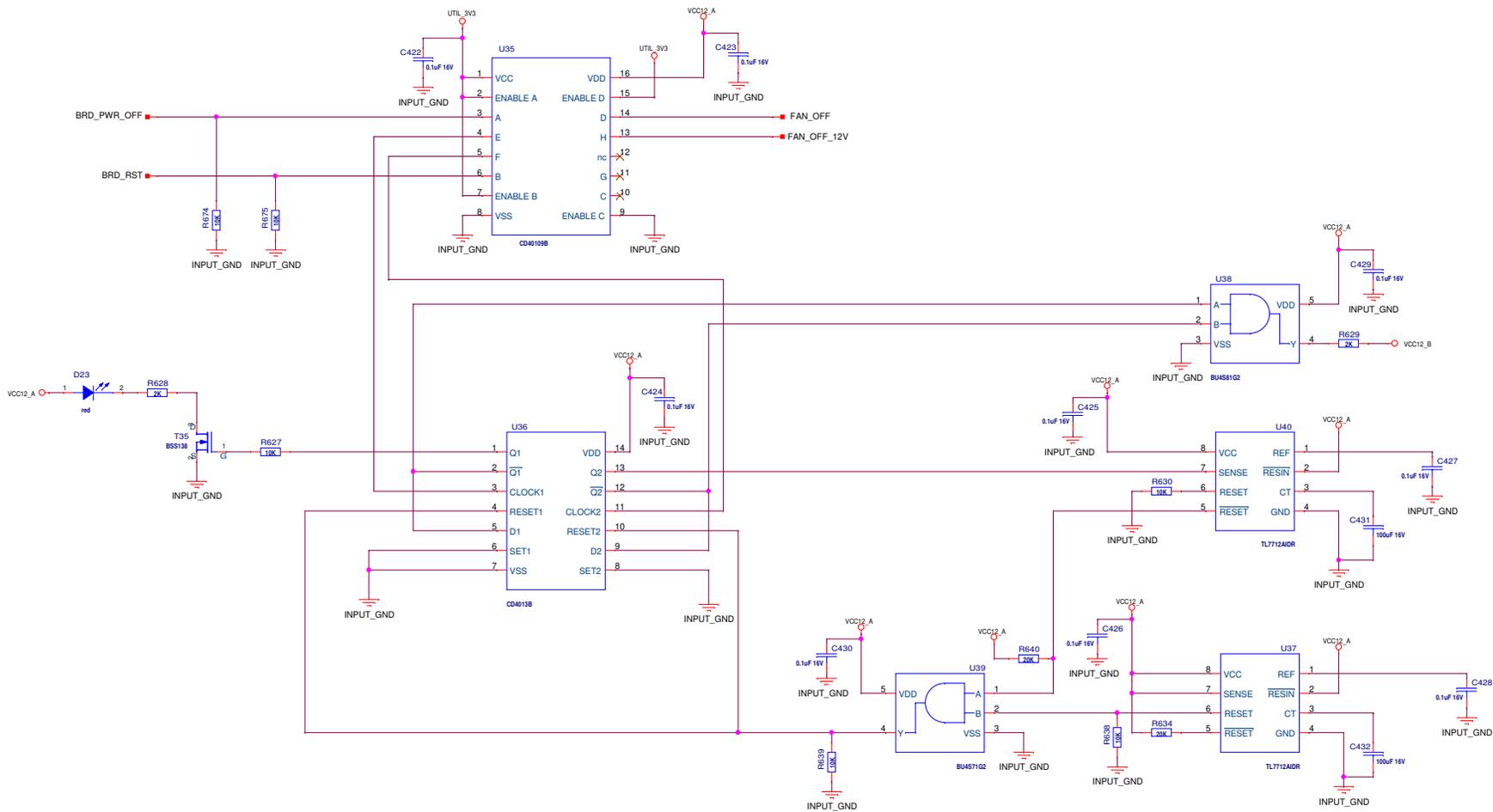
# VCC12\_SW



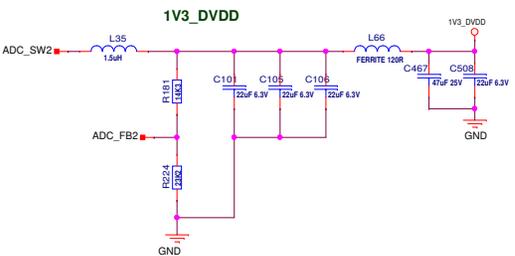
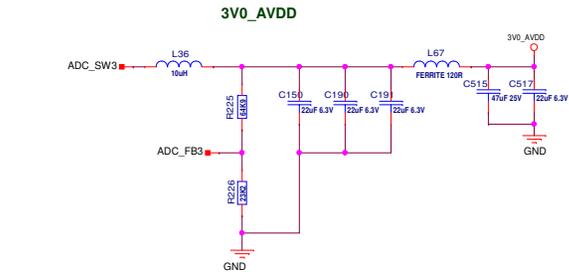
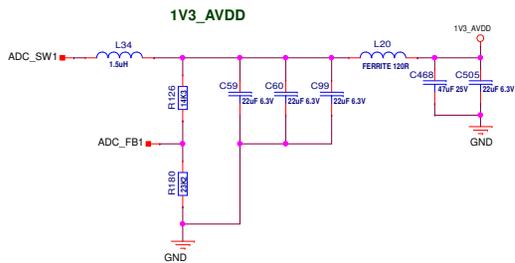
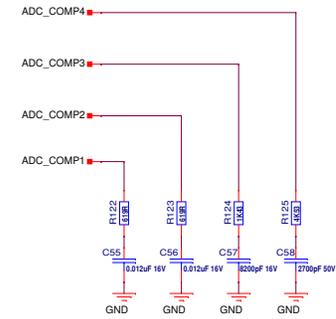
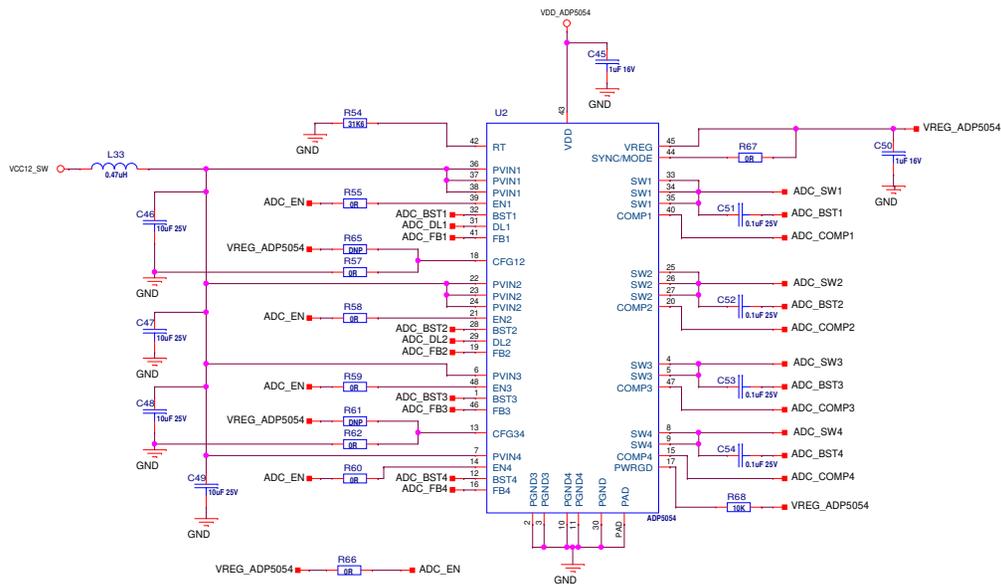
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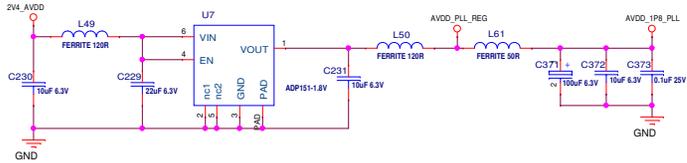
Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	33_PWR_12V_IN		
Size	A3	Project nr.	GRAND PROTO300
Date:	Tuesday, September 29, 2020	Drawing by	F.Hahn
		Print (pcb) nr.	150133_V2.2
		Sheet	33 of 59
		Rev	2.0



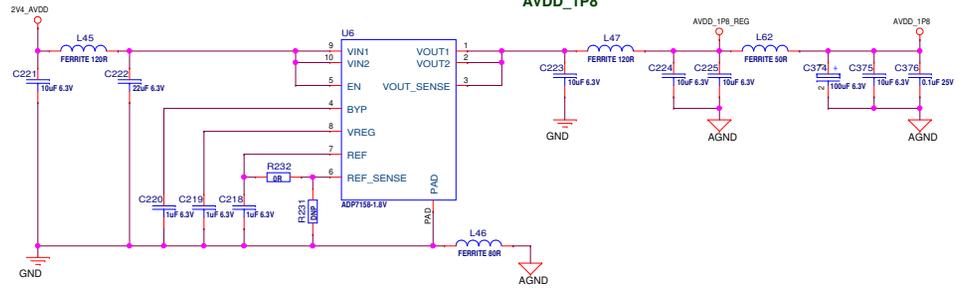
Schematic nr. DIGITIZER_V2.0		Design by R.Habraken & D.Szalas	
Title GRAND PROTO300_DIGITIZER V2			
Page 34_PWR_12V_CTRL			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Wednesday, September 23, 2020	Sheet 34	Print (pcb) nr. 150133_V2.2	of 59



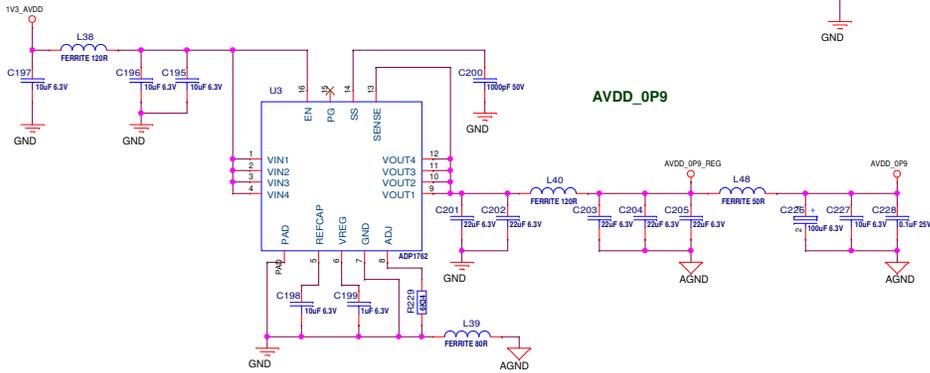
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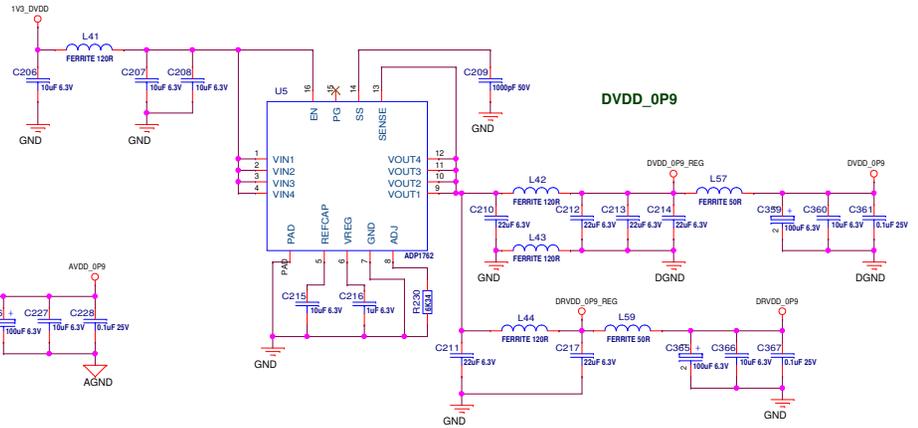
### AVDD\_1P8



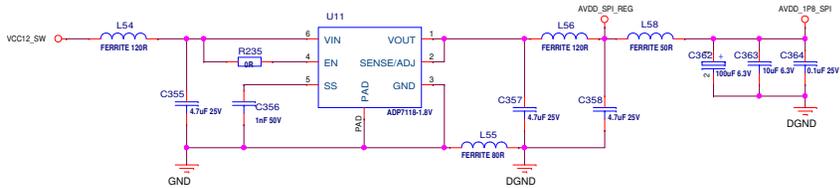
### AVDD\_0P9



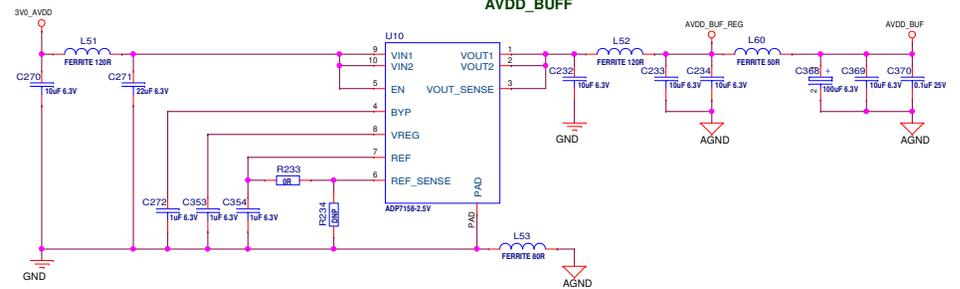
### DVDD\_0P9



### AVDD\_1P8\_SPI



### AVDD\_BUFF

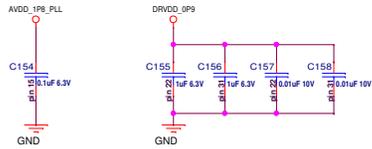


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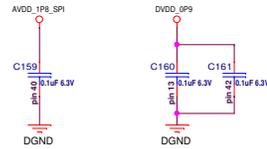


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	38	ADC_PSU2	
Size	A3	Project nr.	GRAND PROTO300
Date:	Wednesday, September 23, 2020	Drawing by	F.Hahn
		Print (pcb) nr.	150133_V2.2
		Sheet	36 of 59
		Rev	2.0

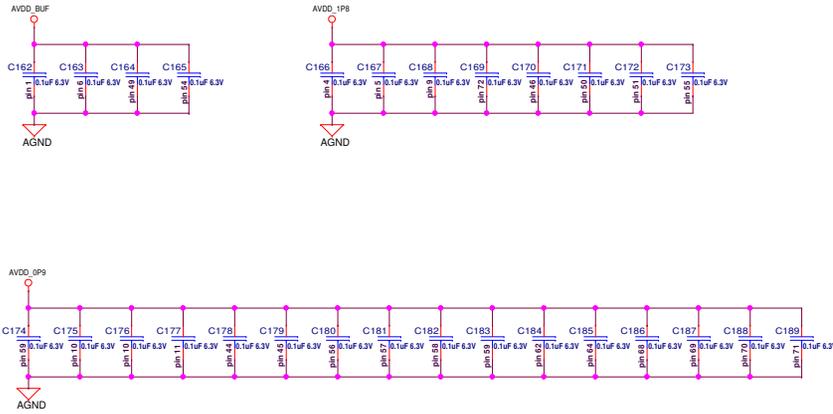
**DRIVER DECOUPLING CAPACITORS**



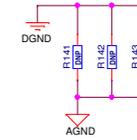
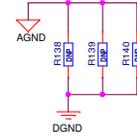
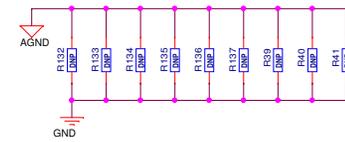
**DIGITAL DECOUPLING CAPACITORS**



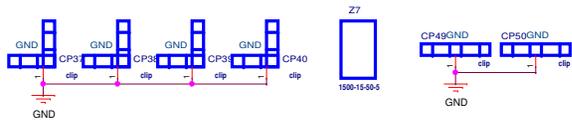
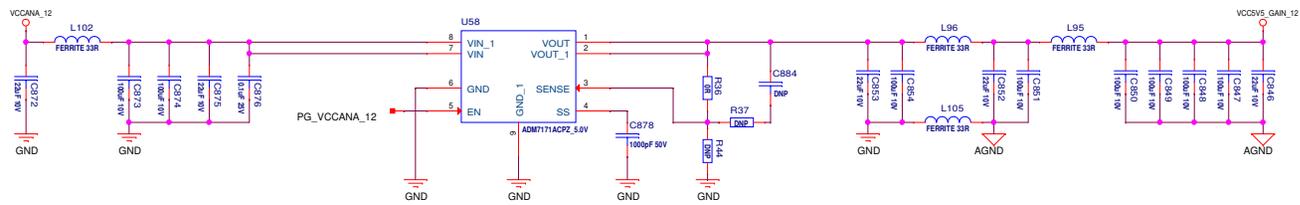
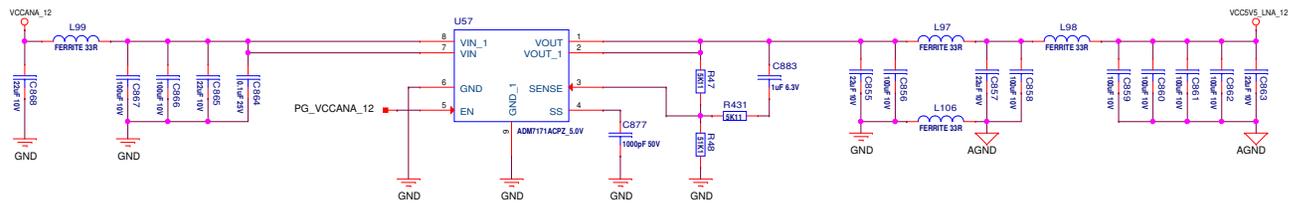
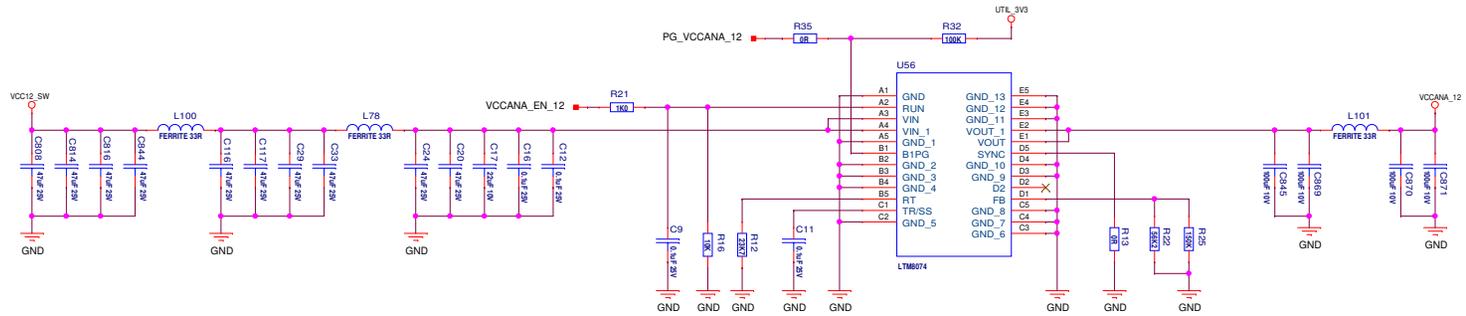
**ANALOG DECOUPLING CAPACITORS**



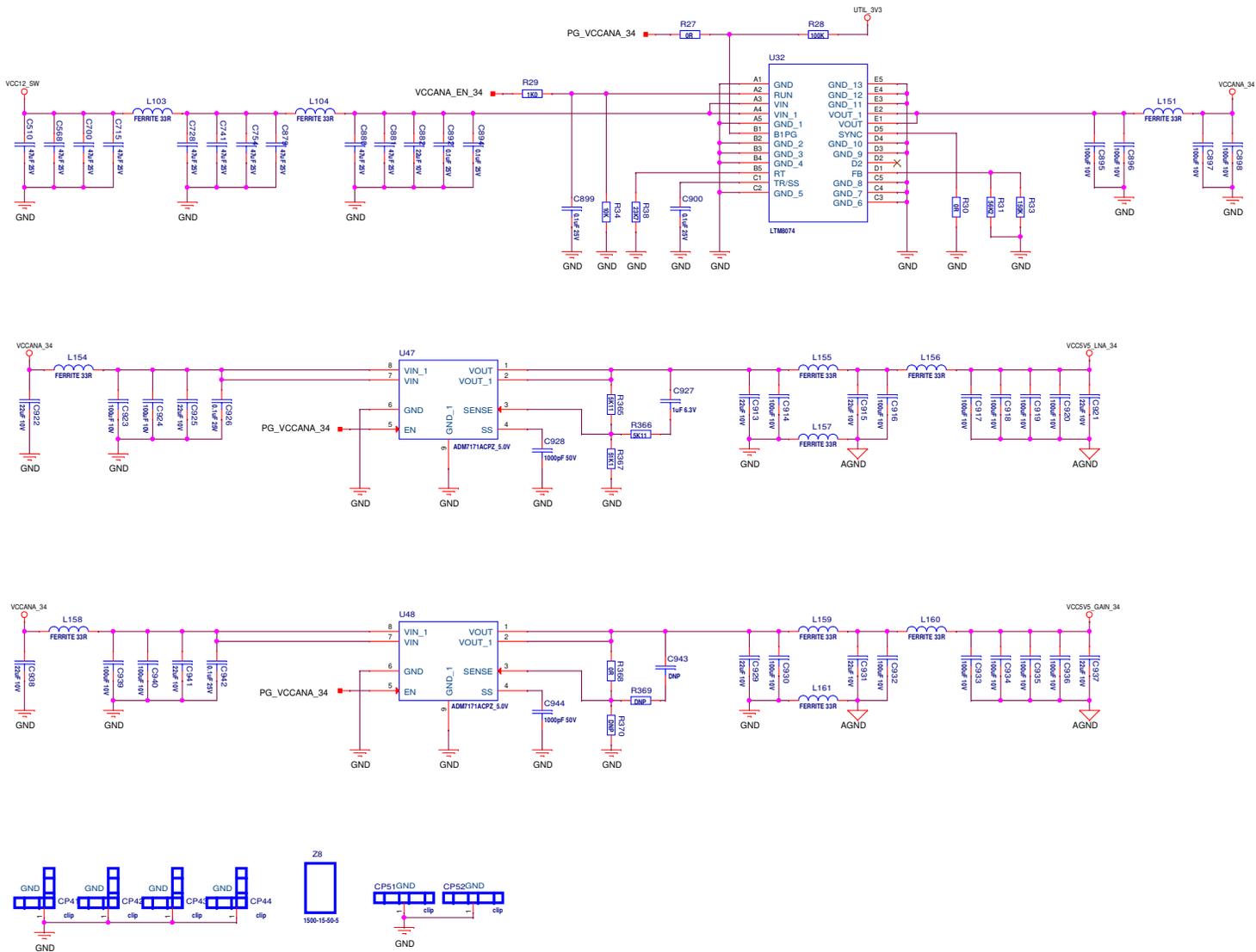
**ADD TIES BETWEEN GROUND PLANES**



Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	37_ADC_decoupling		
Size	A3	Project nr.	GRAND PROTO300
Date	Wednesday, September 23, 2020	Drawing by	F.Hahn
		Print (pcb) nr.	150133 V2.2
		Sheet	37 of 50
		Rev	2.0



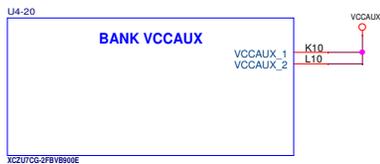
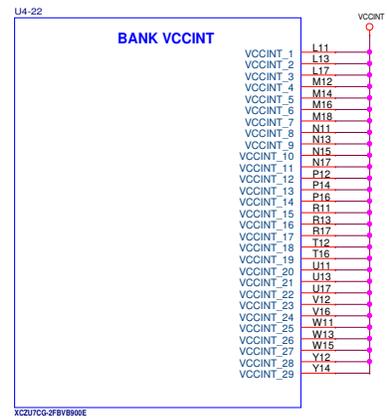
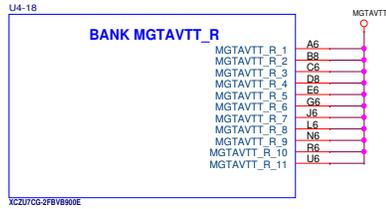
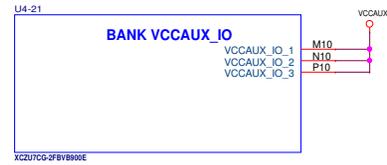
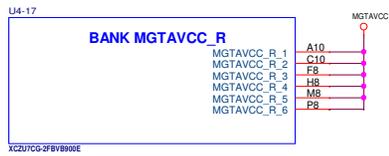
Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	38_FRONT_END_PSU_12		
Size	Project nr.	Drawing by	Rev
A3	GRAND PROTO300	F.Hahn	2.0
Date:	Wednesday, September 23, 2020	Print (pcb) nr.	150133 V2.2
		Sheet	38 of 1



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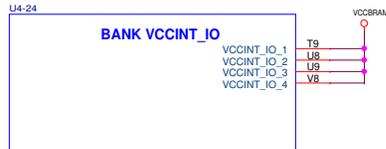


Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas
Title	GRAND PROTO300_DIGITIZER V2		
Page	39_FRONT_END_PSU_34		
Size	A3	Project nr.	GRAND PROTO300
		Print (pcb) nr.	150133_V2.2
Date:	Wednesday, September 23, 2020	Sheet	39 of 1
		Drawing by	F.Hahn
		Rev	2.0





XCZU/CG-2FBV890E



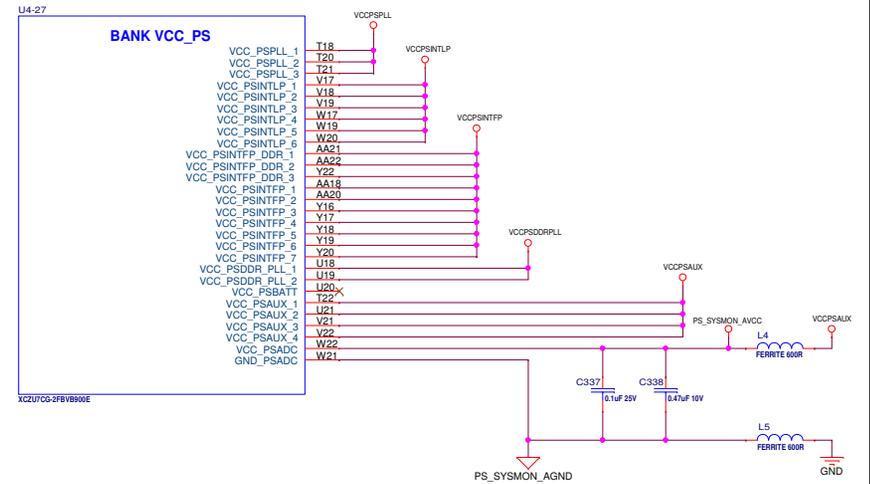
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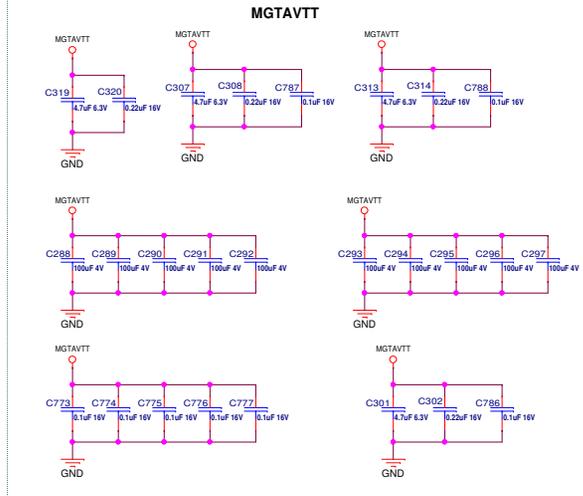
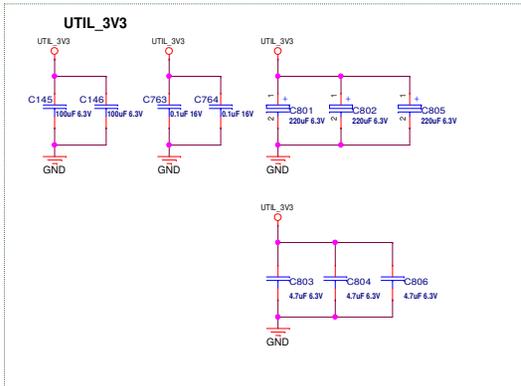
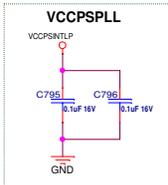
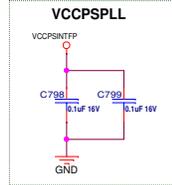
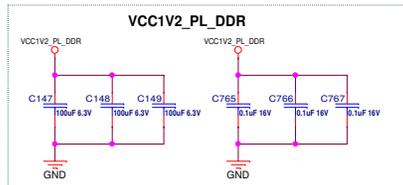
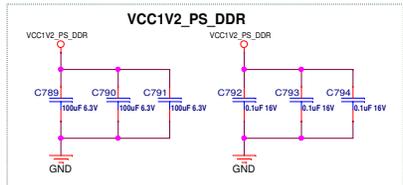
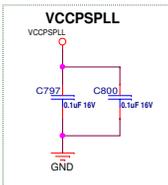
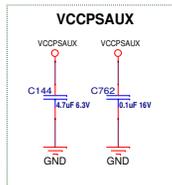
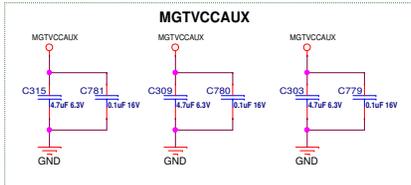
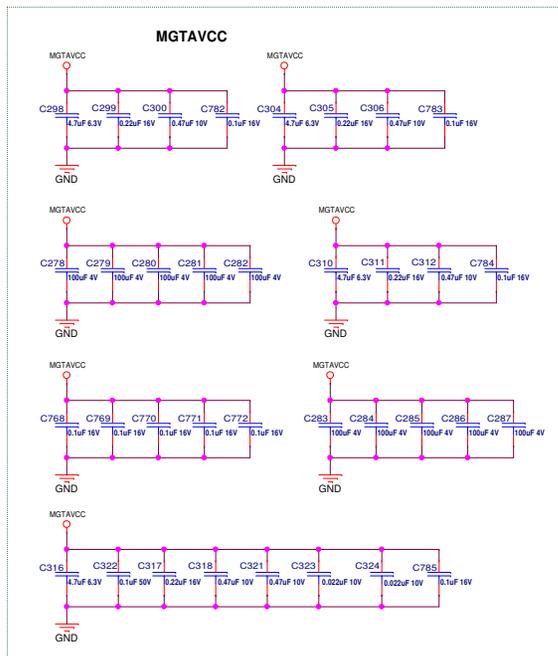
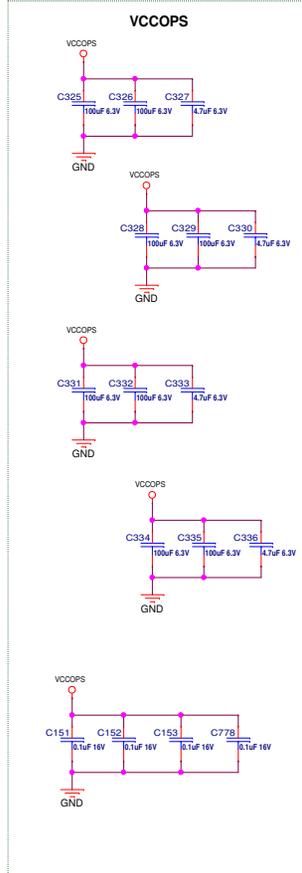
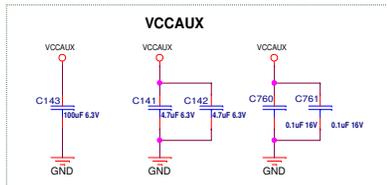
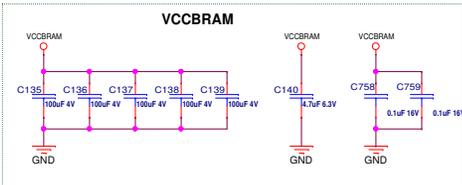
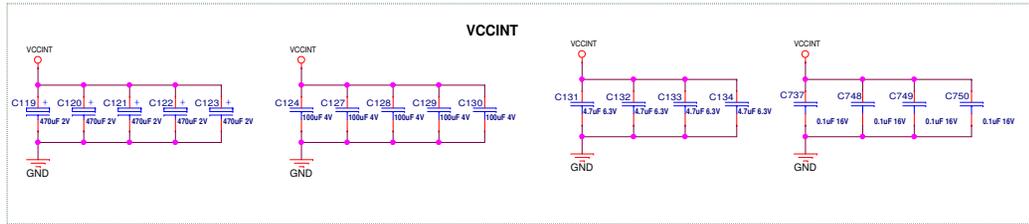
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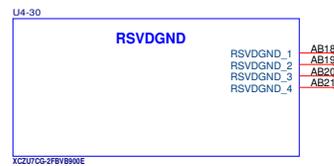
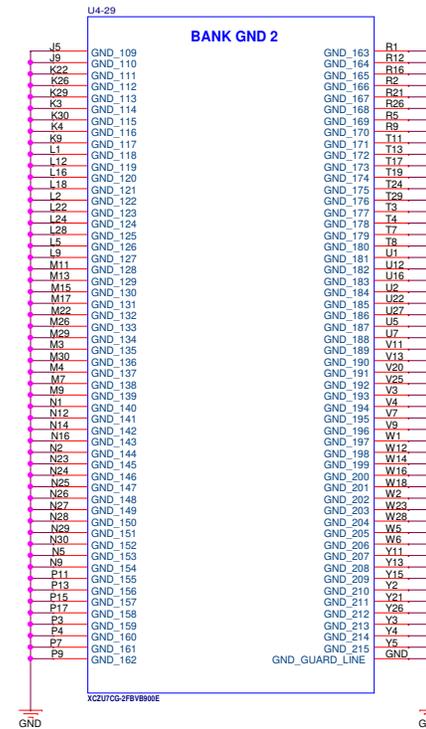
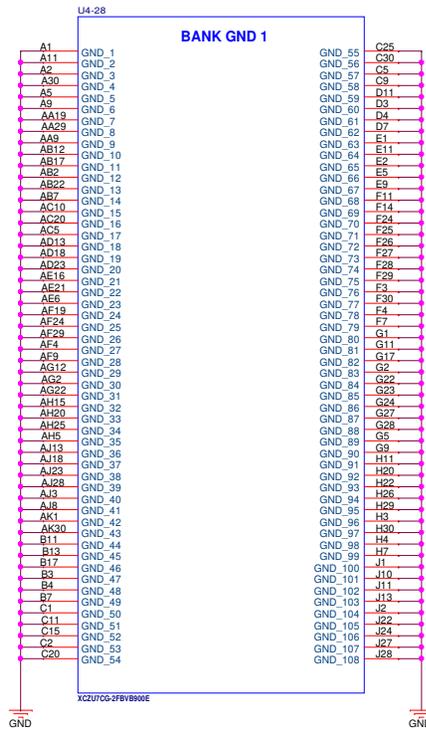


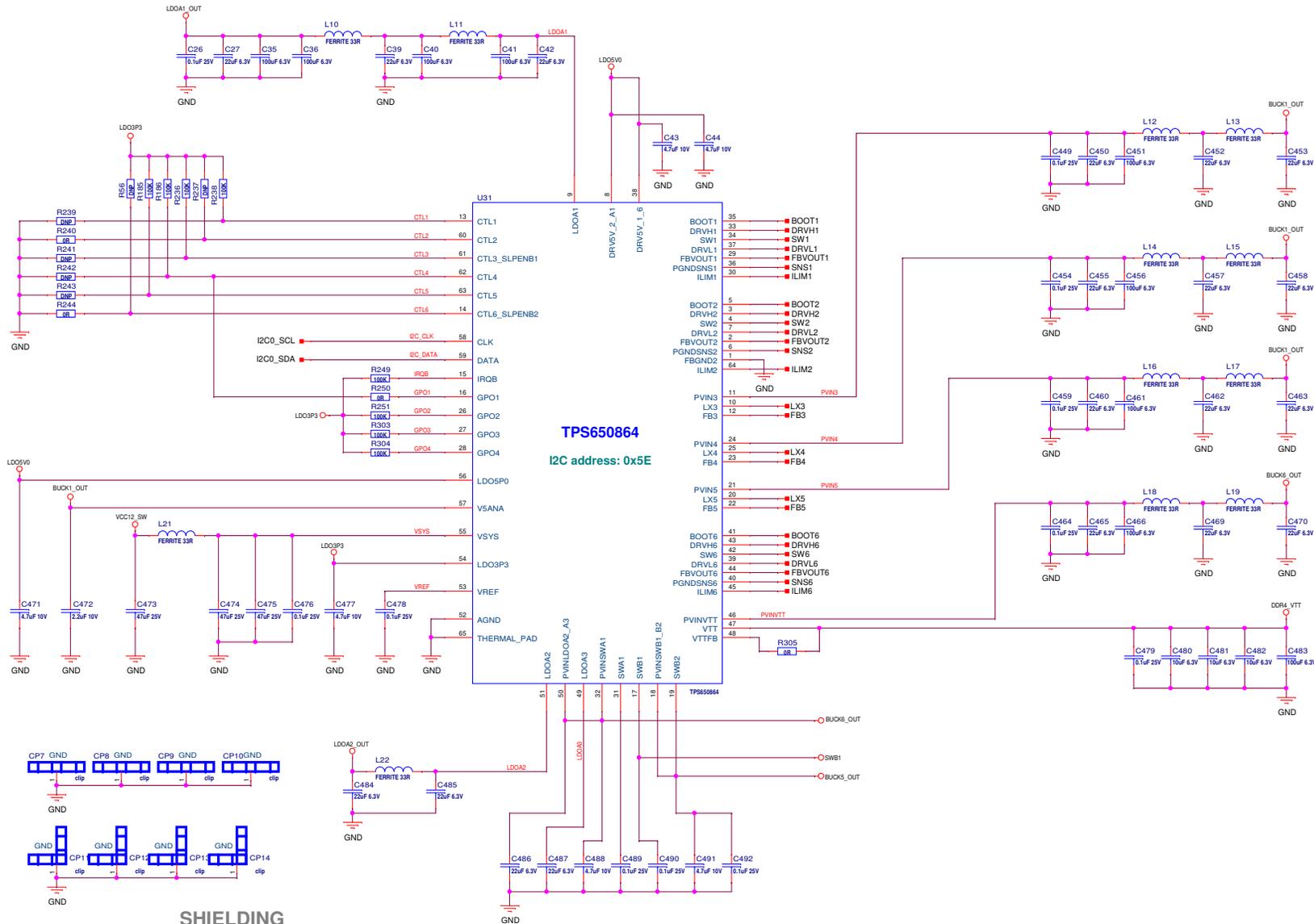
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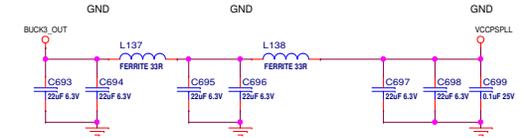
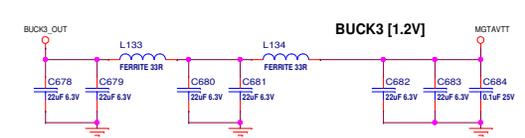
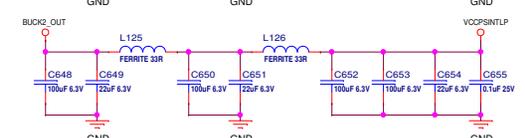
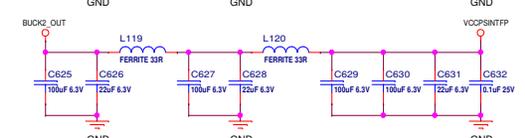
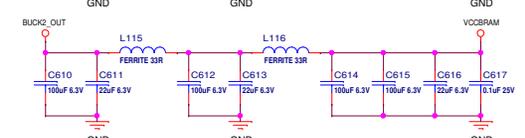
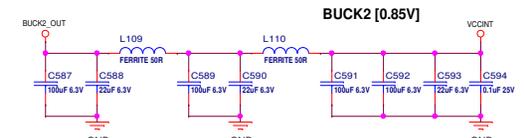
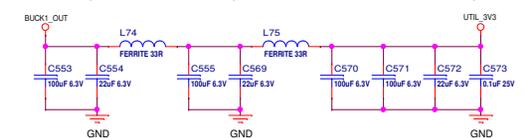
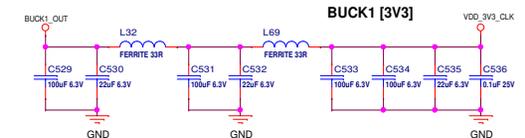
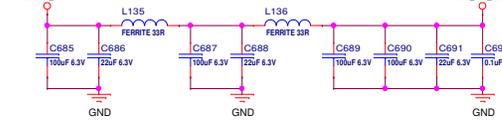
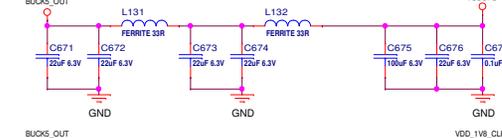
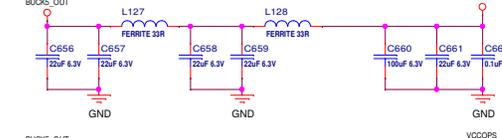
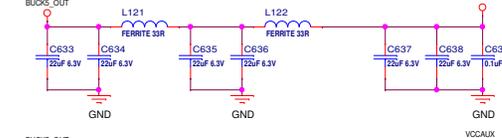
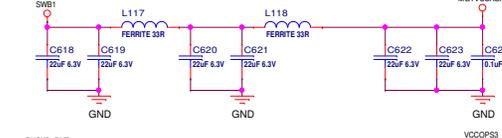
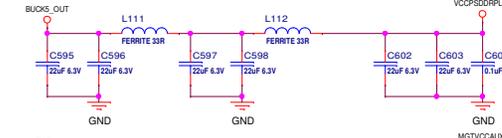
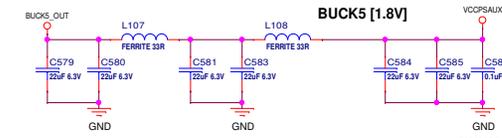
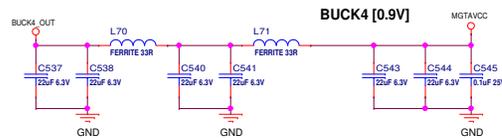
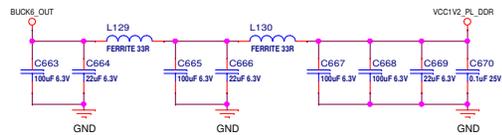
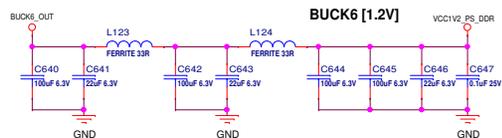
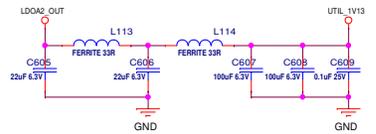
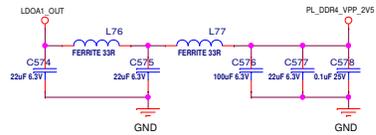
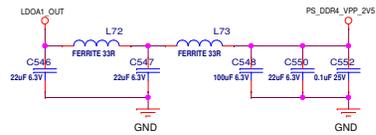
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**SHIELDING**

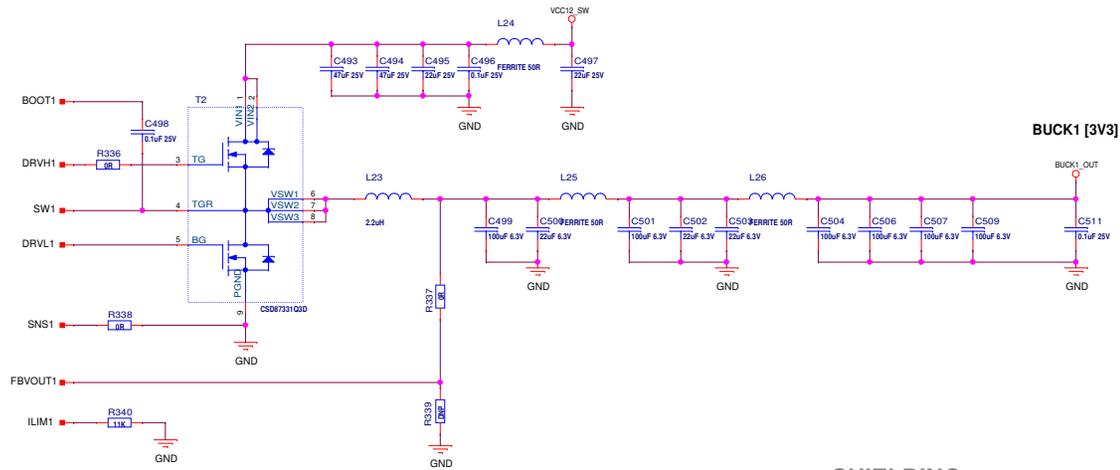


**Radboud University**

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		Print (pcb) nr.	150133_V2.2
Date:	Wednesday, September 23, 2020	Sheet	44 of 1
			Rev 2.0

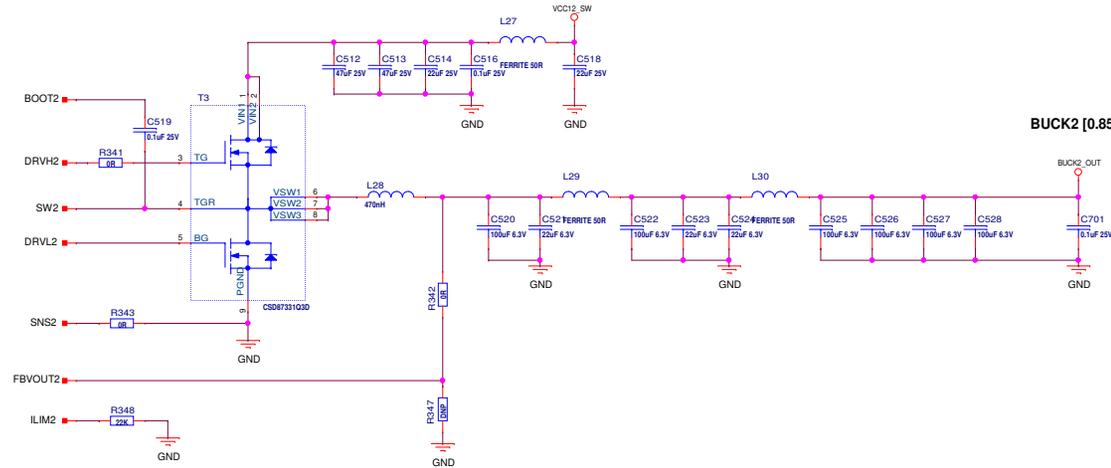


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Print (pcb) nr.	150133 V2.2	Drawing by	F.Hahn
Date:	Wednesday, September 23, 2020	Sheet	45 of 59



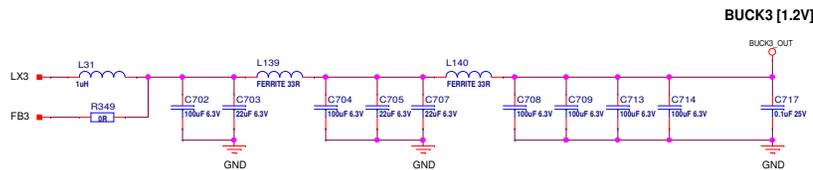
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SHIELDING

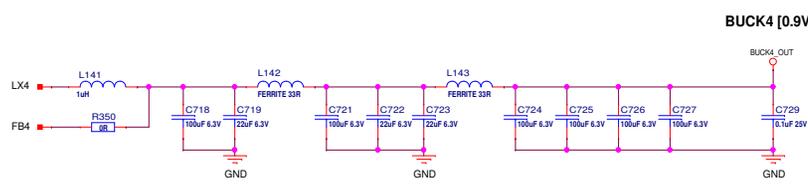


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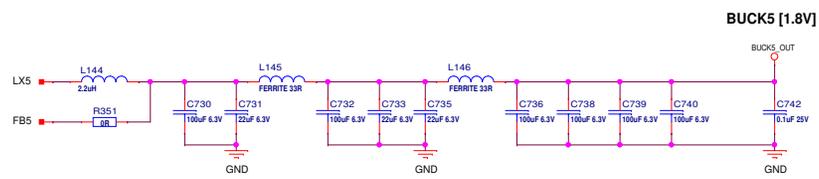
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SHIELDING



SHIELDING

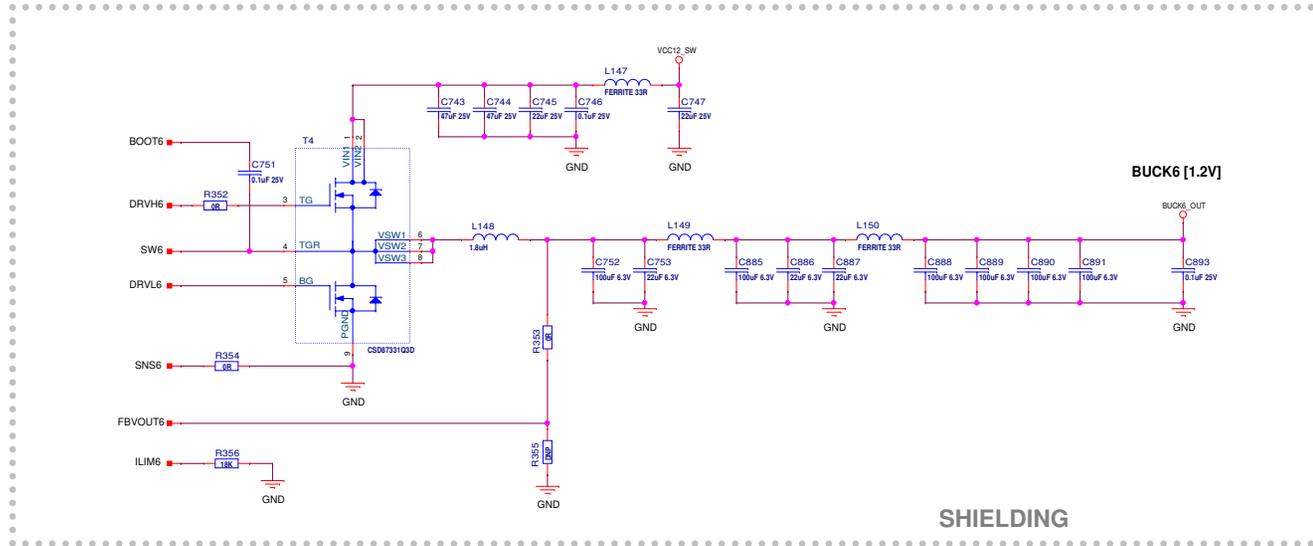


SHIELDING

Radboud University



Schematic nr.	DIGITIZER_V2.0	Design by	R.Habraken & D.Szalas			
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Date:	Wednesday, September 23, 2020	Sheet	47	of	1	

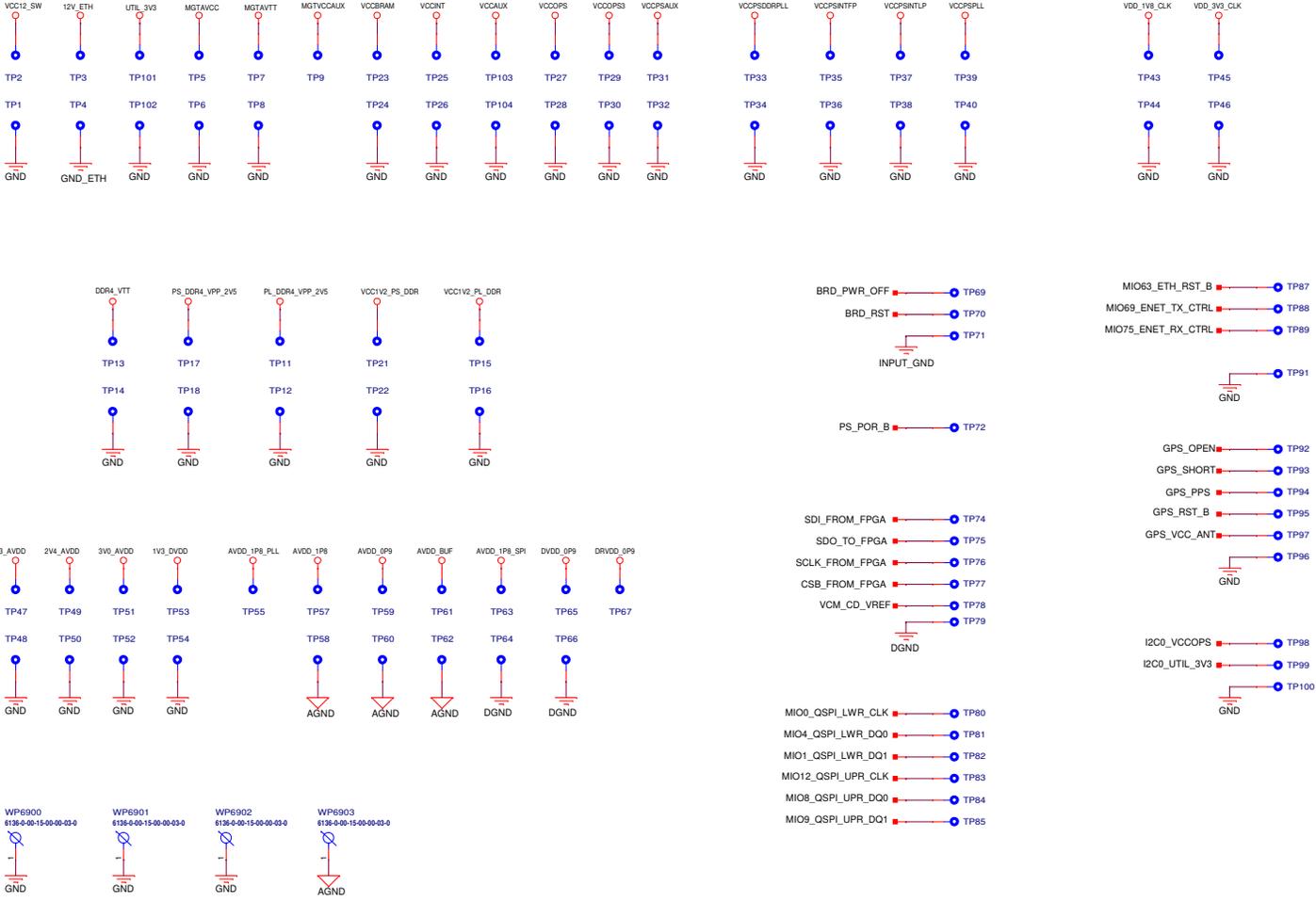


Radboud University



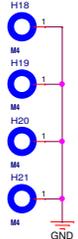
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		Rev	2.0

# TESTPOINTS

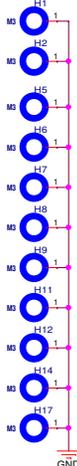


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Rev	2.0		

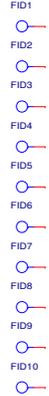
mountingholes M4



mountingholes M3



fiducials top\_layer



fiducials bottom\_layer



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Page 50_MECHANICAL			
Size A3	Project nr. GRAND PROTO300	Drawing by F.Hahn	Rev 2.0
Date: Tuesday, September 29, 2020	Print (pcb) nr. 150133 V2.2	Sheet 50	of 59