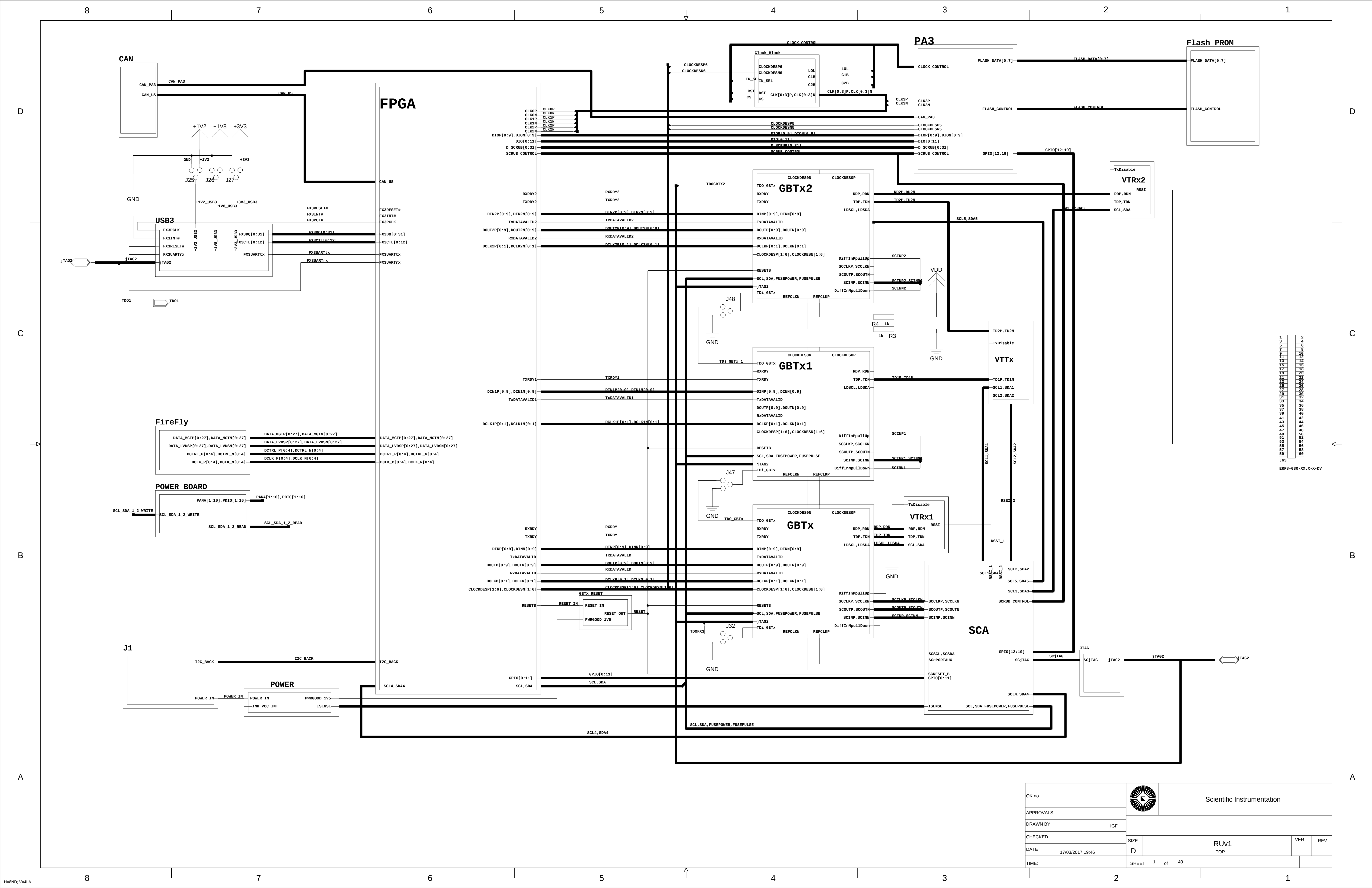
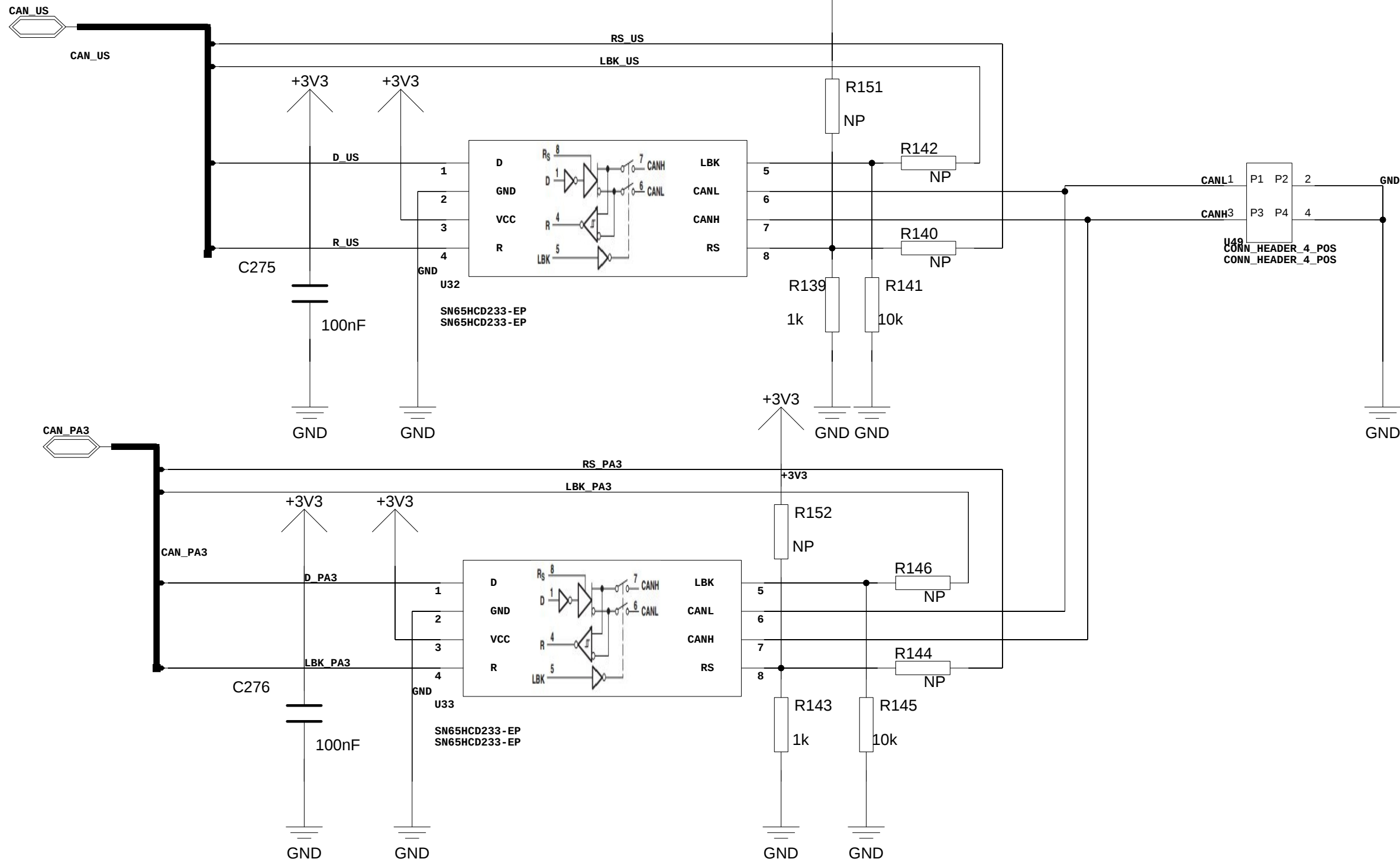


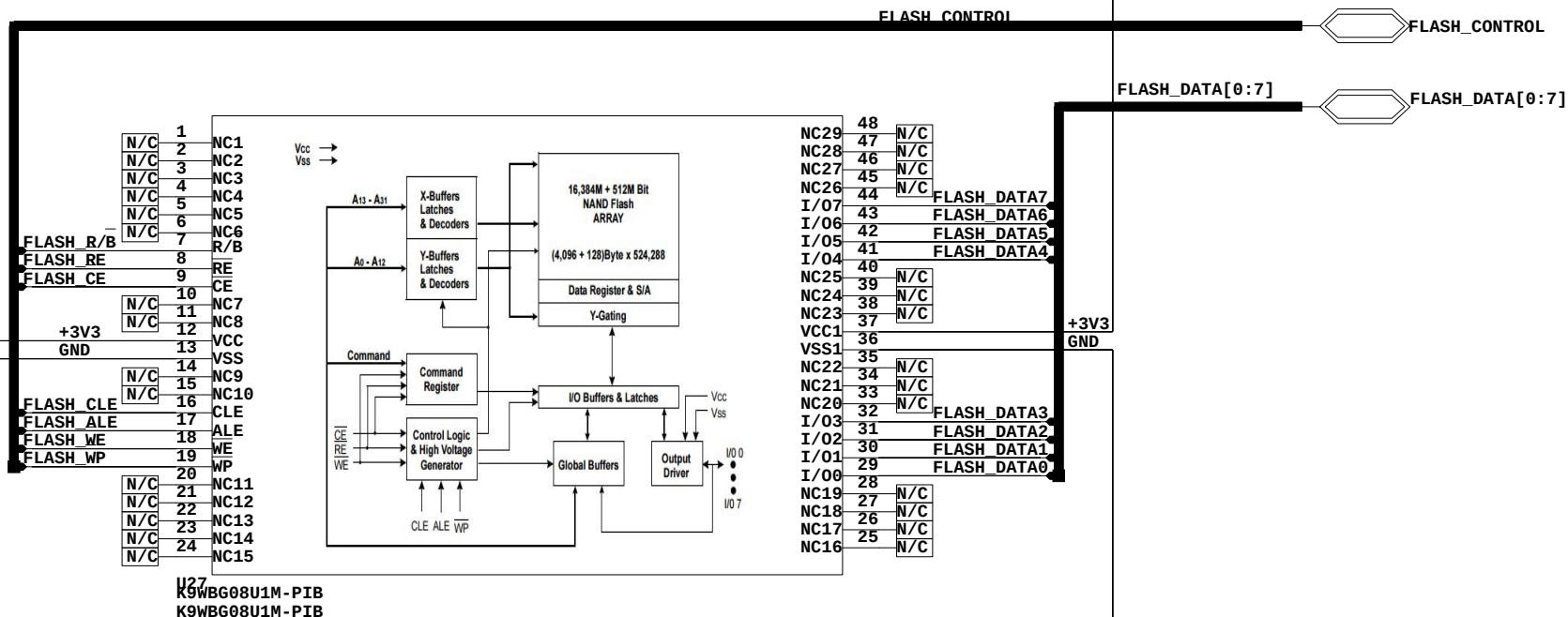




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APPROVALS							
DRAWN BY	IGF	CAN					
CHECKED							
DATE	16/03/2017:16:36	SIZE	B			VER	REV
TIME:							
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+3V3

+3V3



+3V3

GND

+3V3

GND

C316

100nF

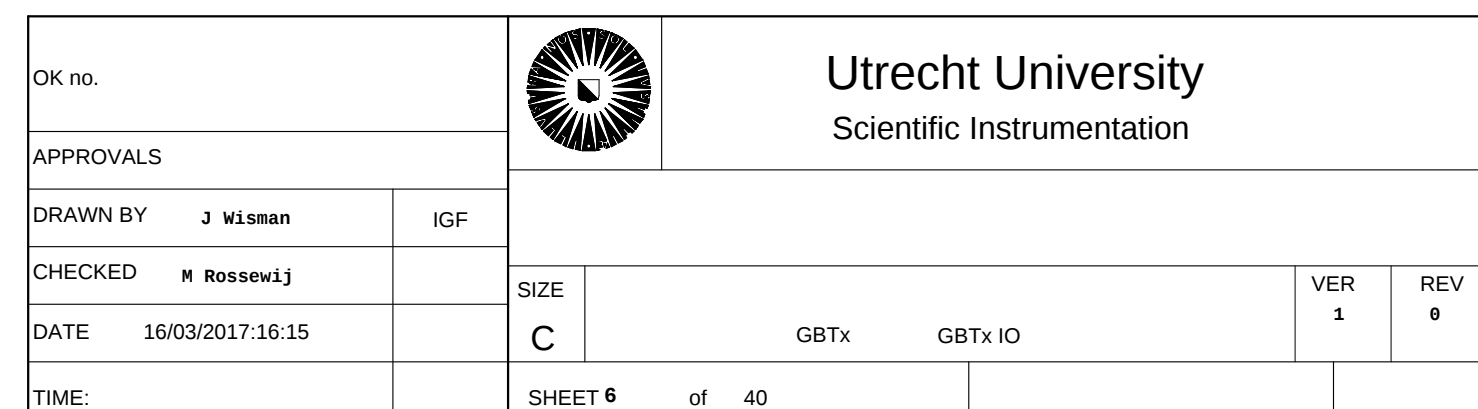
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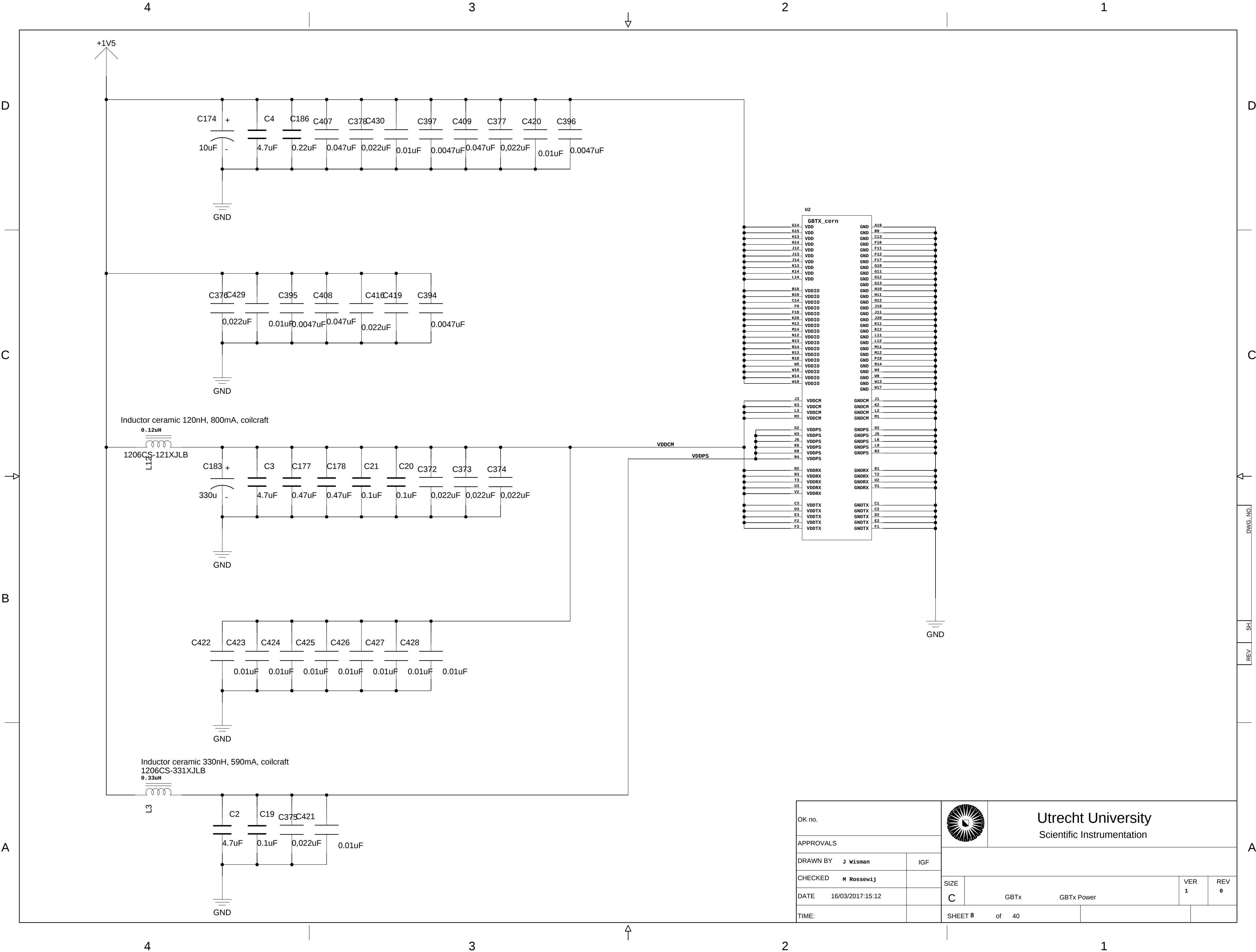
C317

100nF

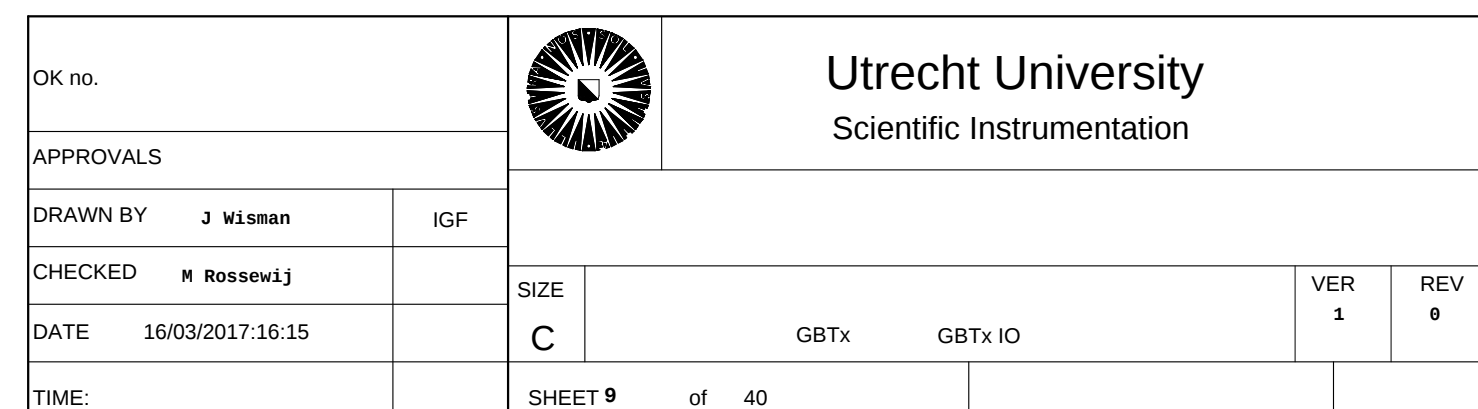
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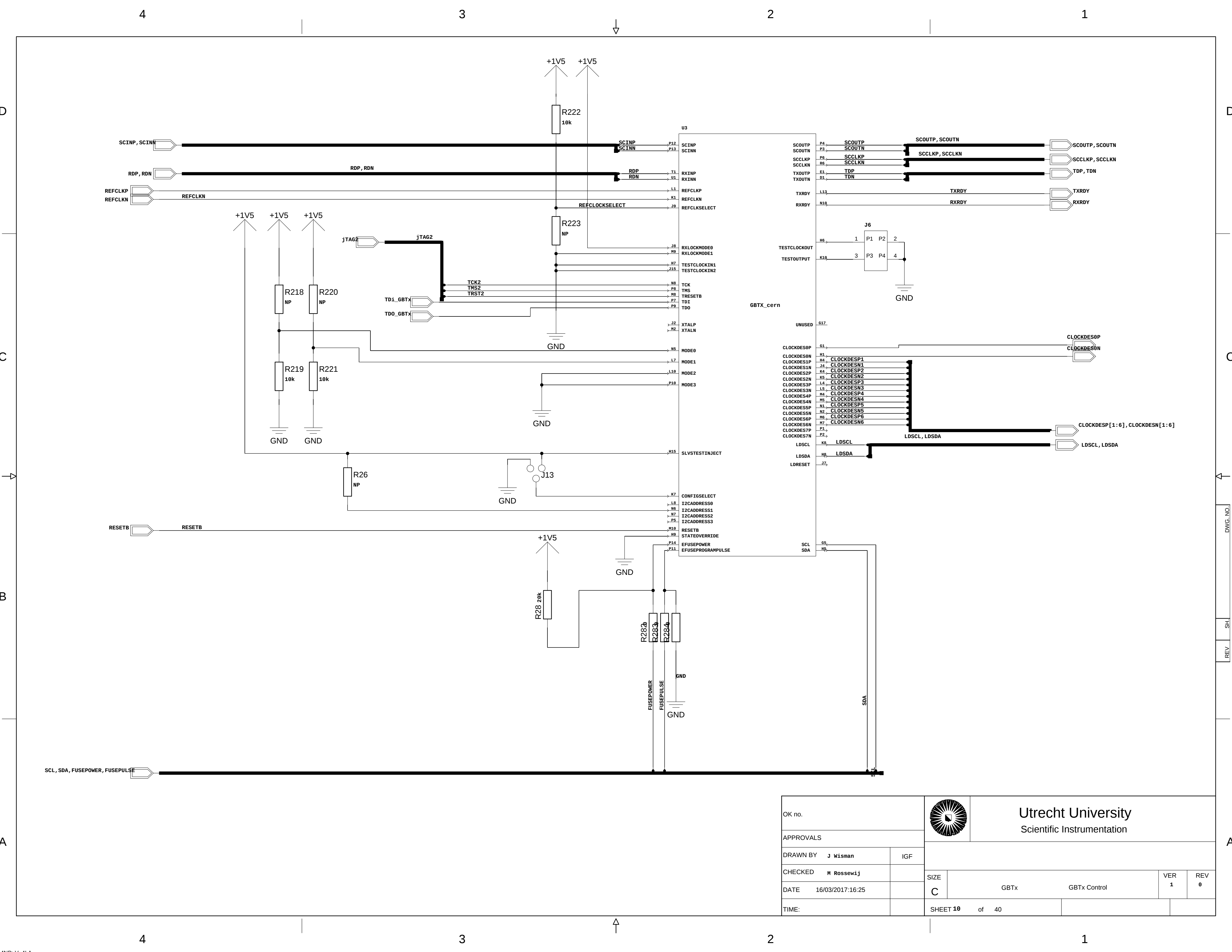
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CHECKED						
DATE						
15/03/2017:09:28						
TIME:						





OK no.			Utrecht University Scientific Instrumentation			
APPROVALS						
DRAWN BY	J Wisman		IGF			
CHECKED	M Rossewij					
DATE	16/03/2017:15:12					
TIME:				SHEET 8 of 40		





OK no.

APPROVALS

DRAWN BY J Wisman

IGF

CHECKED M Rossewij

DATE 16/03/2017:16:25

TIME:



Utrecht University

Scientific Instrumentation

SIZE C

GBTx

GBTx Control

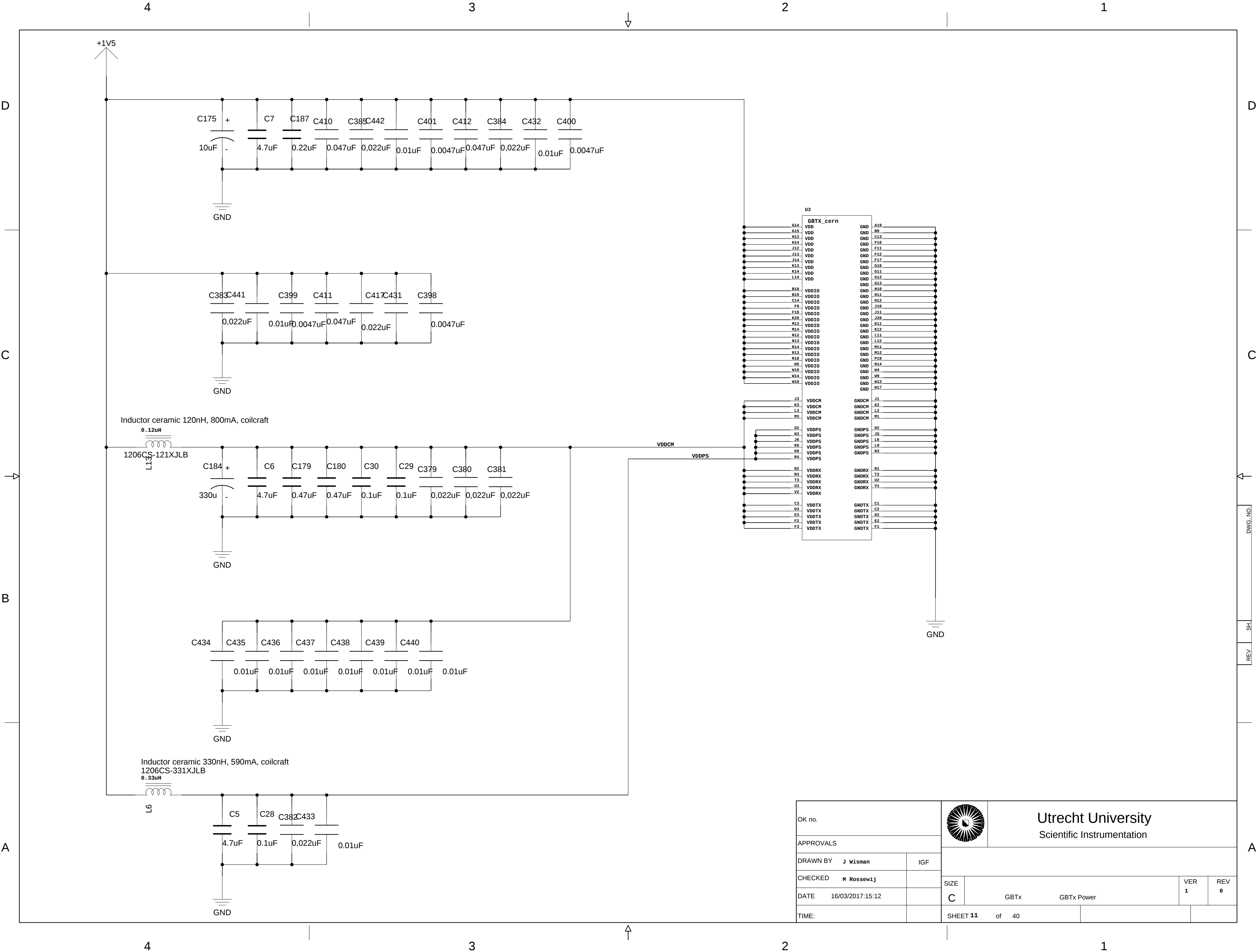
VER 1

REV 0

SHEET 10

of 40

H=4ND; V=4LA



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APPROVALS							
DRAWN BY	J Wisman						IGF
CHECKED	M Rossewij						
DATE	16/03/2017:15:12		SIZE	GBTx GBTx Power		VER 1	REV 0
TIME:			C				
			SHEET 11 of 40				

D

C

B

A

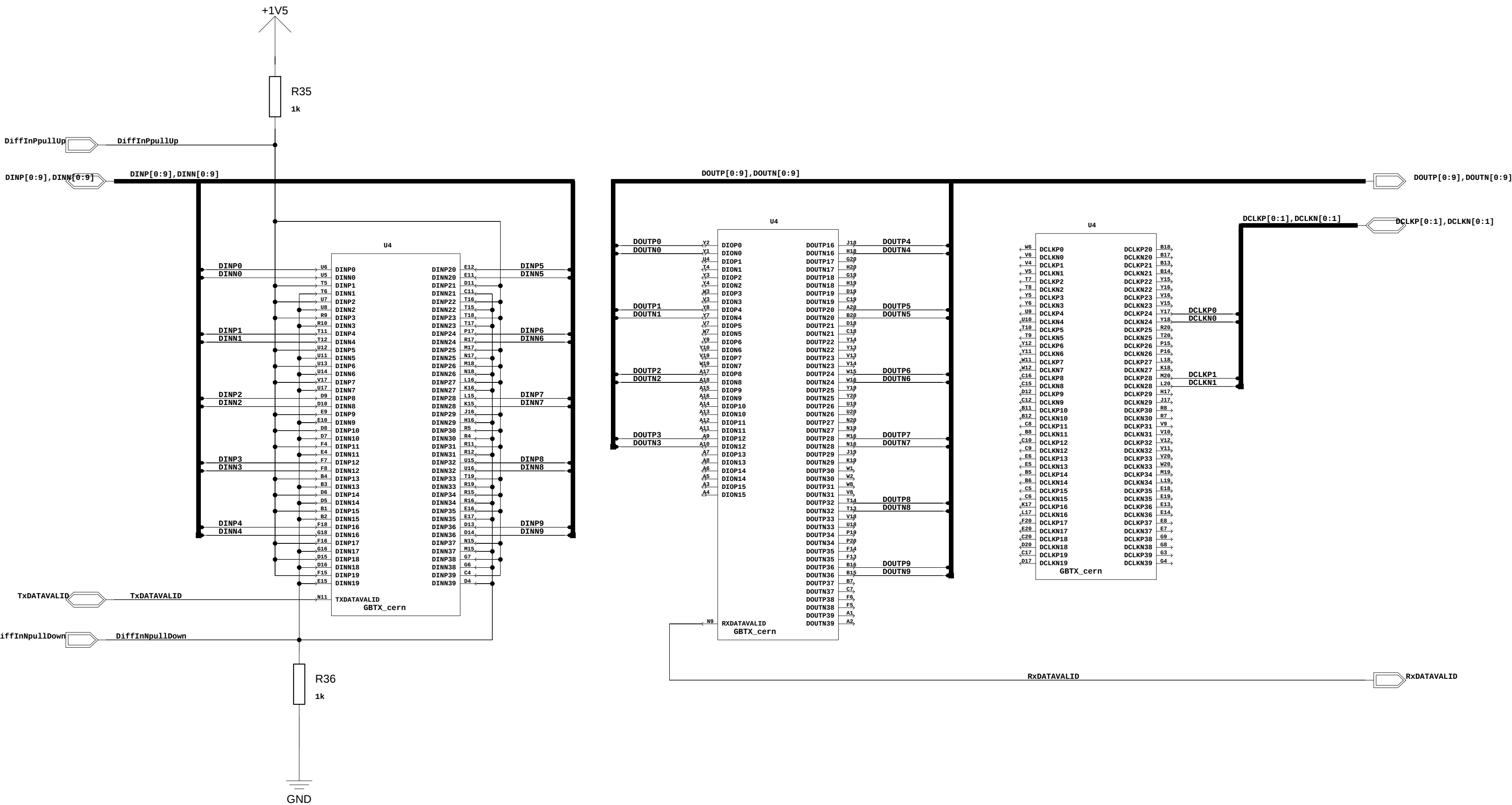
D

C

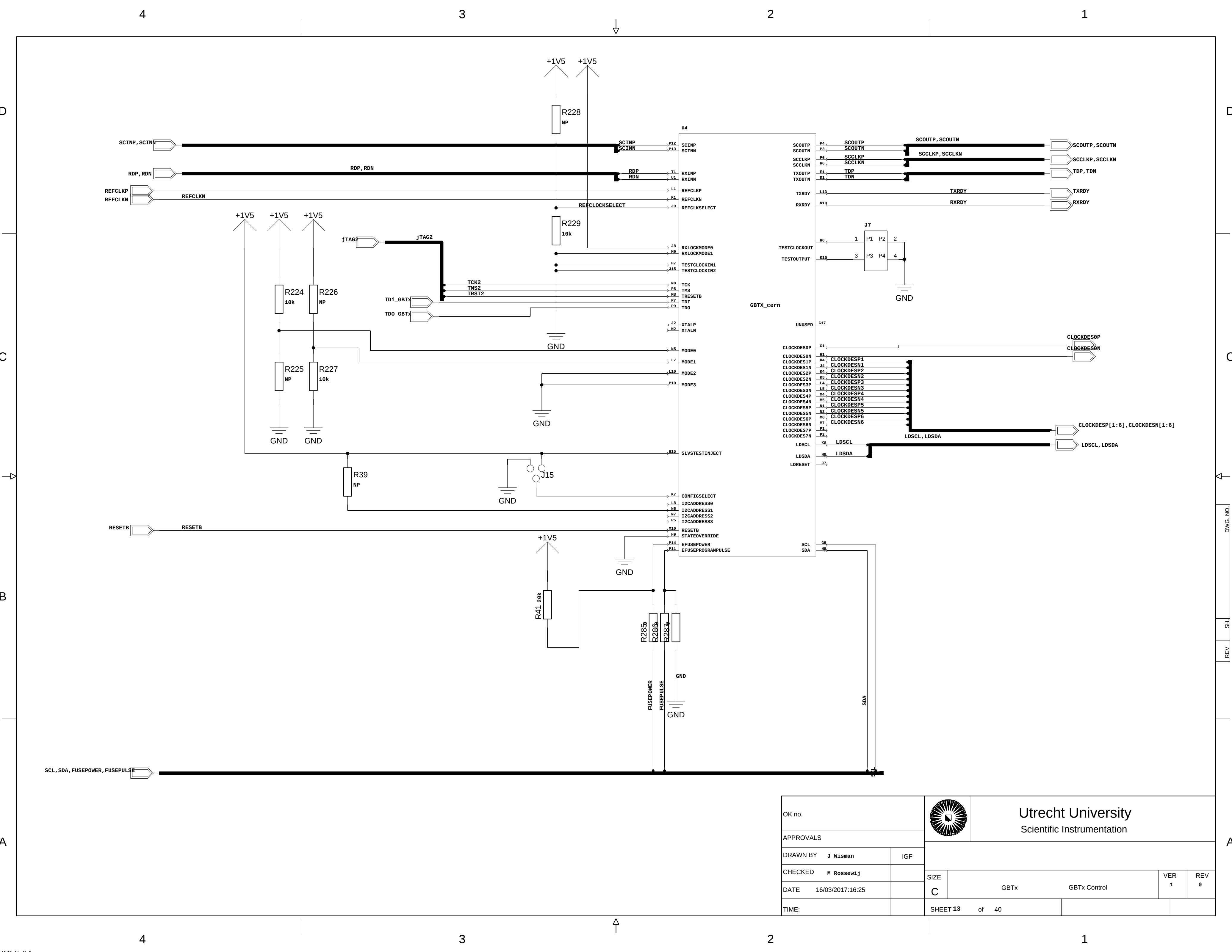
SH

REV

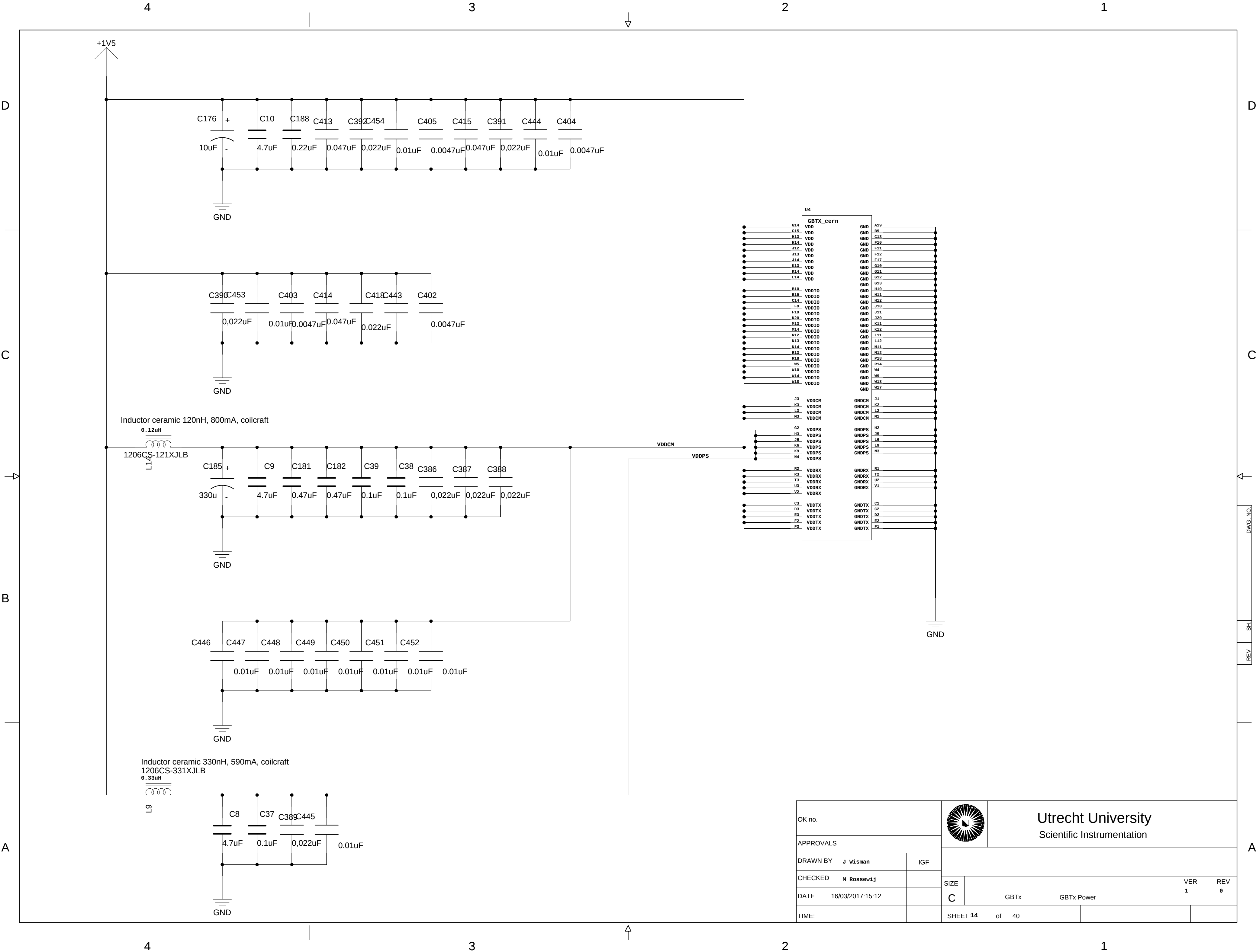
A



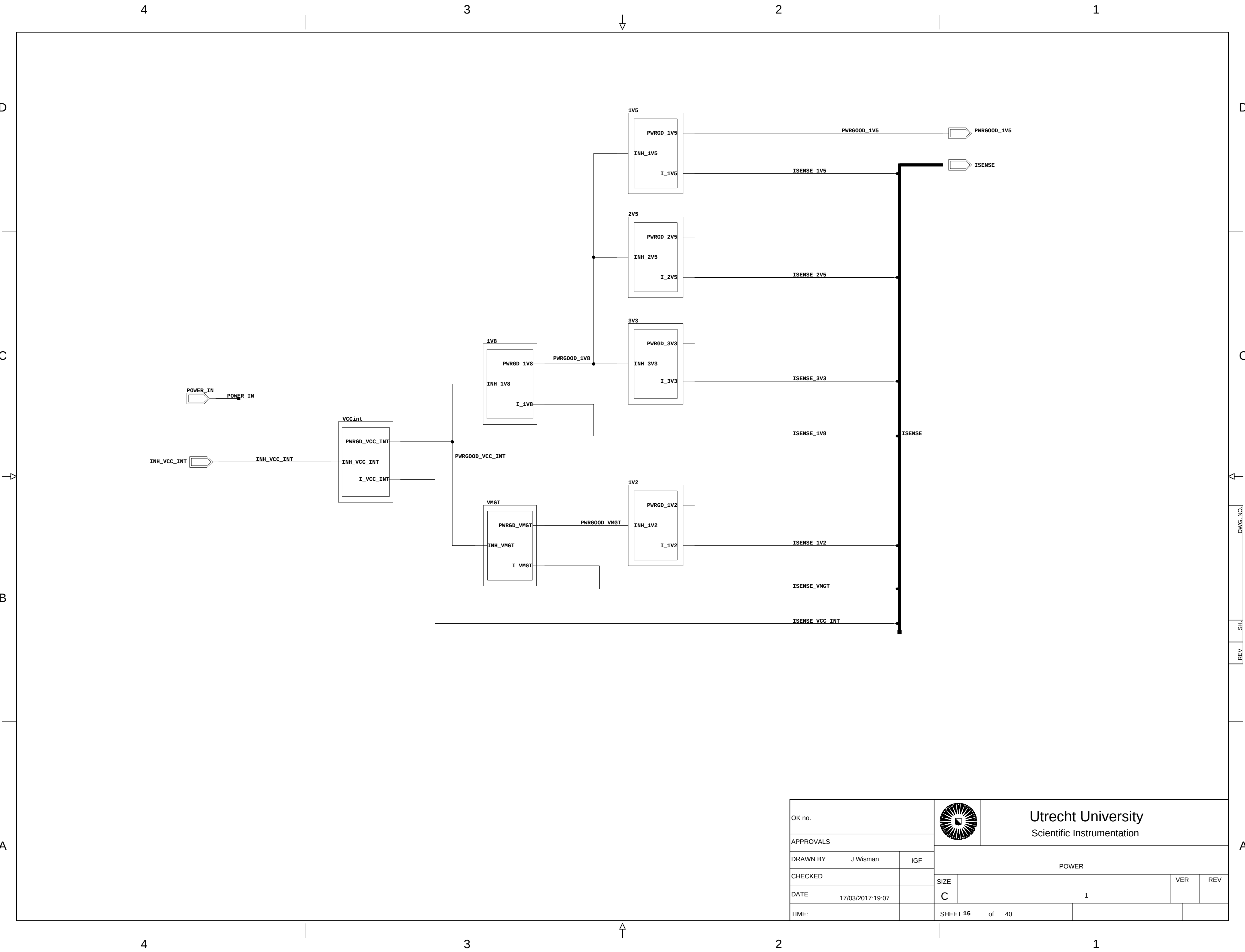
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APPROVALS			Scientific Instrumentation				
DRAWN BY	J Wisman		IGF				
CHECKED	M Rossewij						
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			SHEET 12 of 40				



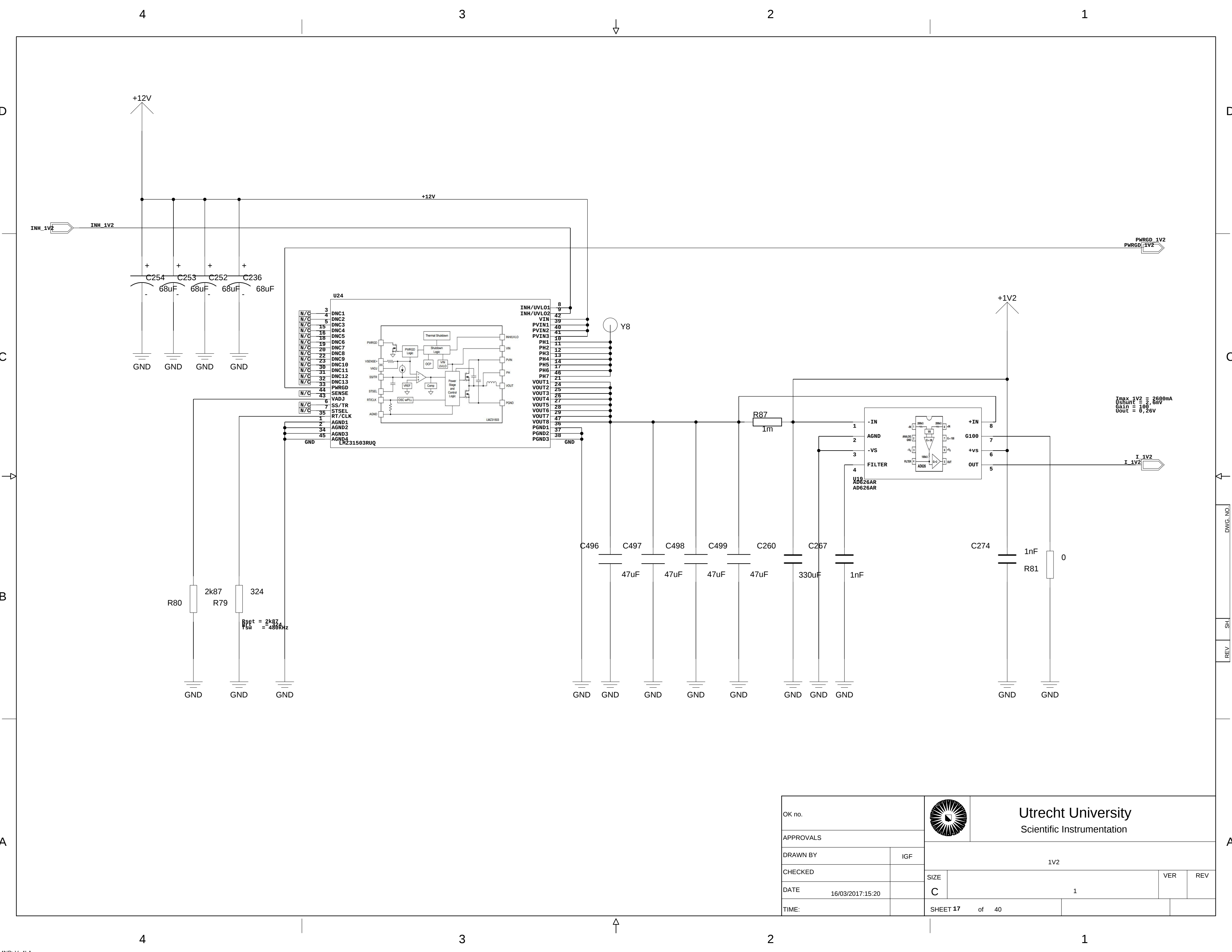
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CHECKED M Rossewij								
DATE 16/03/2017:16:25								
TIME:				SIZE C	GBTx	GBTx Control	VER 1	REV 0



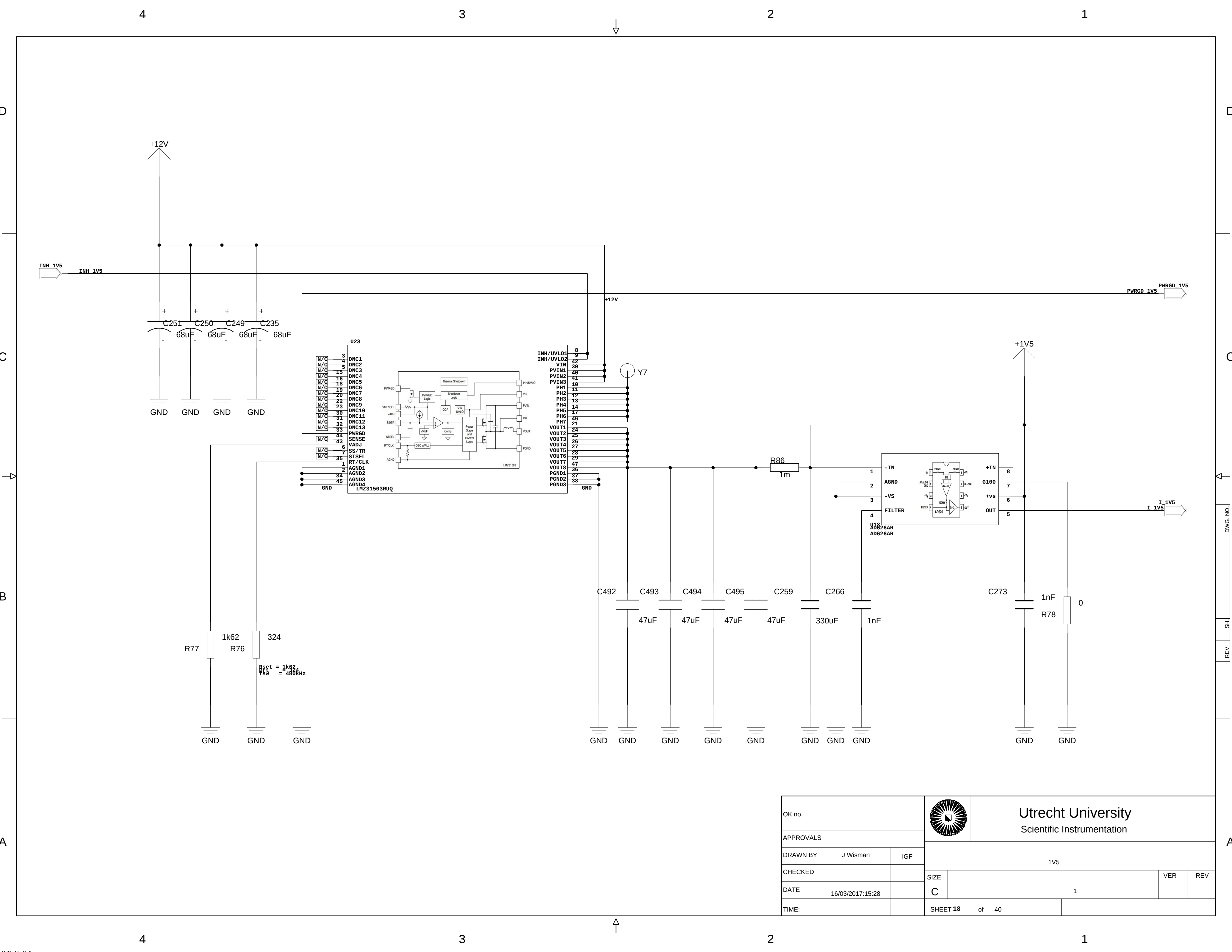
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APPROVALS							
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TIME:			C				
			SHEET 14 of 40				



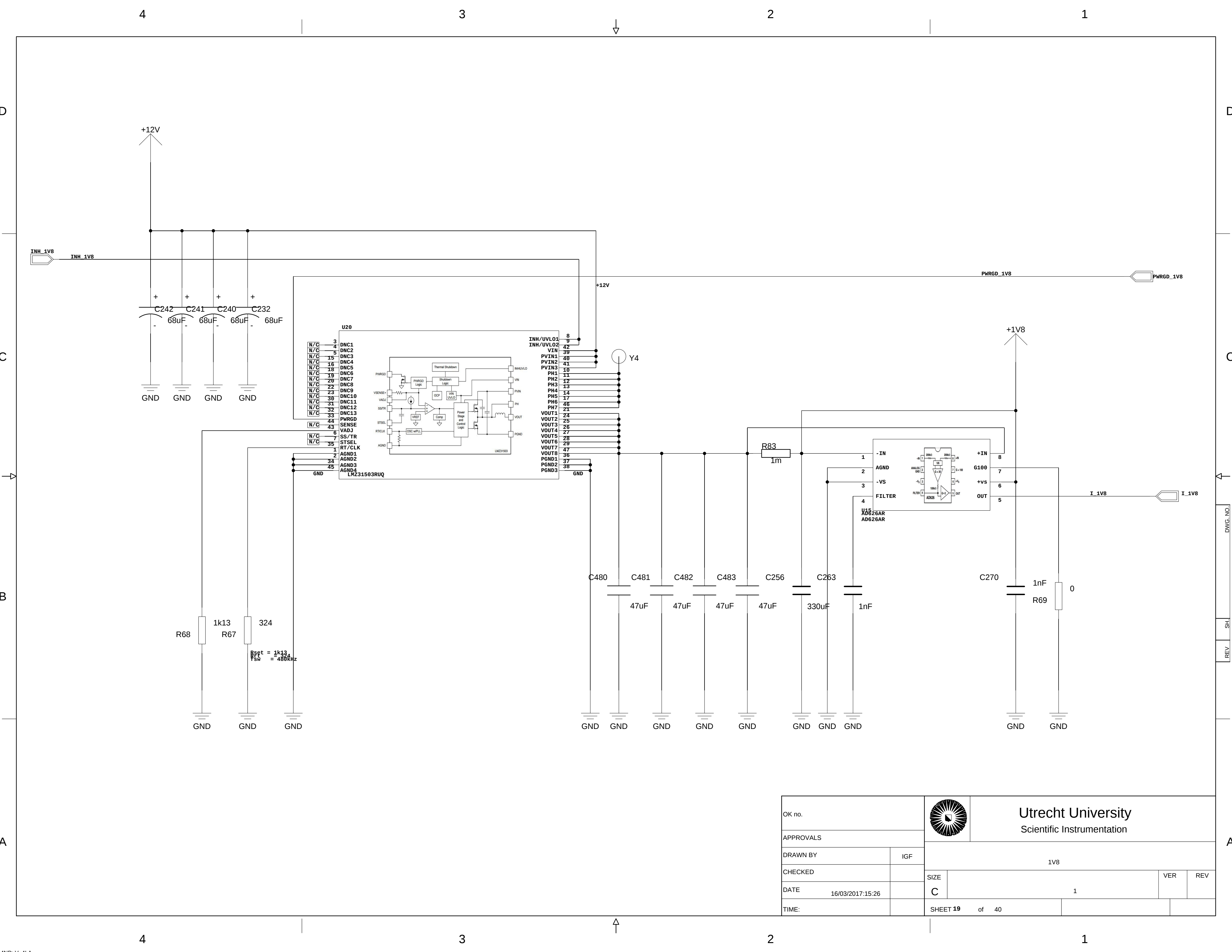
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APPROVALS				Scientific Instrumentation				
DRAWN BY		J Wisman	IGF	POWER				
CHECKED								
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TIME:			SHEET 16 of 40					



OK no.			Utrecht University Scientific Instrumentation			
APPROVALS						
DRAWN BY	IGF	1V2				
CHECKED		SIZE			VER	REV
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TIME:		SHEET 17 of 40				



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DRAWN BY	J Wisman	IGF	1V5				
CHECKED							
DATE	16/03/2017:15:28		SIZE	1		VER	REV
TIME:			SHEET 18 of 40				



OK no.			Utrecht University Scientific Instrumentation			
APPROVALS						
DRAWN BY	IGF	1V8				
CHECKED						
DATE	16/03/2017:15:26	SIZE	1		VER	REV
TIME:		SHEET 19 of 40				

D

C

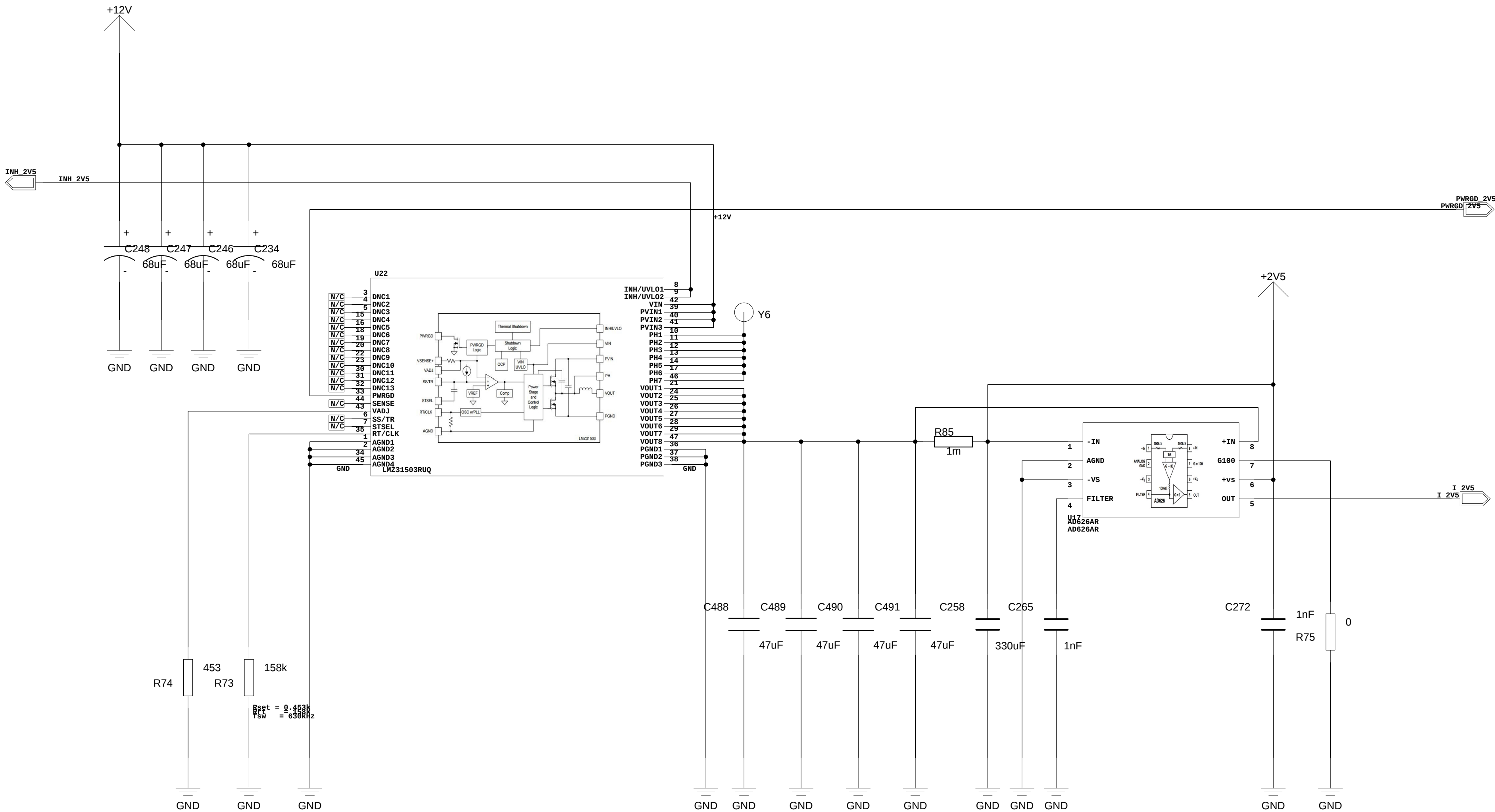
B

A

D

C

A



OK no.			Utrecht University			
APPROVALS			Scientific Instrumentation			
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CHECKED						
DATE	16/03/2017:15:27	SIZE	1		VER	REV
TIME:		SHEET 20 of 40				

D

C

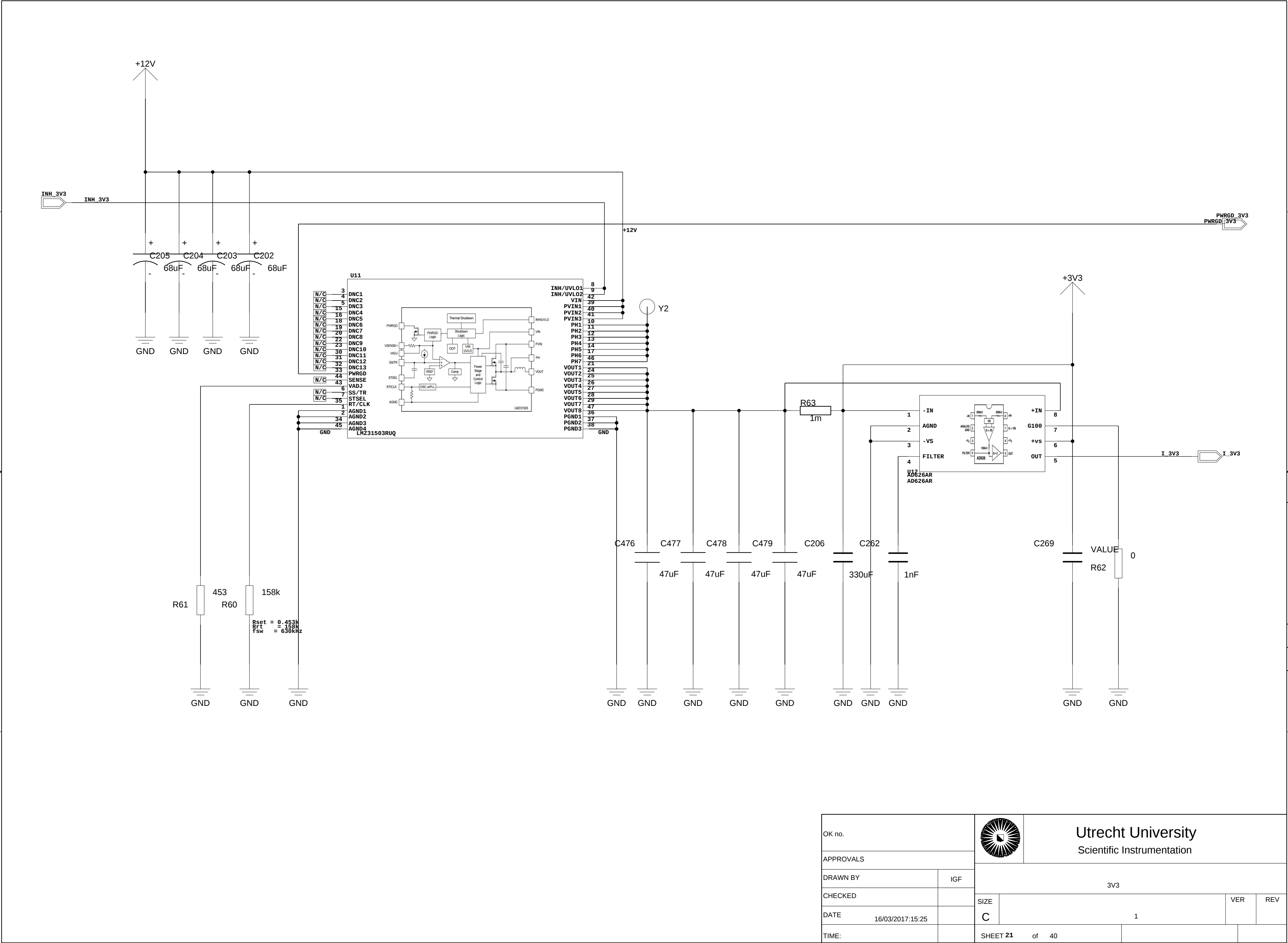
B

A

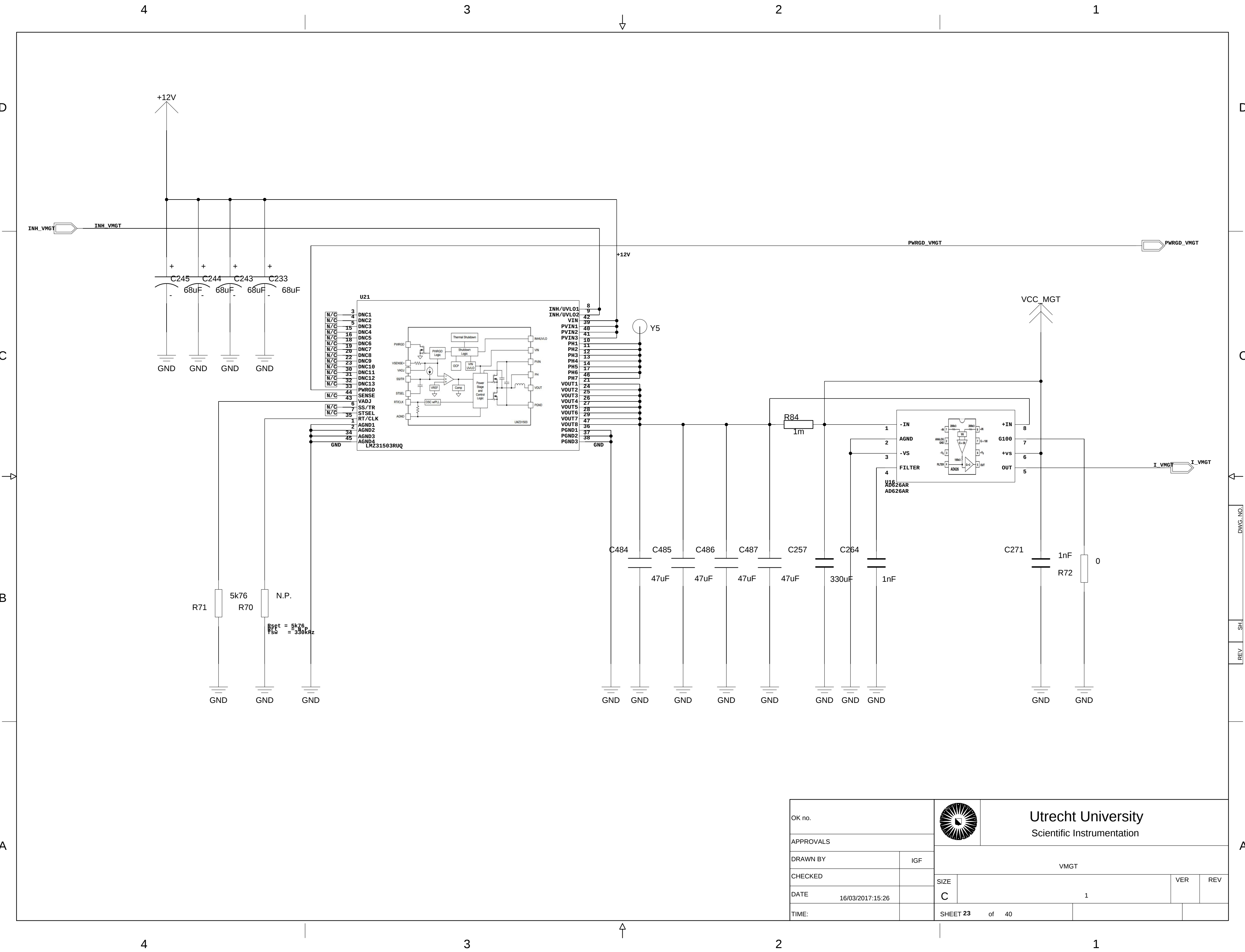
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C

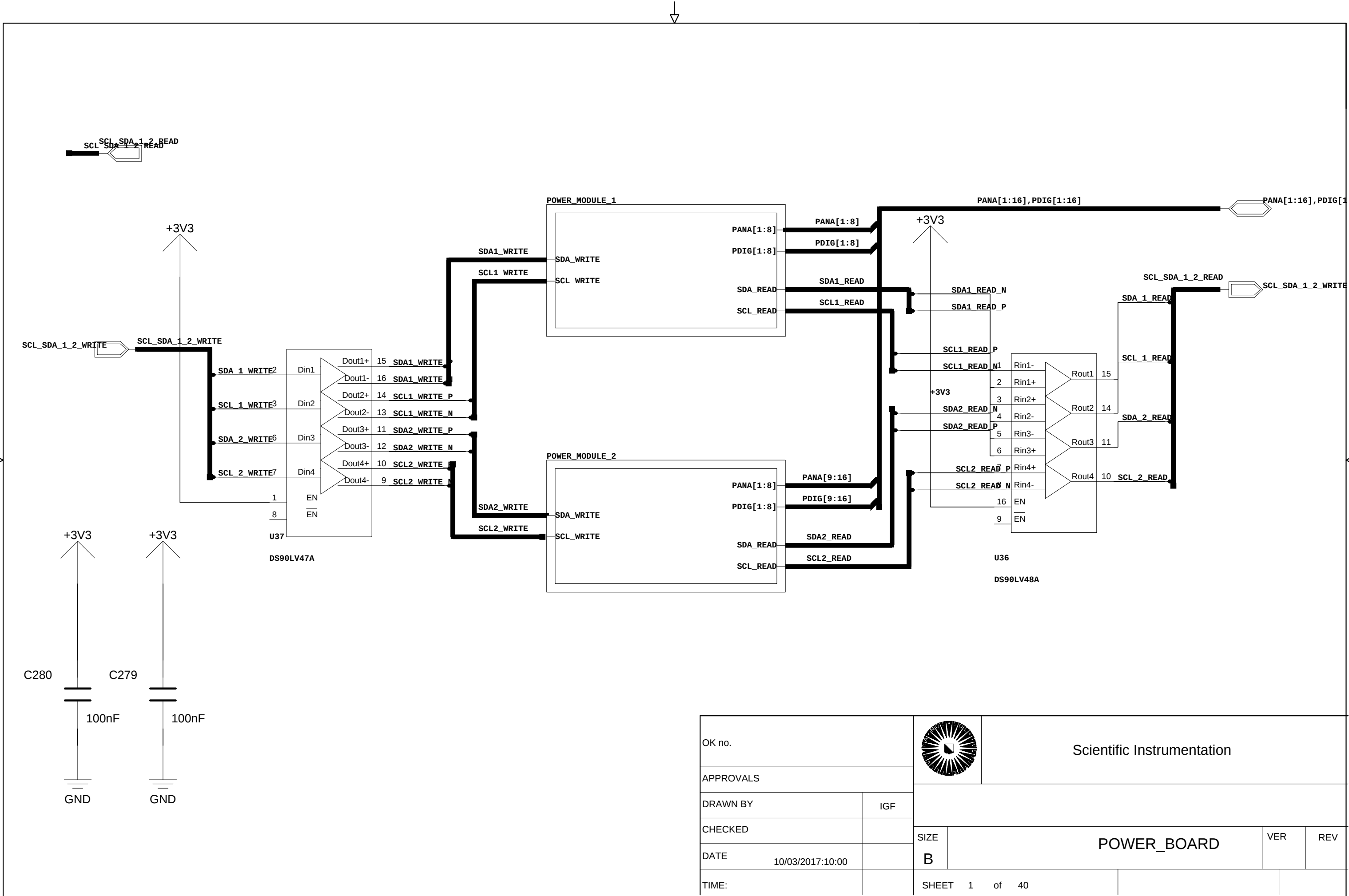
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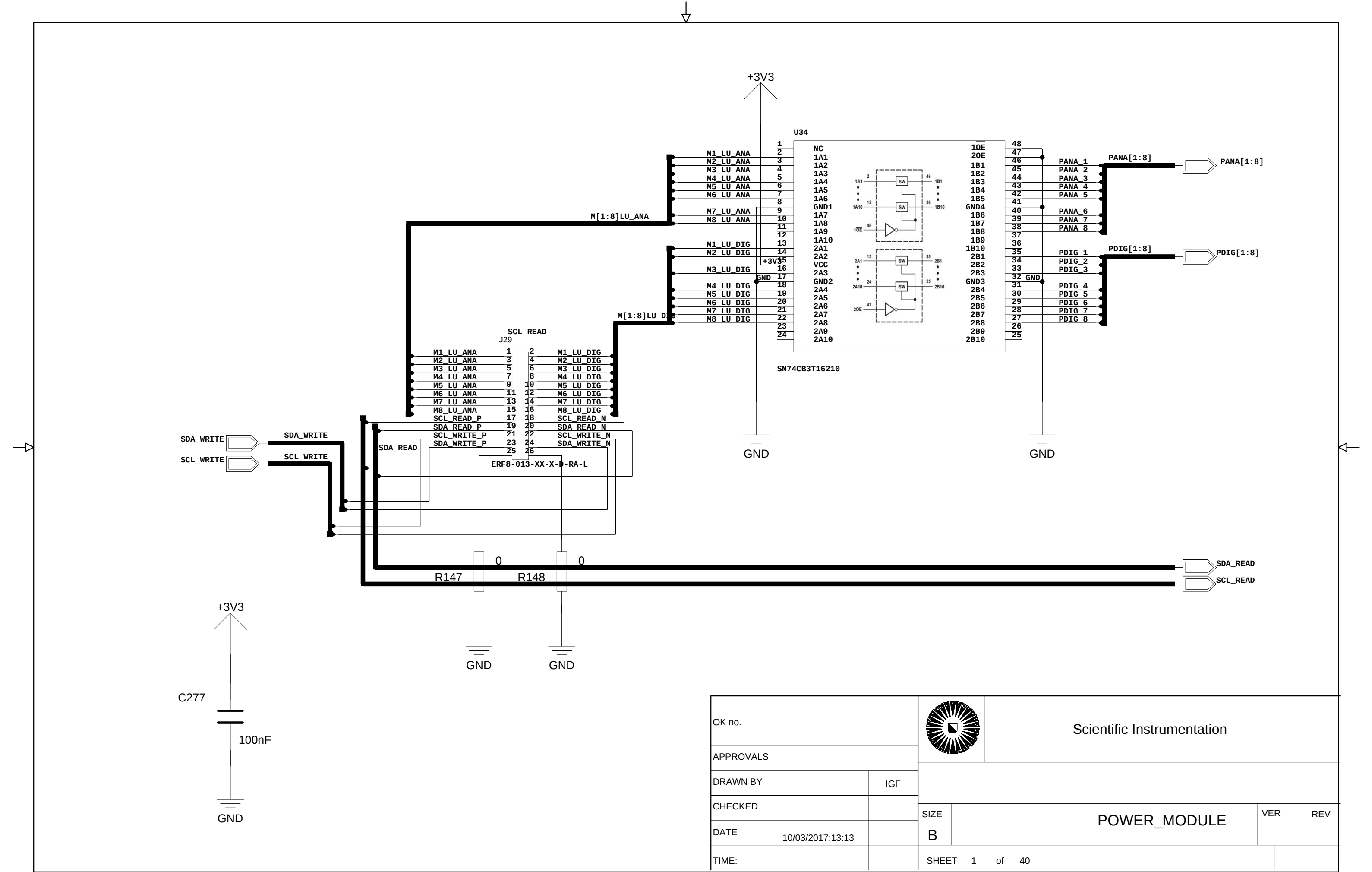
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CHECKED		SIZE	1			VER	REV
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TIME:		SHEET 21 of 40					



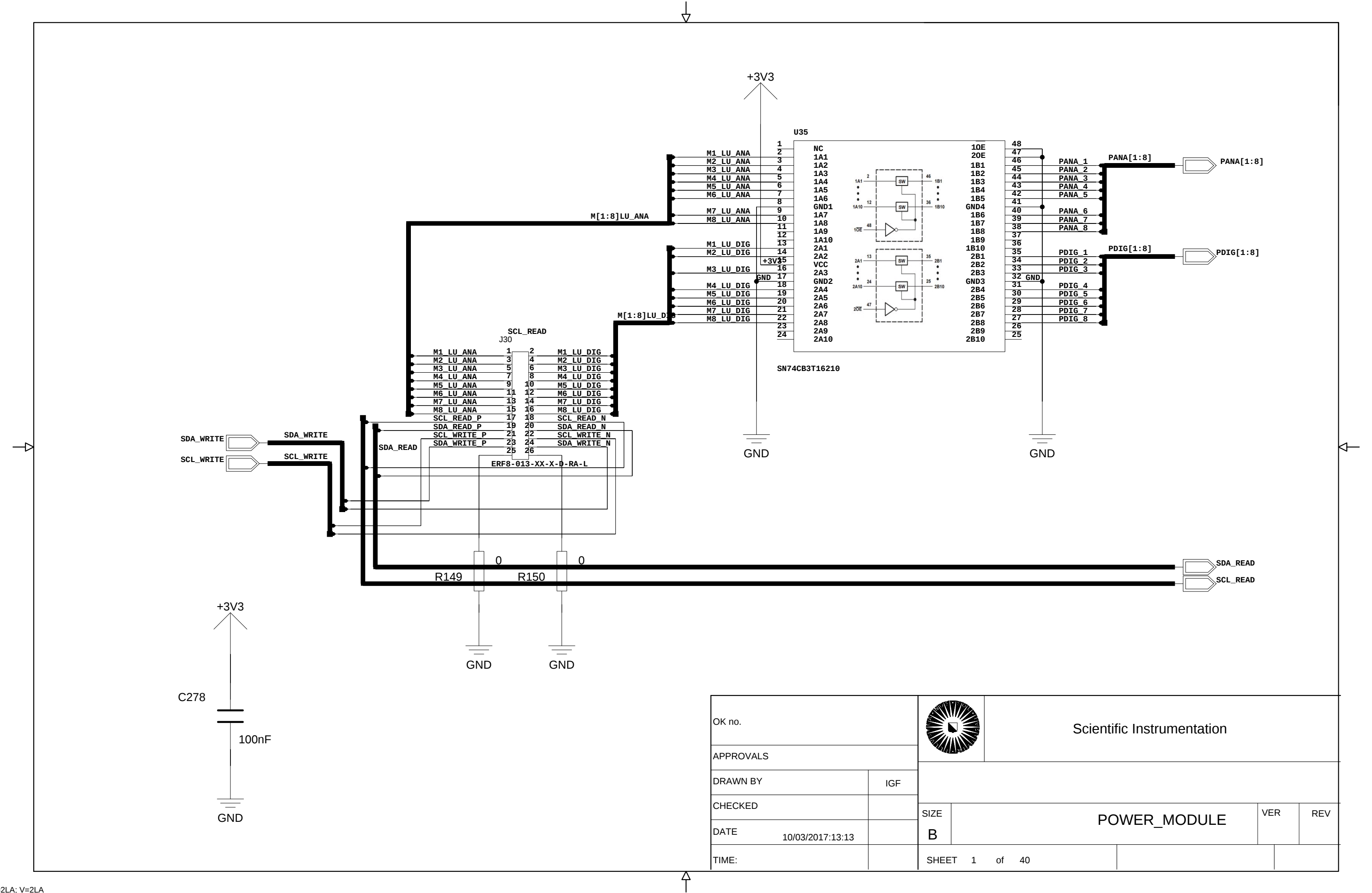
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CHECKED						
DATE	16/03/2017:15:26	SIZE	1		VER	REV
TIME:		SHEET 23 of 40				



OK no.			Scientific Instrumentation				
APPROVALS							
DRAWN BY	IGF						
CHECKED		SIZE	POWER_BOARD			VER	REV
DATE	10/03/2017:10:00	B					
TIME:		SHEET 1 of 40					



OK no.			Scientific Instrumentation				
APPROVALS							
DRAWN BY	IGF						
CHECKED		SIZE	POWER_MODULE			VER	REV
DATE	10/03/2017:13:13	B					
TIME:		SHEET 1 of 40					



OK no.			Scientific Instrumentation			
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DRAWN BY	IGF					
CHECKED						
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		B				
TIME:		SHEET 1 of 40				

D

C

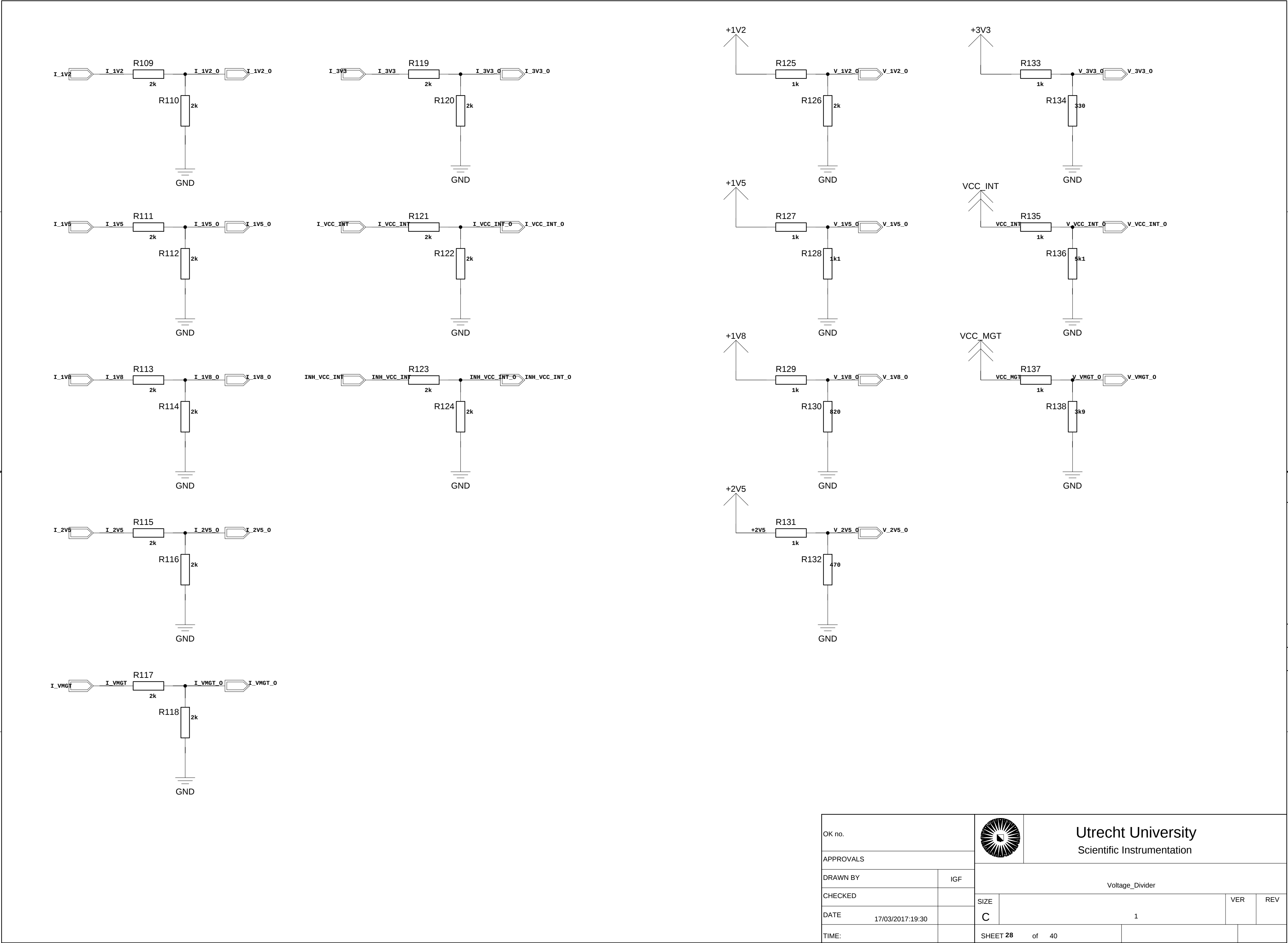
B

A

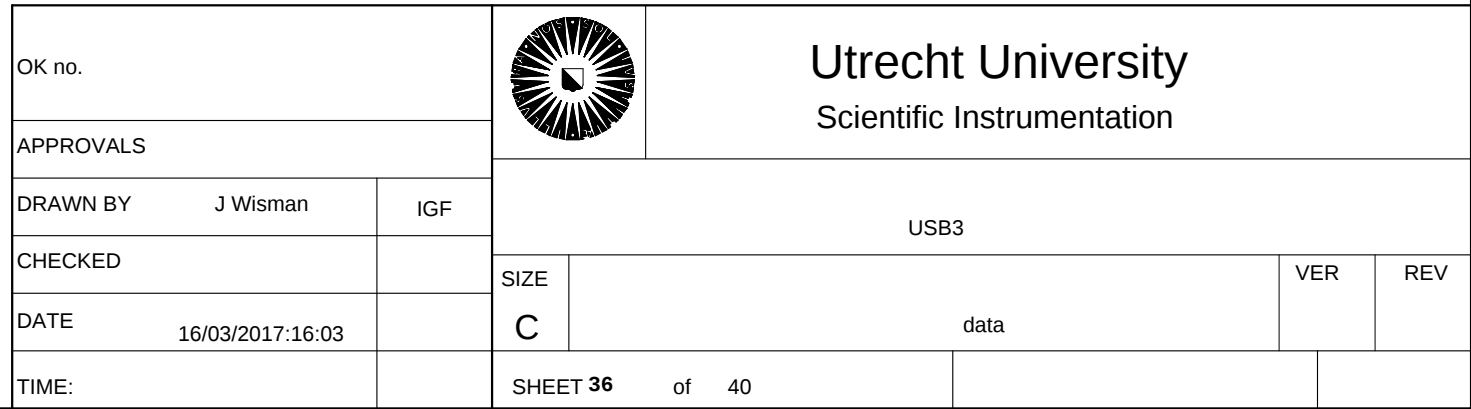
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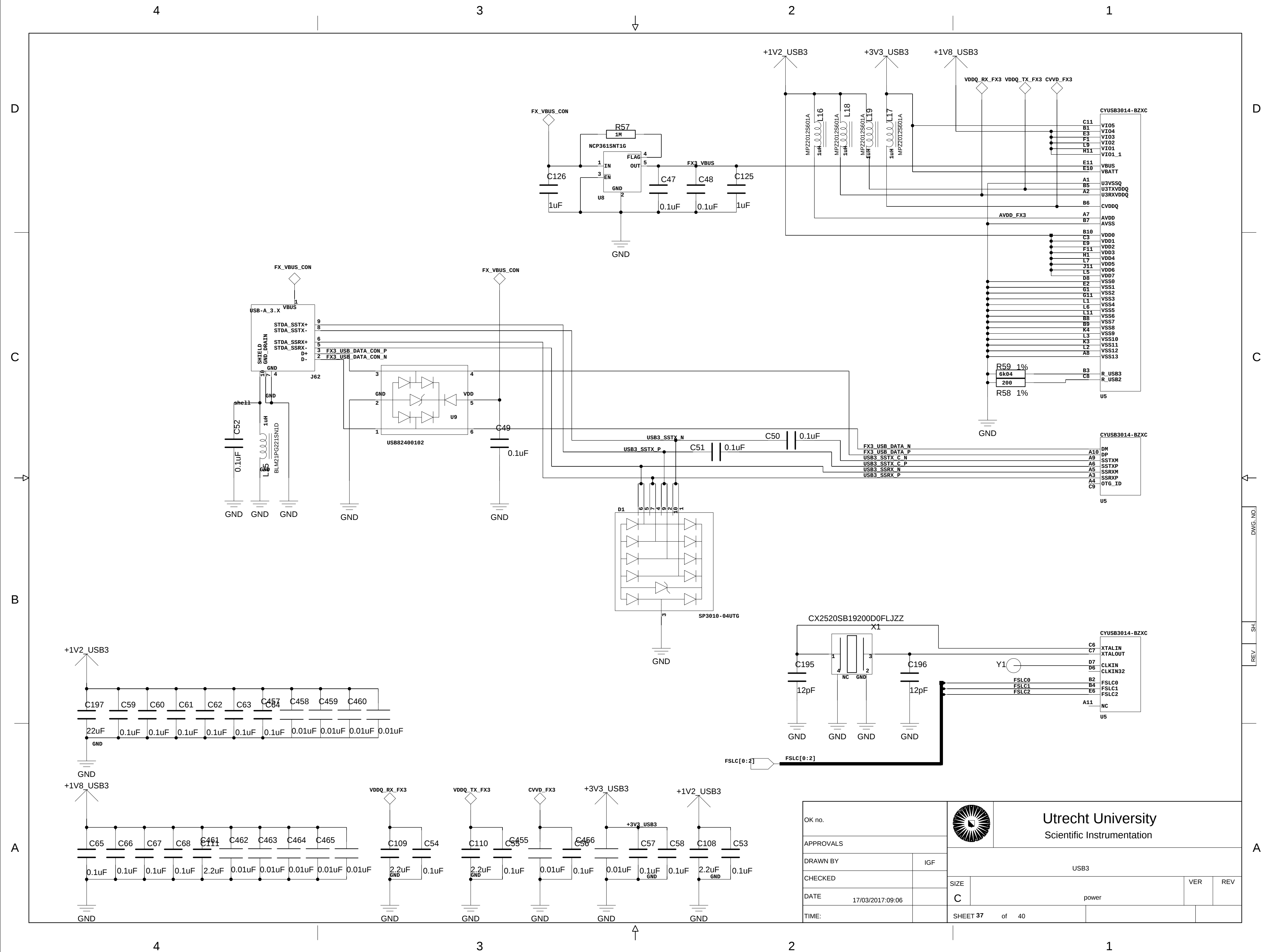
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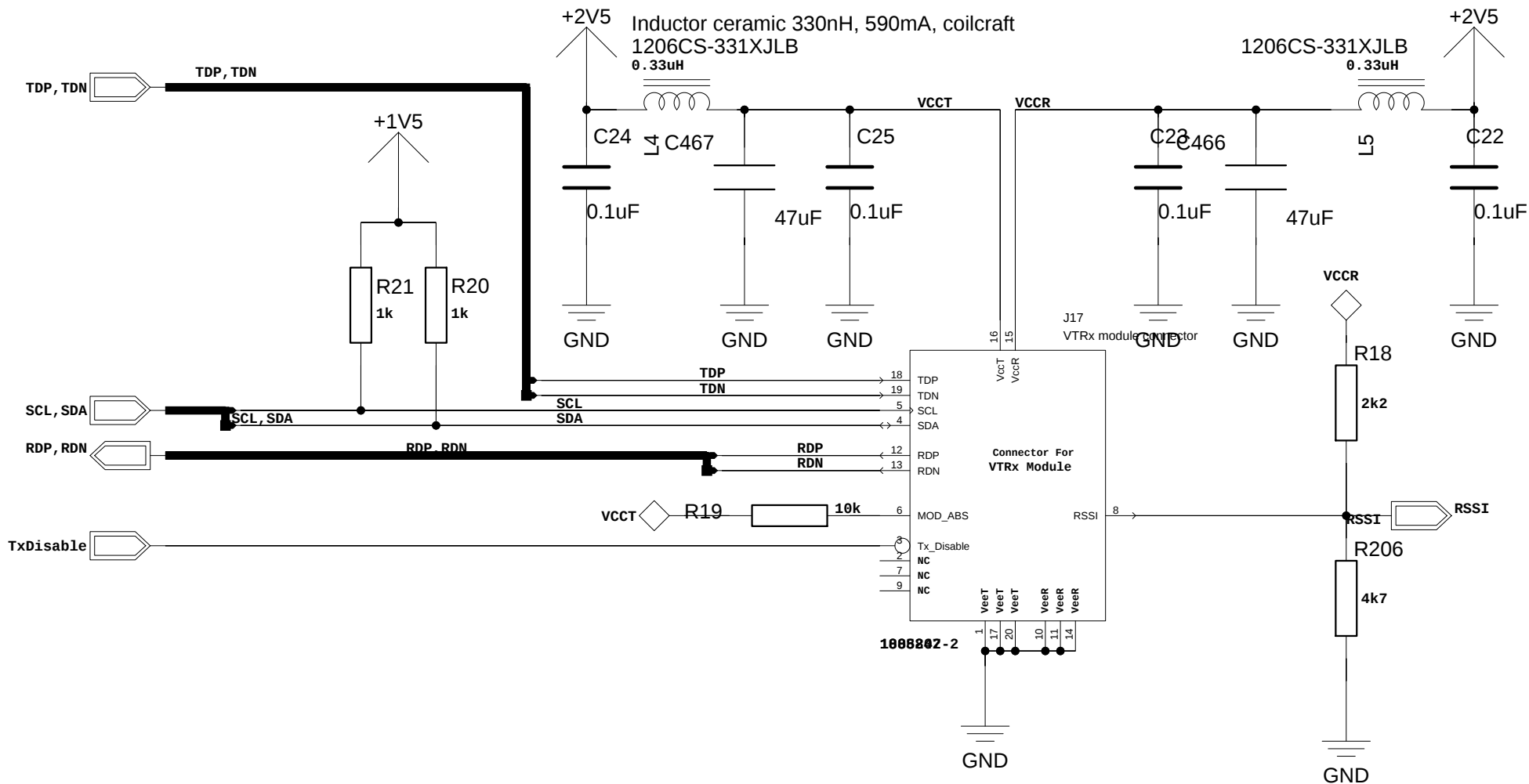
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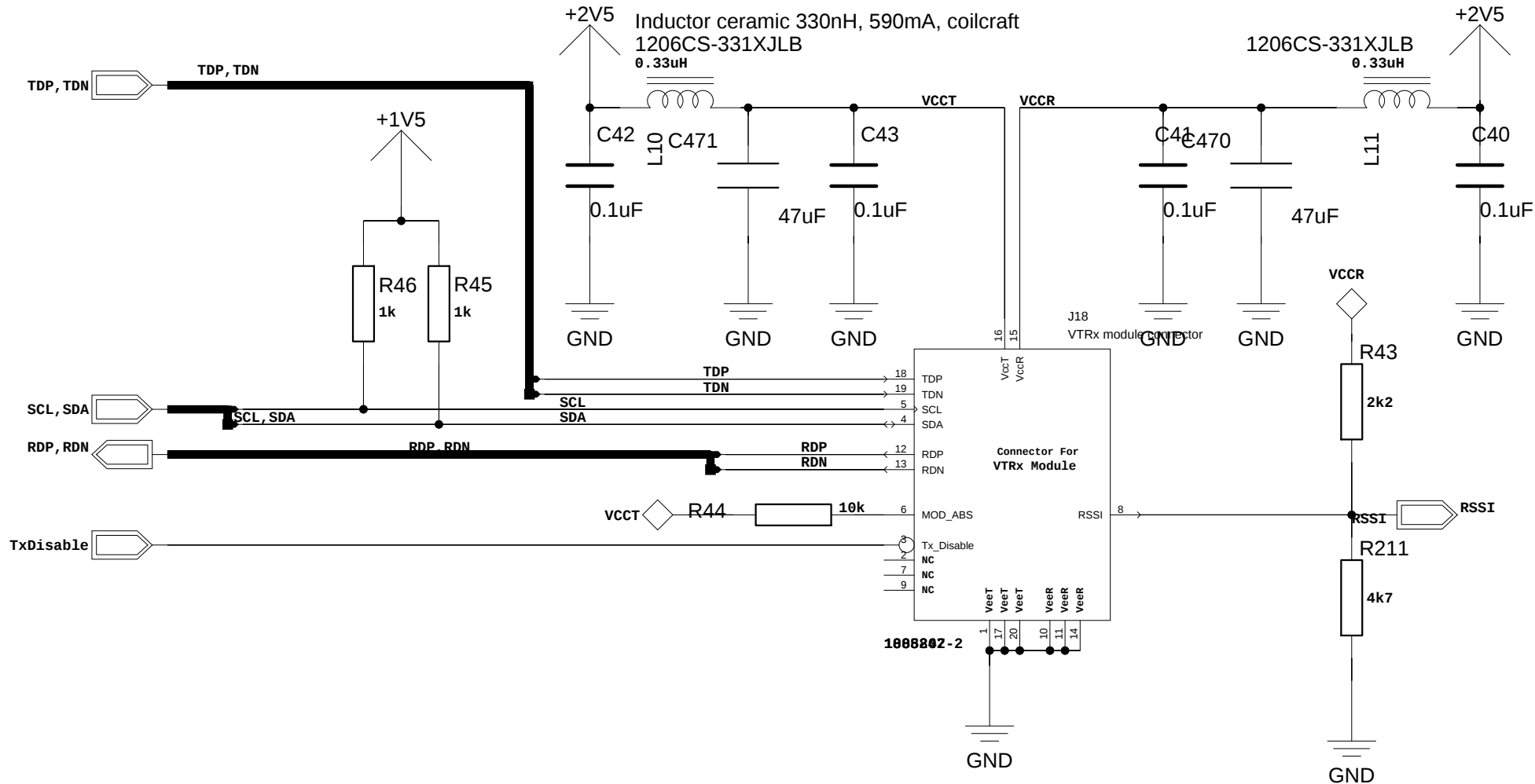
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APPROVALS						
DRAWN BY	IGF	Voltage_Divider				
CHECKED						
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TIME:		SHEET 28 of 40				



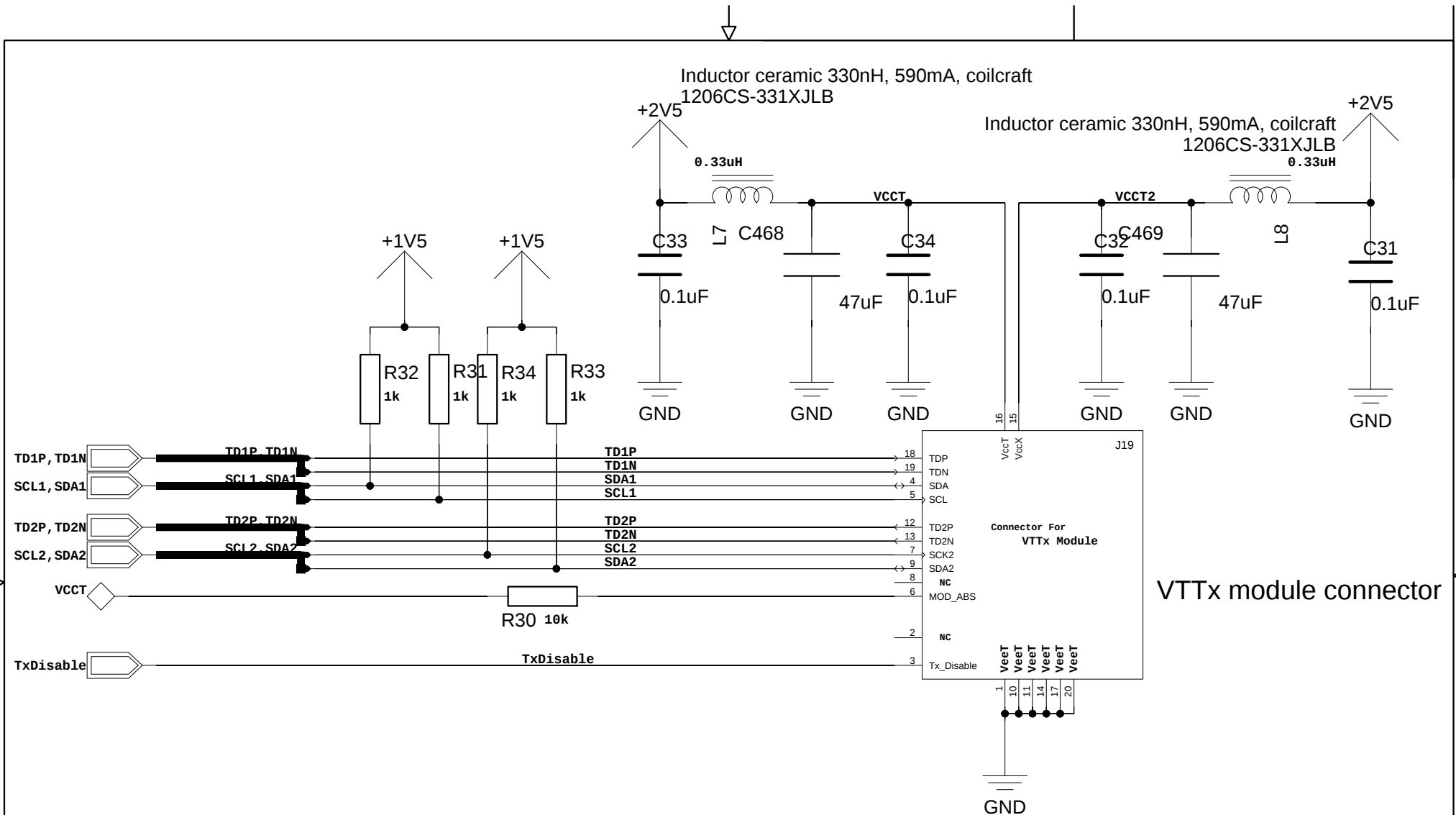




OK no.			Utrecht University					
APPROVALS			Scientific Instrumentation					
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CHECKED								
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		A						
TIME:				SHEET 38 of 40				



OK no.			Utrecht University										
APPROVALS			Scientific Instrumentation										
DRAWN BY		IGF											
CHECKED													
DATE		16/03/2017:15:23		SIZE		1		VTRx		VER		REV	
				A									
TIME:				SHEET 39 of 40									



OK no.			Utrecht University				
APPROVALS			Scientific Instrumentation				
DRAWN BY	IGF						
CHECKED							
DATE	16/03/2017:15:24	SIZE	1 VTTx			VER	REV
		A					
TIME:		SHEET 40 of 40					

D

C

B

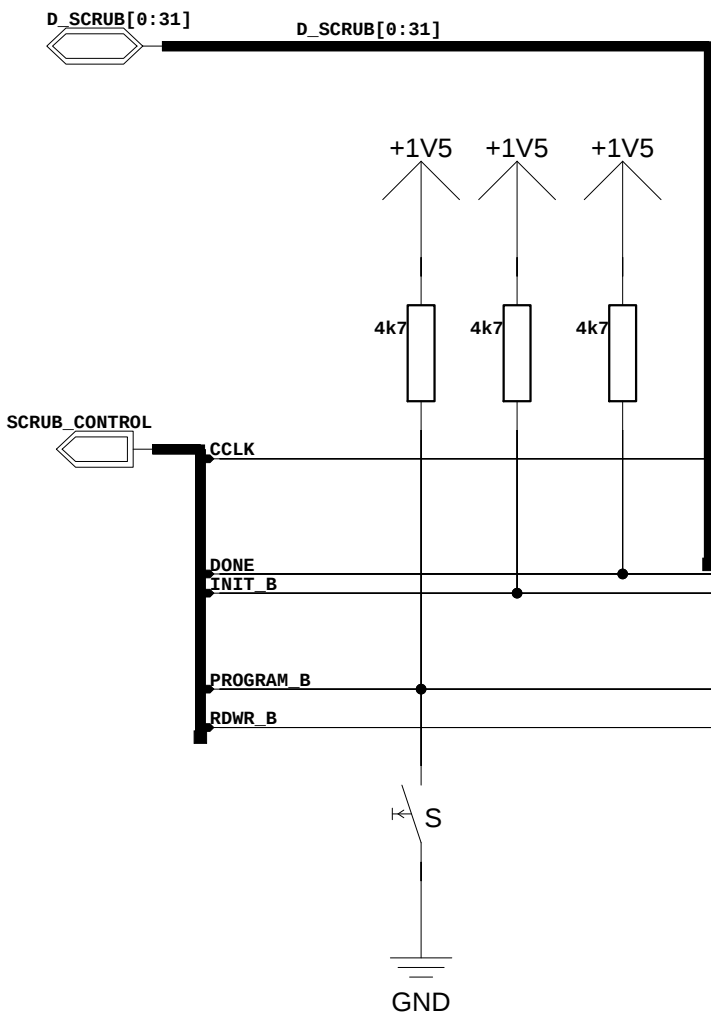
A

H=4ND; V=4LA

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I2C_BACK I2C_BACK

DCLK_P[0:4],DCLK_N[0:4],DCLK_P[0:4],DCLK_N[0:4]



AAB
W7
AC7
AB7
AA7
V7
N7
V7
K7
L7
R7
P7
T7
R7
U7
AC6
V8
U9
W9
V11
V12
W12
RUV1_XCKU

CCLK_0
CFGBVS_0
D00_MOSI_0
D01_DIN_0
D02_0
D03_0
DONE_0
INIT_B_0
M0_0
M1_0
M2_0
POR_OVERRIDE
PROGRAM_B_0
PUDC_B_0
RDWR_FCS_B_0
TCK_0
TDI_0
TDO_0
TMS_0
DXN
DXP
VREFN
VREFP

RUV1_XCKU_RUV1_KU_PartitionBank0_pcb

GNDADC
VBATT
VCCADC
VCC0_0
VCC0_0

U11
U07
U12
AB8
V8

+1V5

+1V5

D

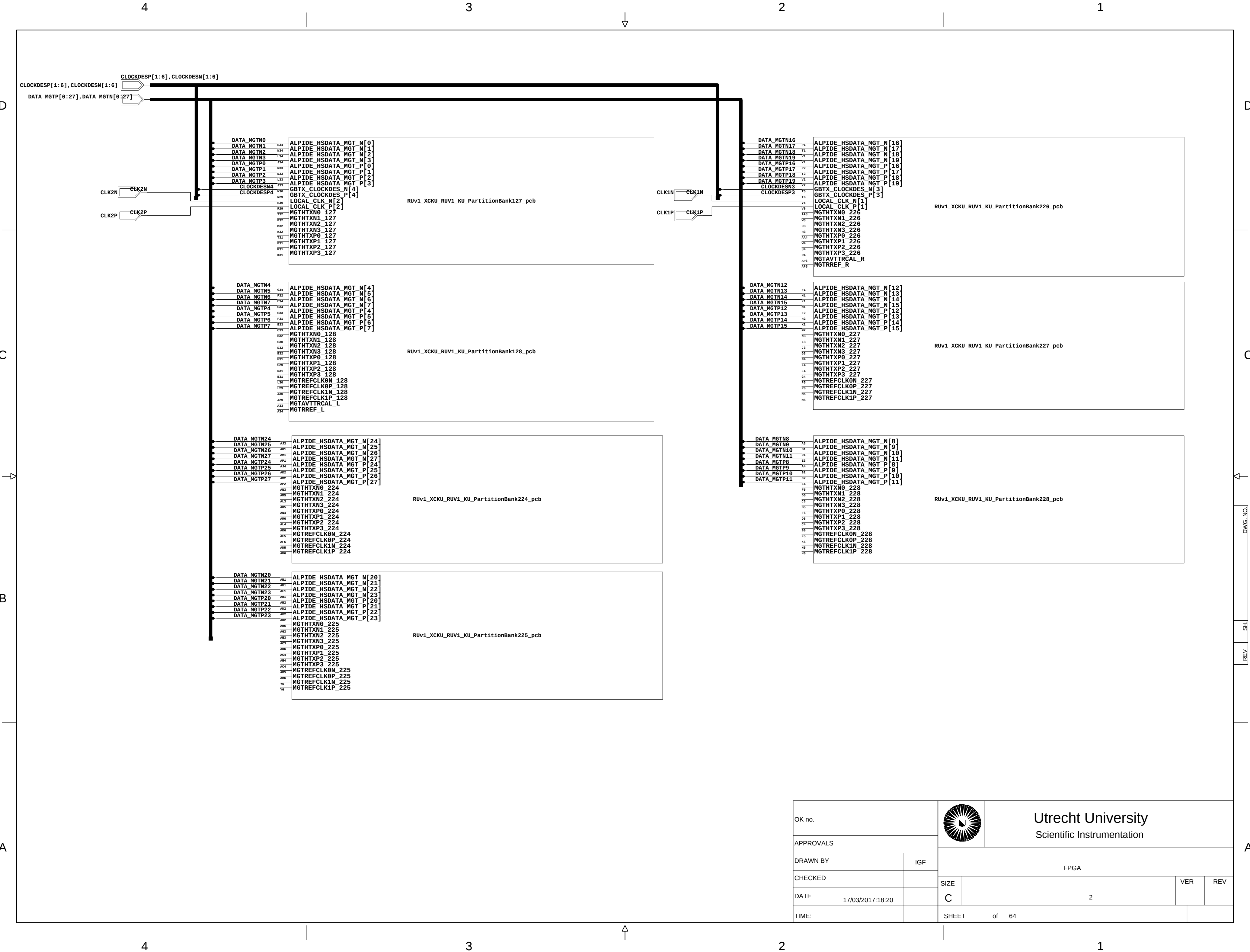
C

SH

REV

A

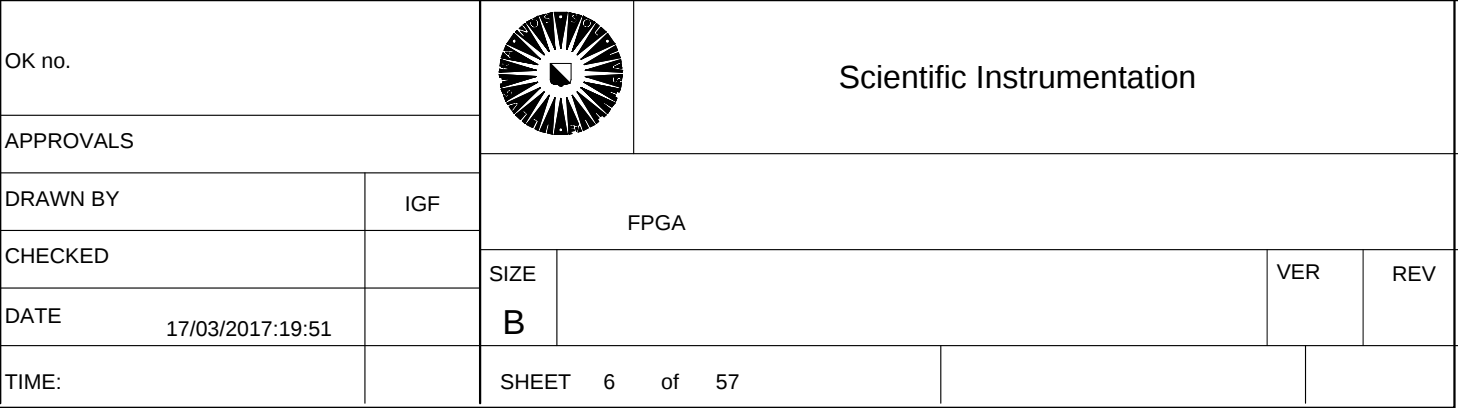
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CHECKED		SIZE			VER	REV
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TIME:		SHEET	of	55		

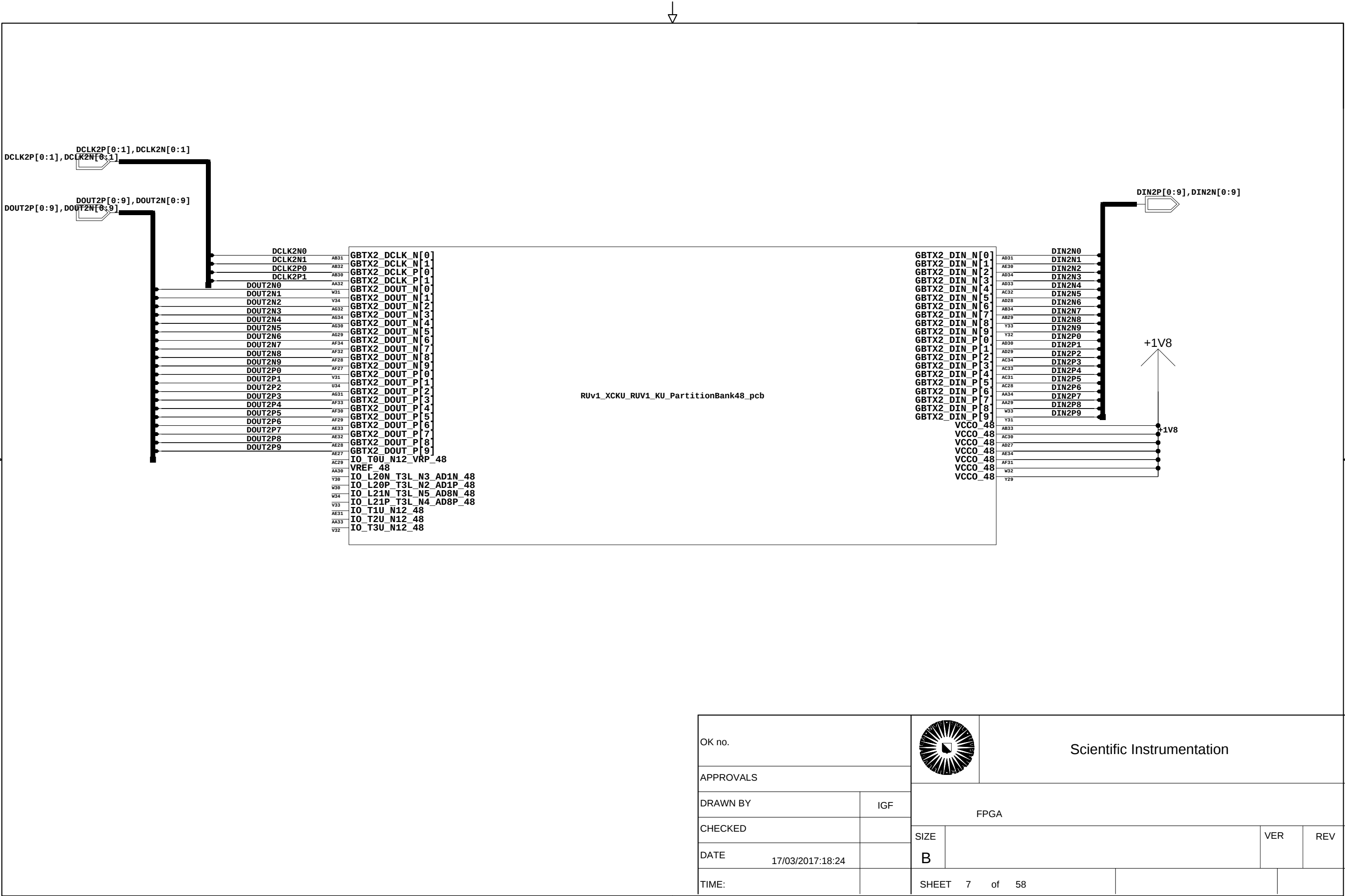


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AD23	VREF_44	VCCO_44	AE21
AE21	IO_L1N_T0L_N1_DBC_44	VCCO_44	AE25
AD21	IO_L1P_T0L_N0_DBC_44	VCCO_44	AJ22
AG20	IO_L2N_T0L_N3_44	VCCO_44	AN23
AF20	IO_L2P_T0L_N2_44	VCCO_44	AN20
AE20	IO_L3N_T0L_N5_AD15N_44	IO_L11P_T1U_N8_GC_44	AJ23
AD20	IO_L3P_T0L_N4_AD15P_44	IO_L12P_T1U_N10_GC_44	AN22
AE21	IO_L4N_T0U_N7_DBC_AD7N_44	IO_L13P_T2L_N0_GC_QBC_44	AJ21
AG21	IO_L4P_T0U_N6_DBC_AD7P_44		
AE23	IO_L5N_T0U_N9_AD14N_44		
AE22	IO_L5P_T0U_N8_AD14P_44		
AG22	IO_L6N_T0U_N11_AD6N_44		
AF22	IO_L6P_T0U_N10_AD6P_44		
AE26	IO_L7N_T1L_N1_QBC_AD13N_44		
AE25	IO_L7P_T1L_N0_QBC_AD13P_44		
AF24	IO_L8N_T1L_N3_AD5N_44		
AF23	IO_L8P_T1L_N2_AD5P_44		
AG25	IO_L9N_T1L_N5_AD12N_44		
AG24	IO_L9P_T1L_N4_AD12P_44		
AJ25	IO_L10N_T1U_N7_QBC_AD4N_44		
AN24	IO_L10P_T1U_N6_QBC_AD4P_44		
AJ24	IO_L11N_T1U_N9_GC_44		
AN23	IO_L12N_T1U_N11_GC_44		
AK21	IO_L13N_T2L_N1_GC_QBC_44		
AK23	IO_L14N_T2L_N3_GC_44		
AK22	IO_L14P_T2L_N2_GC_44		
AN20	IO_L15N_T2L_N5_AD11N_44		
AL20	IO_L15P_T2L_N4_AD11P_44		
AK20	IO_L16N_T2U_N7_QBC_AD3N_44		
AJ20	IO_L16P_T2U_N6_QBC_AD3P_44		
AL23	IO_L17N_T2U_N9_AD10N_44		
AL22	IO_L17P_T2U_N8_AD10P_44		
AL25	IO_L18N_T2U_N11_AD2N_44		
AL24	IO_L18P_T2U_N10_AD2P_44		
AN21	IO_L19N_T3L_N1_DBC_AD9N_44		
AN21	IO_L19P_T3L_N0_DBC_AD9P_44		
AN22	IO_L20N_T3L_N3_AD1N_44		
AN22	IO_L20P_T3L_N2_AD1P_44		
AN24	IO_L21N_T3L_N5_AD8N_44		
AN24	IO_L21P_T3L_N4_AD8P_44		
AP21	IO_L22N_T3U_N7_DBC_AD0N_44		
AP20	IO_L22P_T3U_N6_DBC_AD0P_44		
AP25	IO_L23N_T3U_N9_44		
AP24	IO_L23P_T3U_N8_44		
AP23	IO_L24N_T3U_N11_44		
AN23	IO_L24P_T3U_N10_44		
AF25	IO_T1U_N12_44		
AK25	IO_T2U_N12_44		
AN25	IO_T3U_N12_44		
RUV1_XCKU			

RUV1_XCKU_RUV1_KU_PartitionBank44_pcb

OK no.			Scientific Instrumentation			
APPROVALS						
DRAWN BY	IGF	FPGA				
CHECKED		SIZE			VER	REV
DATE	17/03/2017:18:20	B				
TIME:		SHEET 3 of 54				





OK no.

APPROVALS

DRAWN BY

IGF

CHECKED

DATE

17/03/2017:18:24

TIME:

Scientific Instrumentation

FPGA

SIZE

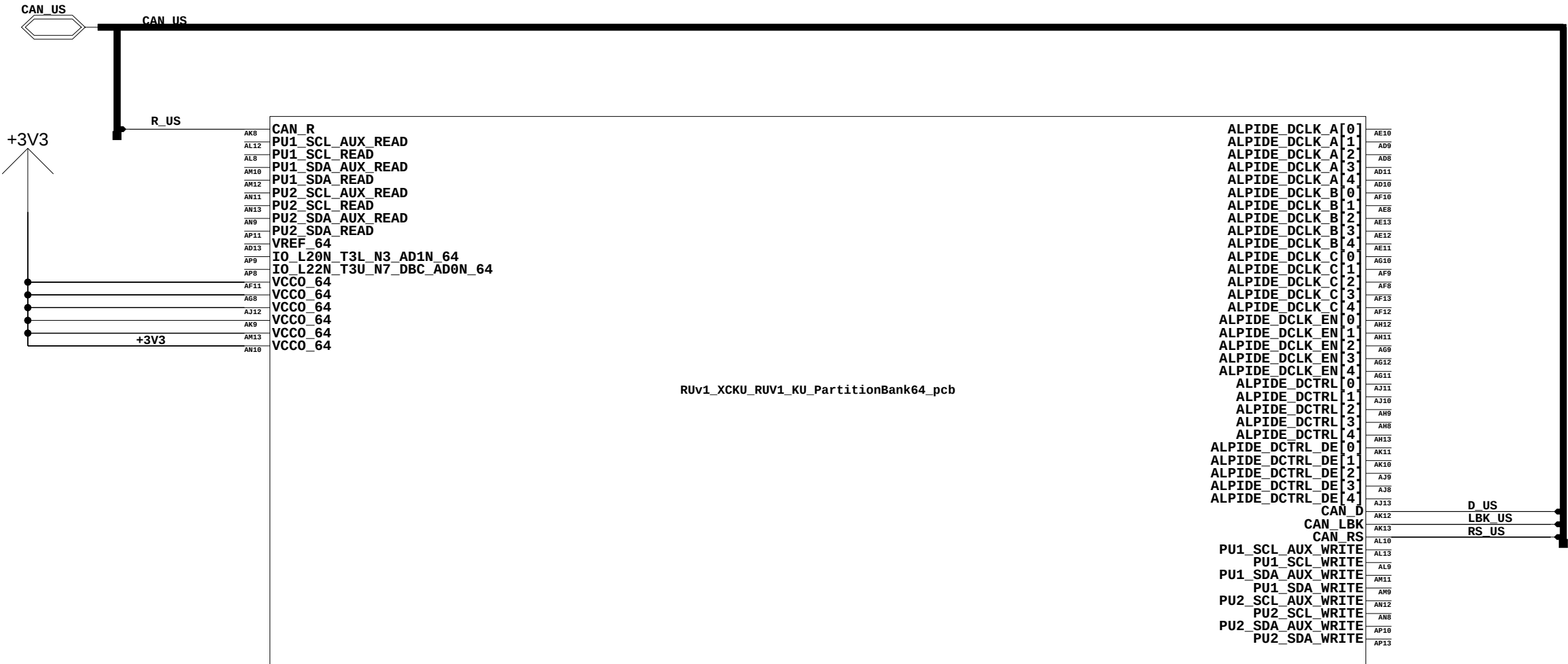
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VER

REV

SHEET 7 of 58

H=2LA; V=2LA



OK no.			Scientific Instrumentation			
APPROVALS						
DRAWN BY	IGF	FPGA				
CHECKED						
DATE	17/03/2017:18:24	SIZE			VER	REV
		B				
TIME:		SHEET 8 of 59				


$$H=2LA; V=2LA$$

DATA_LVDSP[0:27],DATA_LVDSN[0:27]

CLK0N

CLK0P

CLK0N

CLK0P

DATA LVDSN0

DATA LVDSN1

DATA LVDSN2

DATA LVDSN3

DATA LVDSN4

DATA LVDSN5

DATA LVDSN6

DATA LVDSN7

DATA LVDSN8

DATA LVDSN9

DATA LVDSN10

DATA LVDSN11

DATA LVDSN12

DATA LVDSN13

DATA LVDSN14

DATA LVDSN16

DATA LVDSN17

DATA LVDSN18

DATA LVDSN22

DATA LVDSN23

DATA LVDSN24

DATA LVDSN25

DATA LVDSP0

DATA LVDSP1

DATA LVDSP2

DATA LVDSP3

DATA LVDSP4

DATA LVDSP5

DATA LVDSP6

DATA LVDSP7

DATA LVDSP8

DATA LVDSP9

DATA LVDSP10

DATA LVDSP11

DATA LVDSP12

DATA LVDSP13

DATA LVDSP14

DATA LVDSP16

DATA LVDSP17

DATA LVDSP18

DATA LVDSP22

DATA LVDSP23

DATA LVDSP24

DATA LVDSP25

ALPIDE HSDATA SIO N[0]

ALPIDE HSDATA SIO N[1]

ALPIDE HSDATA SIO N[2]

ALPIDE HSDATA SIO N[3]

ALPIDE HSDATA SIO N[4]

ALPIDE HSDATA SIO N[5]

ALPIDE HSDATA SIO N[6]

ALPIDE HSDATA SIO N[7]

ALPIDE HSDATA SIO N[8]

ALPIDE HSDATA SIO N[9]

ALPIDE HSDATA SIO N[10]

ALPIDE HSDATA SIO N[11]

ALPIDE HSDATA SIO N[12]

ALPIDE HSDATA SIO N[13]

ALPIDE HSDATA SIO N[14]

ALPIDE HSDATA SIO N[16]

ALPIDE HSDATA SIO N[17]

ALPIDE HSDATA SIO N[18]

ALPIDE HSDATA SIO N[22]

ALPIDE HSDATA SIO N[23]

ALPIDE HSDATA SIO N[24]

ALPIDE HSDATA SIO N[25]

ALPIDE HSDATA SIO P[0]

ALPIDE HSDATA SIO P[1]

ALPIDE HSDATA SIO P[2]

ALPIDE HSDATA SIO P[3]

ALPIDE HSDATA SIO P[4]

ALPIDE HSDATA SIO P[5]

ALPIDE HSDATA SIO P[6]

ALPIDE HSDATA SIO P[7]

ALPIDE HSDATA SIO P[8]

ALPIDE HSDATA SIO P[9]

ALPIDE HSDATA SIO P[10]

ALPIDE HSDATA SIO P[11]

ALPIDE HSDATA SIO P[12]

ALPIDE HSDATA SIO P[13]

ALPIDE HSDATA SIO P[14]

ALPIDE HSDATA SIO P[16]

ALPIDE HSDATA SIO P[17]

ALPIDE HSDATA SIO P[18]

ALPIDE HSDATA SIO P[22]

ALPIDE HSDATA SIO P[23]

ALPIDE HSDATA SIO P[24]

ALPIDE HSDATA SIO P[25]

LOCAL_CLK_N[0]

LOCAL_CLK_P[0]

IO_T0U_N12_VRP_66

VREF_66

IO_L16N_T2U_N7_QBC_AD3N_66

IO_L16P_T2U_N6_QBC_AD3P_66

IO_T1U_N12_66

IO_T2U_N12_66

IO_T3U_N12_66

VCC0_66

VCC0_66

VCC0_66

VCC0_66

VCC0_66

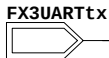
VCC0_66

+1V8

RUV1_XCKU_RUV1_KU_PartitionBank66_pcb

OK no.			Scientific Instrumentation			
APPROVALS						
DRAWN BY		IGF	FPGA			
CHECKED			SIZE		VER	REV
DATE		17/03/2017:18:24	B			
TIME:			SHEET 10 of 61			

+1V8



FX3UARTtx

FX3 UART_TX
VREF 68
IO_L8P_T1L_N2_AD5P_68
IO_L10P_T1U_N6_QBC_AD4P_68
VCC0_68
VCC0_68
VCC0_68
VCC0_68
VCC0_68
VCC0_68
VCC0_68
VCC0_68

+1V8

RUV1_XCKU_RUV1_KU_PartitionBank68_pcb

FX3_CTL[0]
FX3_CTL[1]
FX3_CTL[2]
FX3_CTL[3]
FX3_CTL[4]
FX3_CTL[5]
FX3_CTL[6]
FX3_CTL[7]
FX3_CTL[8]
FX3_CTL[9]
FX3_CTL[10]
FX3_CTL[11]
FX3_CTL[12]
FX3_DQ[0]
FX3_DQ[1]
FX3_DQ[2]
FX3_DQ[3]
FX3_DQ[4]
FX3_DQ[5]
FX3_DQ[6]
FX3_DQ[7]
FX3_DQ[8]
FX3_DQ[9]
FX3_DQ[10]
FX3_DQ[11]
FX3_DQ[12]
FX3_DQ[13]
FX3_DQ[14]
FX3_DQ[15]
FX3_DQ[16]
FX3_DQ[17]
FX3_DQ[18]
FX3_DQ[19]
FX3_DQ[20]
FX3_DQ[21]
FX3_DQ[22]
FX3_DQ[23]
FX3_DQ[24]
FX3_DQ[25]
FX3_DQ[26]
FX3_DQ[27]
FX3_DQ[28]
FX3_DQ[29]
FX3_DQ[30]
FX3_DQ[31]
FX3_INTB
FX3_PCLK
FX3_RESETB
FX3_UART_RX

FX3CTL0

FX3CTL1

FX3CTL2

FX3CTL3

FX3CTL4

FX3CTL5

FX3CTL6

FX3CTL7

FX3CTL8

FX3CTL9

FX3CTL10

FX3CTL11

FX3CTL12

FX3DQ0

FX3DQ1

FX3DQ2

FX3DQ3

FX3DQ4

FX3DQ5

FX3DQ6

FX3DQ7

FX3DQ8

FX3DQ9

FX3DQ10

FX3DQ11

FX3DQ12

FX3DQ13

FX3DQ14

FX3DQ15

FX3DQ16

FX3DQ17

FX3DQ18

FX3DQ19

FX3DQ20

FX3DQ21

FX3DQ22

FX3DQ23

FX3DQ24

FX3DQ25

FX3DQ26

FX3DQ27

FX3DQ28

FX3DQ29

FX3DQ30

FX3DQ31

FX3INT#

FX3PCLK

FX3RESET#

FX3UARTrx

FX3CTL[0:12]

FX3DQ[0:31]

FX3DQ[0:31]

FX3PCLK

FX3RESET#

FX3UARTrx

FX3CTL[0:12]

FX3DQ[0:31]

FX3INT#

FX3RESET#

OK no.

APPROVALS

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17/03/2017:18:15

TIME:



Scientific Instrumentation

FPGA

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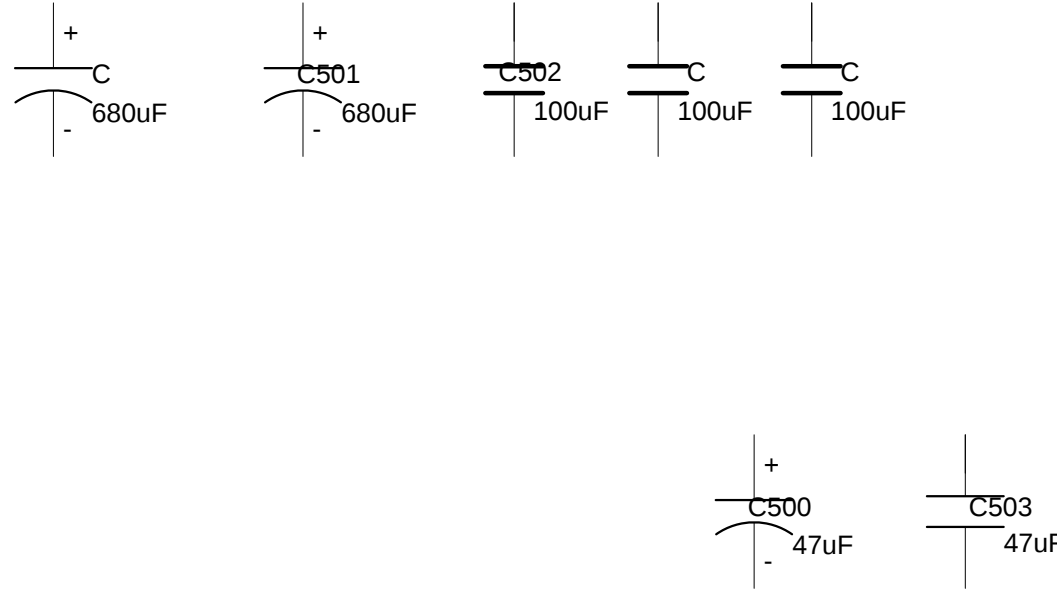
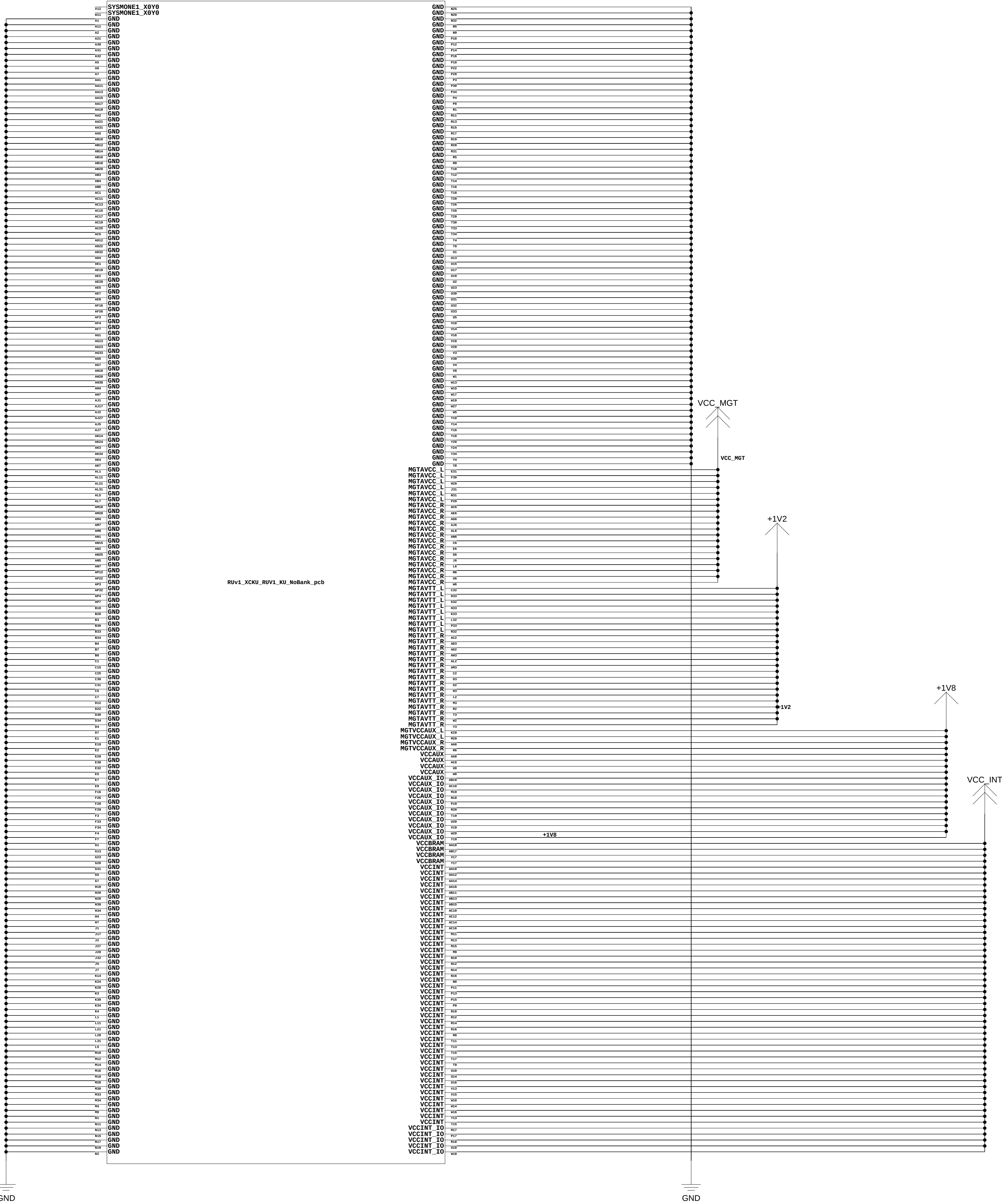
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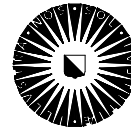
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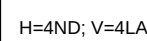
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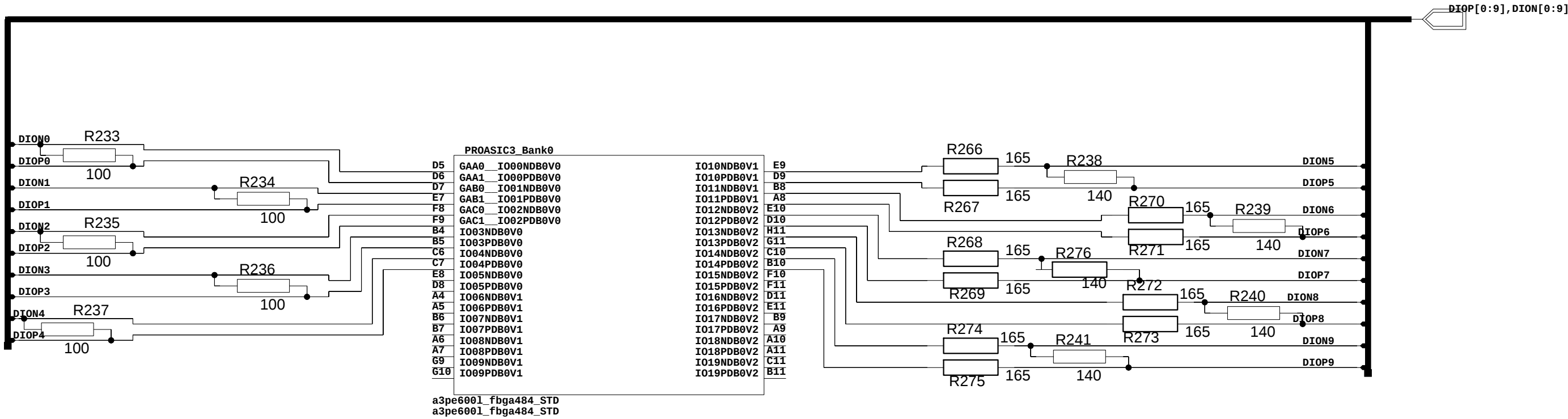
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TIME:		SHEET 13 of 64				





OK no.			Scientific Instrumentation					
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DRAWN BY			IGF					
CHECKED			SIZE		PA3		VER	REV
DATE		14/03/2017:13:02		B				
TIME:				SHEET 2 of 48				

GPIO[12:19]



GPIO12
GPIO13
GPIO14
GPIO15
GPIO16
GPIO17
GPIO18
GPIO19

PROASIC3_Bank1			
D17	GBA0	I035NDB1V1	F13
D18	GBA1	I035PDB1V1	G13
E16	GBB0	I034NDB1V1	B13
D16	GBB1	I034PDB1V1	A13
F15	GBC0	I033NDB1V1	G14
E15	GBC1	I033PDB1V1	F14
E12	I020NDB1V0	I027NDB1V0	D14
GPIO13	F12	I020PDB1V0	D15
GPIO14	H12	I021NDB1V0	A14
GPIO15	G12	I021PDB1V0	A15
GPIO16	B12	I022NDB1V0	B16
GPIO17	A12	I022PDB1V0	B17
GPIO18	D12	I023NDB1V0	A16
GPIO19	D13	I023PDB1V0	A17
E13	I024NDB1V0	I031NDB1V1	A18
E14	I024PDB1V0	I031PDB1V1	A18
		I032NDB1V1	B18
		I032PDB1V1	

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APPROVALS						
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DATE	13/03/2017:16:19					
TIME:		SHEET of				

PROASIC3_NoBank			
A19	NotBonded	NotBonded	G22
AA14	NotBonded	NotBonded	G3
AA15	NotBonded	NotBonded	H1
AA18	NotBonded	NotBonded	H2
AA19	NotBonded	NotBonded	H21
AA20	NotBonded	NotBonded	H22
AA3	NotBonded	NotBonded	J20
AB10	NotBonded	NotBonded	J3
AB11	NotBonded	NotBonded	K3
AB18	NotBonded	NotBonded	L1
AB19	NotBonded	NotBonded	M1
B14	NotBonded	NotBonded	M22
B15	NotBonded	NotBonded	N20
B19	NotBonded	NotBonded	N3
B20	NotBonded	NotBonded	P1
B3	NotBonded	NotBonded	P20
C12	NotBonded	NotBonded	R1
C13	NotBonded	NotBonded	T1
C16	NotBonded	NotBonded	T20
C17	NotBonded	NotBonded	T3
C19	NotBonded	NotBonded	U1
C2	NotBonded	NotBonded	U20
C20	NotBonded	NotBonded	V1
C21	NotBonded	NotBonded	V2
C3	NotBonded	NotBonded	V21
C4	NotBonded	NotBonded	W1
D1	NotBonded	NotBonded	W2
D2	NotBonded	NotBonded	W20
D20	NotBonded	NotBonded	W21
D21	NotBonded	NotBonded	W22
D22	NotBonded	NotBonded	W3
D3	NotBonded	NotBonded	Y13
E1	NotBonded	NotBonded	Y16
E2	NotBonded	NotBonded	Y17
E21	NotBonded	NotBonded	Y19
E22	NotBonded	NotBonded	Y2
F1	NotBonded	NotBonded	Y20
F20	NotBonded	NotBonded	Y21
F21	NotBonded	NotBonded	Y3
F22	NotBonded		

a3pe6001_fbga484_STD

PROASIC3_Bank3			
L17	GCA0	I052NPB3V0	I057NPB3V0 N17
M16	GCA1	I052PPB3V0	I057PPB3V0 N19
M19	GCA2	I053PDB3V0	I058NDB3V0 P22
M15	GCB2	I054PPB3V0	I058PDB3V0 N22
M17	GCC2	I055PPB3V0	I059NDB3V0 R21
U19	GDA0	I067NDB3V1	I059PDB3V0 P21
T19	GDA1	I067PDB3V1	I060NDB3V1 P17
P16	GDB0	I066NPB3V1	I060PDB3V1 P18
R17	GDB1	I066PPB3V1	I061NDB3V1 R19
T18	GDC0	I065NDB3V1	I061PDB3V1 P19
R18	GDC1	I065PDB3V1	I062NDB3V1 T22
M20		I053NDB3V0	I062PDB3V1 R22
N16		I054NPB3V0	I063NDB3V1 V22
N18		I055NPB3V0	I063PDB3V1 U22
N21		I056NDB3V0	I064NDB3V1 U21
M21		I056PDB3V0	I064PDB3V1 T21

a3pe6001_fbga484_STD

PROASIC3_Bank2			
E18	GBA2	I036PDB2V0	I042NDB2V0 E19
G17	GBB2	I037PDB2V0	I042PDB2V0 F19
H16	GBC2	I038PDB2V0	I043NDB2V0 G21
L19	GCB0	I051NPB2V1	I043PDB2V0 G20
L16	GCB1	I051PPB2V1	I044NDB2V1 K17
L15	GCC0	I050NPB2V1	I044PDB2V1 K18
K16	GCC1	I050PPB2V1	I045NPB2V1 K20
F18		I036NDB2V0	I045PPB2V1 J19
H17		I037NDB2V0	I046NDB2V1 K22
J16		I038NDB2V0	I046PDB2V1 J22
G19		I039NDB2V0	I047NDB2V1 L21
G18		I039PDB2V0	I047PDB2V1 L22
J17		I040NDB2V0	I048NDB2V1 K21
J18		I040PDB2V0	I048PDB2V1 J21
H18		I041NDB2V0	I049NPB2V1 K19
H19		I041PDB2V0	I049PPB2V1 L20

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APPROVALS			Scientific Instrumentation					
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DATE		13/03/2017:16:41	SIZE				VER	REV
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FLASH_DATA[0:7]

FLASH_CONTROL

FLASH_CONTROL

CAN_PA3

PROASIC3_Bank4					
	W17	GDA2_I068PDB4V0	I075NDB4V1	AB12	FLASH_R/B
	V16	GDB2_I069PDB4V0	I075PDB4V1	AB13	FLASH_RE
	W15	GDC2_I070PDB4V0	I076NDB4V1	U13	FLASH_CE
FLASH_DATA0	W16	I068NDB4V0	I076PDB4V1	U14	FLASH_CLE
FLASH_DATA1	V15	I069NDB4V0	I077NDB4V1	V13	FLASH_ALE
FLASH_DATA2	W14	I070NDB4V0	I077PDB4V1	V14	FLASH_WE
FLASH_DATA3	AA16	I071NDB4V0	I078NPB4V1	Y12	FLASH_WP
FLASH_DATA4	AA17	I071PDB4V0	I078PPB4V1	AA11	
FLASH_DATA5	AB14	I072NDB4V0	I079NDB4V1	AA12	RS_PA3
FLASH_DATA6	AB15	I072PDB4V0	I079PDB4V1	AA13	D_PA3
FLASH_DATA7	AB16	I073NDB4V0	I080NDB4V1	W11	LBK_PA3
	AB17	I073PDB4V0	I080PDB4V1	Y11	R_PA3
	T13	I074NDB4V1	I081NDB4V1	W12	
	T14	I074PDB4V1	I081PDB4V1	W13	

a3pe6001_fbga484_STD

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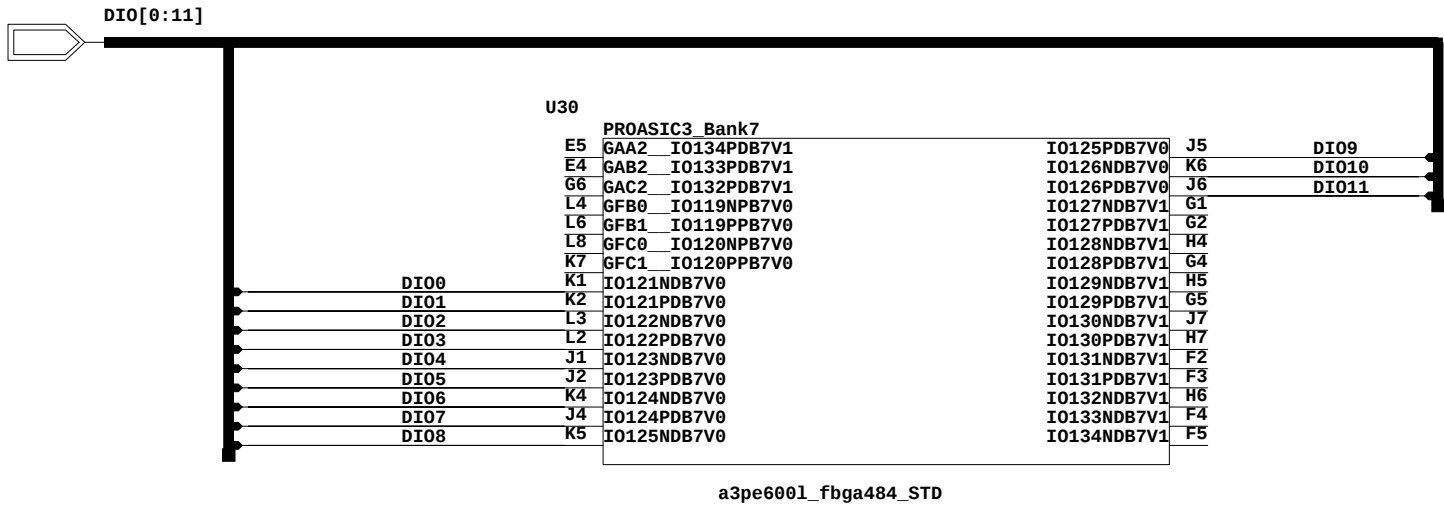
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SCRUB_CONTROL

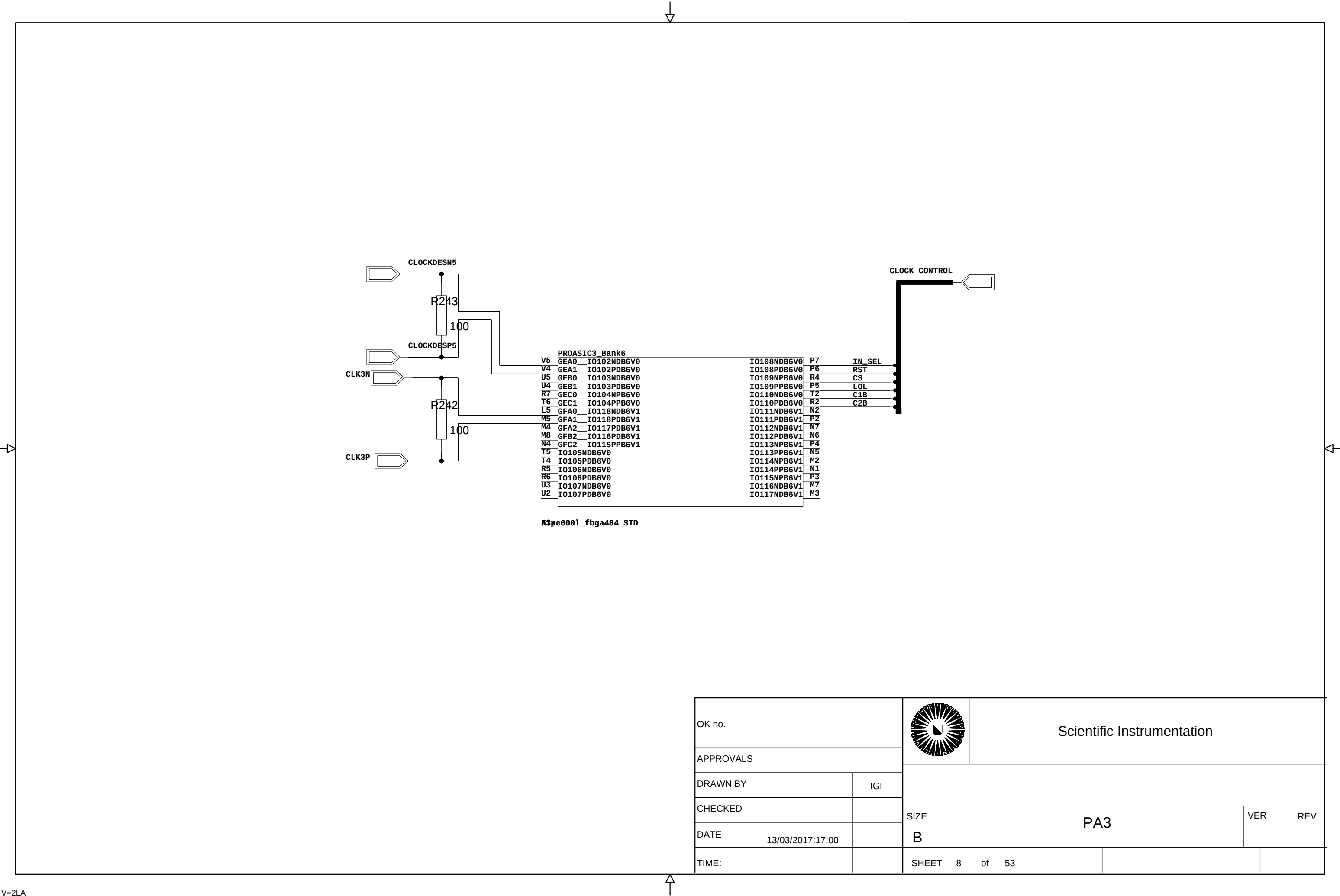
PROASIC3_Bank5			
	W6	FF_GEB2_I0100PDB5V2	I089PDB5V0 Y10
D_SCRUB0	T9	GEA2_I0101PPB5V2	I090NDB5V1 T11
D_SCRUB1	V7	GEC2_I099PDB5V2	I090PDB5V1 U11
D_SCRUB2	W5	I0100NDB5V2	I091NDB5V1 V9
D_SCRUB3	U8	I0101NPB5V2	I091PDB5V1 V10
D_SCRUB4	Y12	I082NDB5V0	I092NDB5V1 T10
D_SCRUB5	U12	I082PDB5V0	I092PDB5V1 U10
D_SCRUB6	V11	I083NDB5V0	I093NDB5V1 AB6
D_SCRUB7	V12	I083PDB5V0	I093PDB5V1 AB7
D_SCRUB8	R11	I084NDB5V0	I094NDB5V1 Y6
D_SCRUB9	R12	I084PDB5V0	I094PDB5V1 Y7
D_SCRUB10	AA10	I085NDB5V0	I095NPB5V1 V8
D_SCRUB11	AA9	I085PDB5V0	I095PPB5V1 U9
D_SCRUB12	AA7	I086NDB5V0	I096NDB5V2 AA5
D_SCRUB13	AA8	I086PDB5V0	I096PDB5V2 AA6
D_SCRUB14	AB8	I087NDB5V0	I097NDB5V2 AB4
D_SCRUB15	AB9	I087PDB5V0	I097PDB5V2 AB5
D_SCRUB16	W8	I088NDB5V0	I098NDB5V2 Y4
D_SCRUB17	W9	I088PDB5V0	I098PDB5V2 AA4
D_SCRUB18	W10	I089NDB5V0	I099NDB5V2 W7
			D_SCRUB19
			D_SCRUB20
			D_SCRUB21
			D_SCRUB22
			D_SCRUB23
			D_SCRUB24
			D_SCRUB25
			D_SCRUB26
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			D_SCRUB29
			D_SCRUB30
			D_SCRUB31
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			INIT_B
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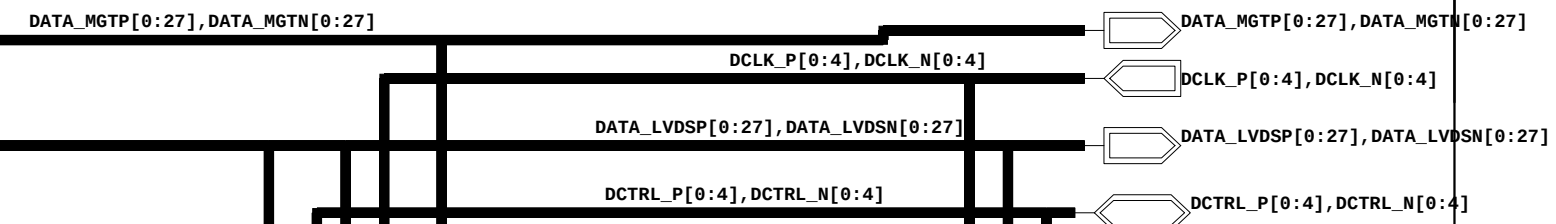
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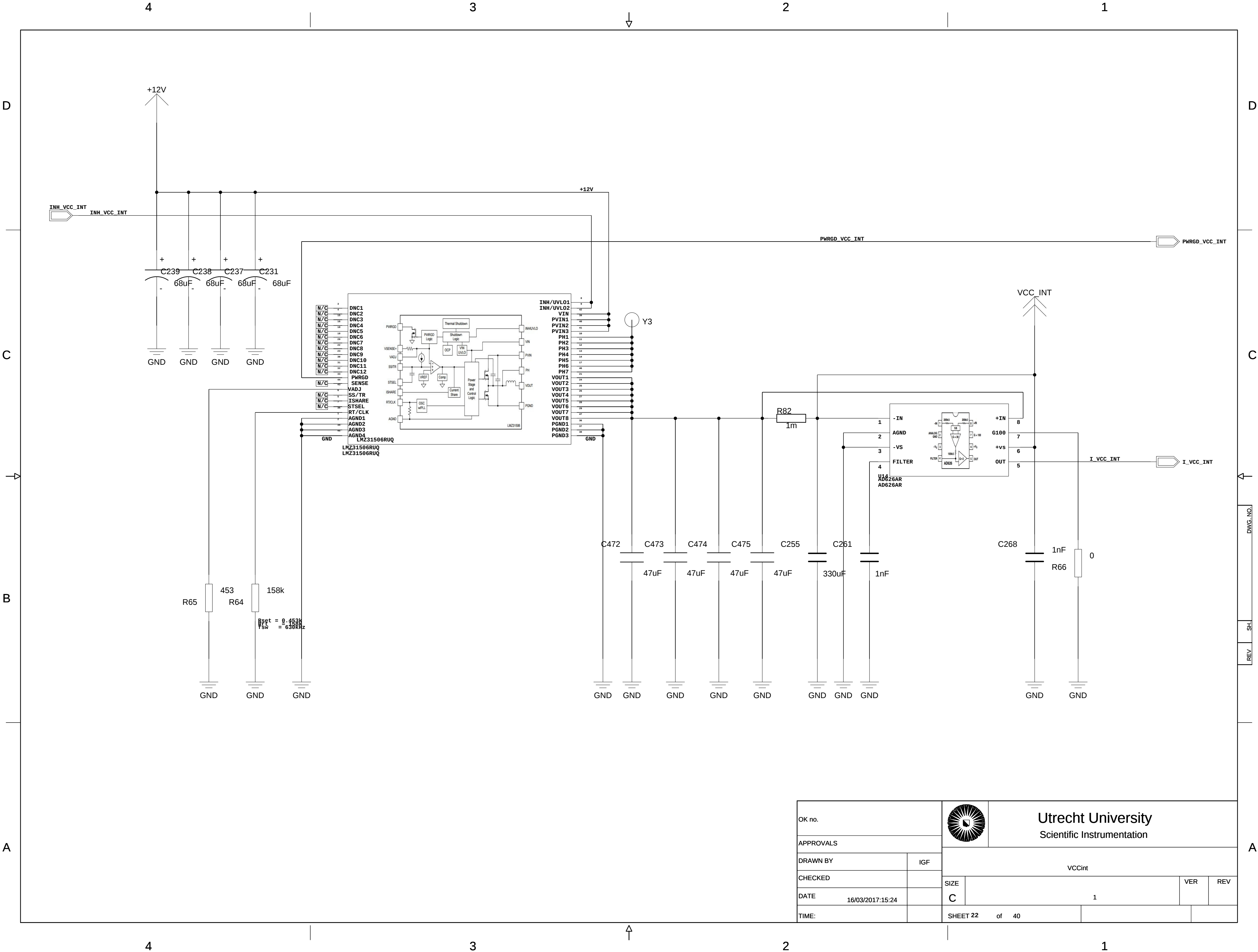
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OK no.			Utrecht University Scientific Instrumentation			
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D

C

B

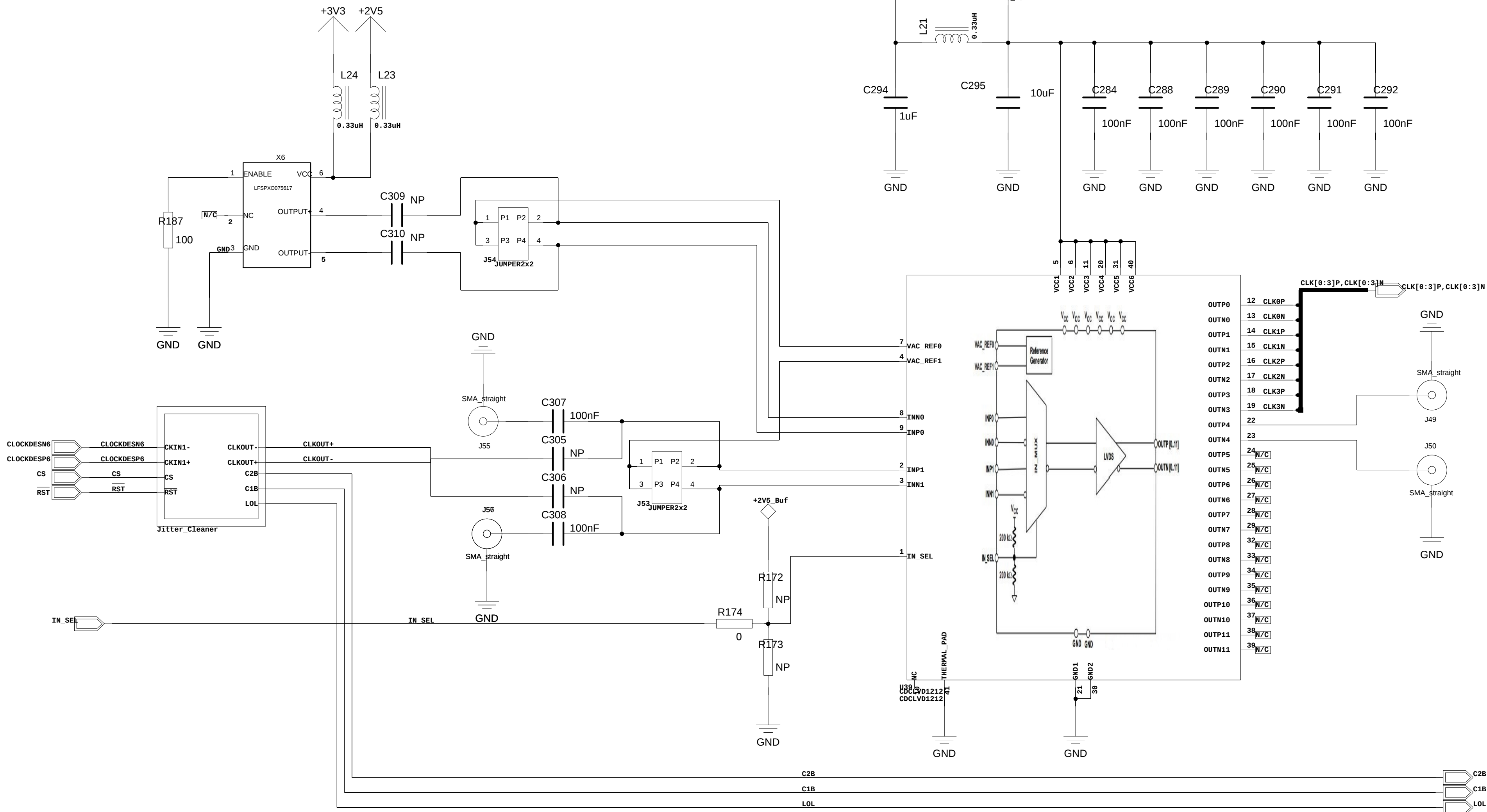
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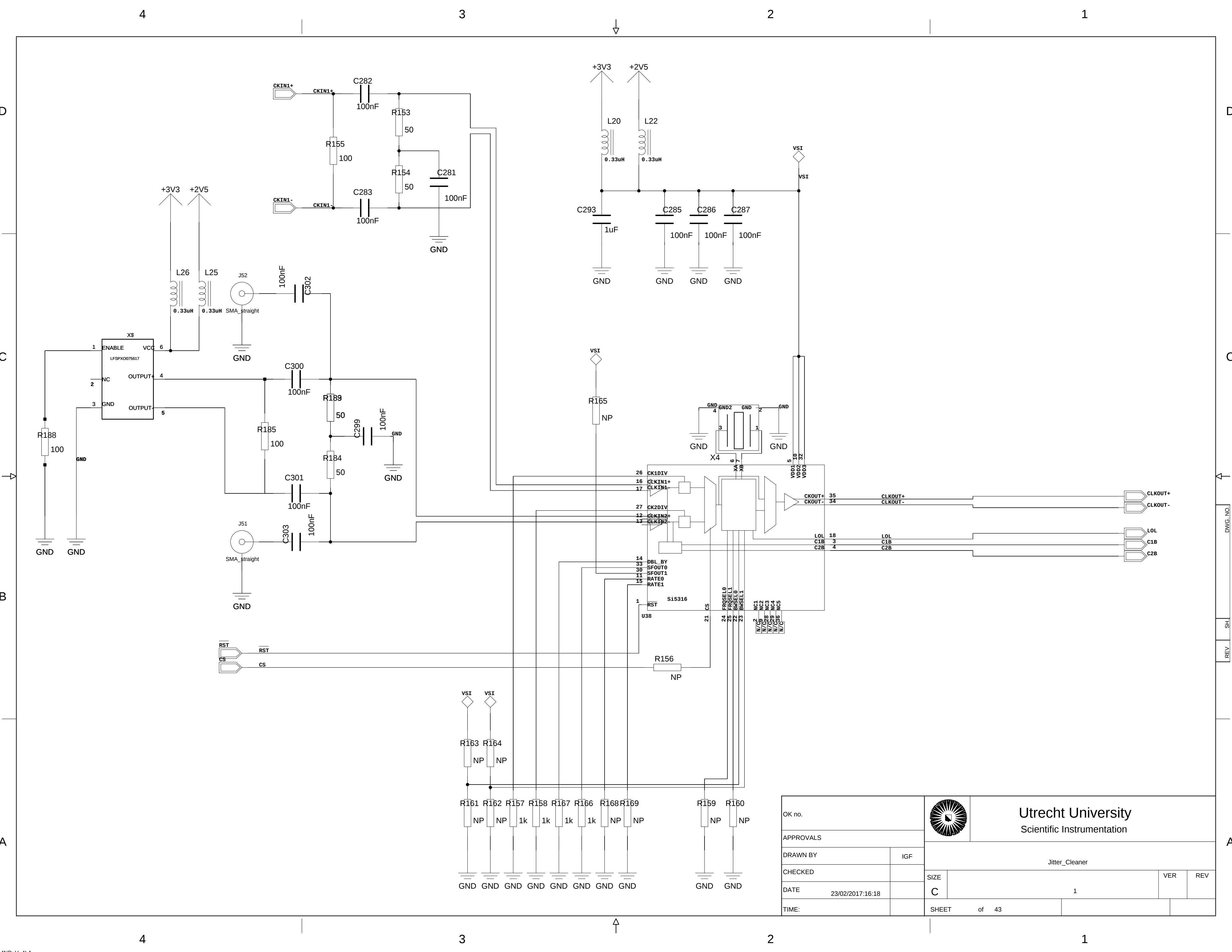
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REV

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D

C

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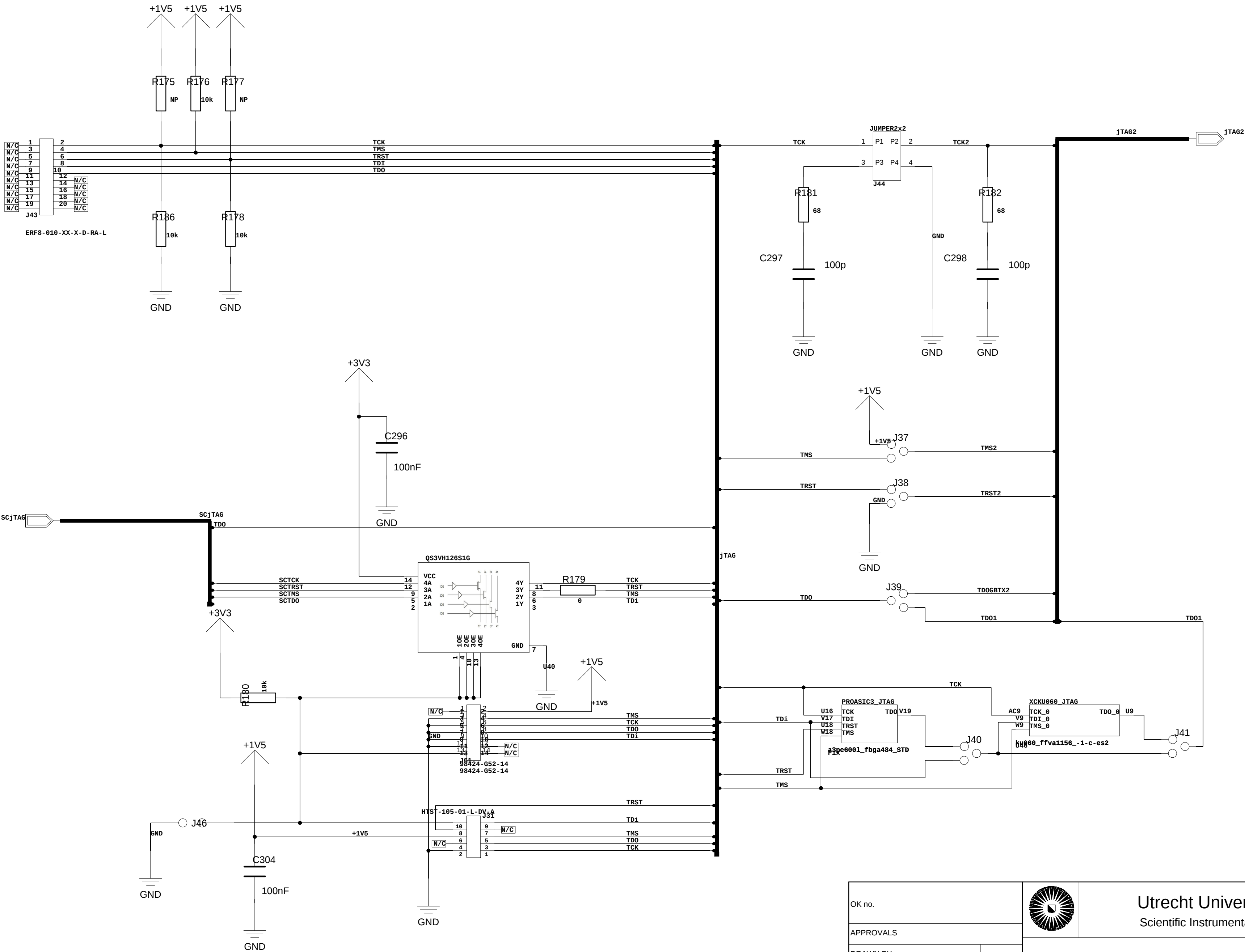
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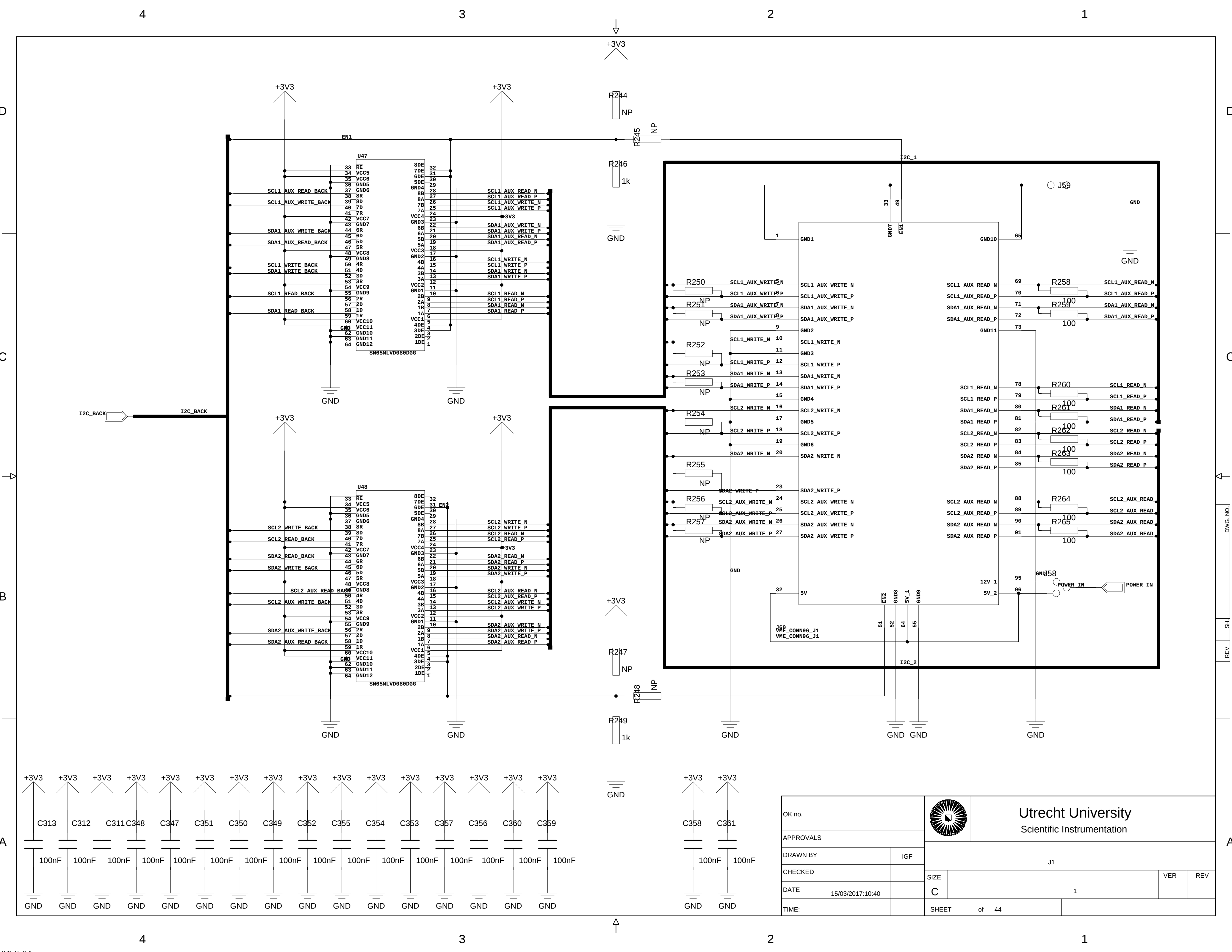
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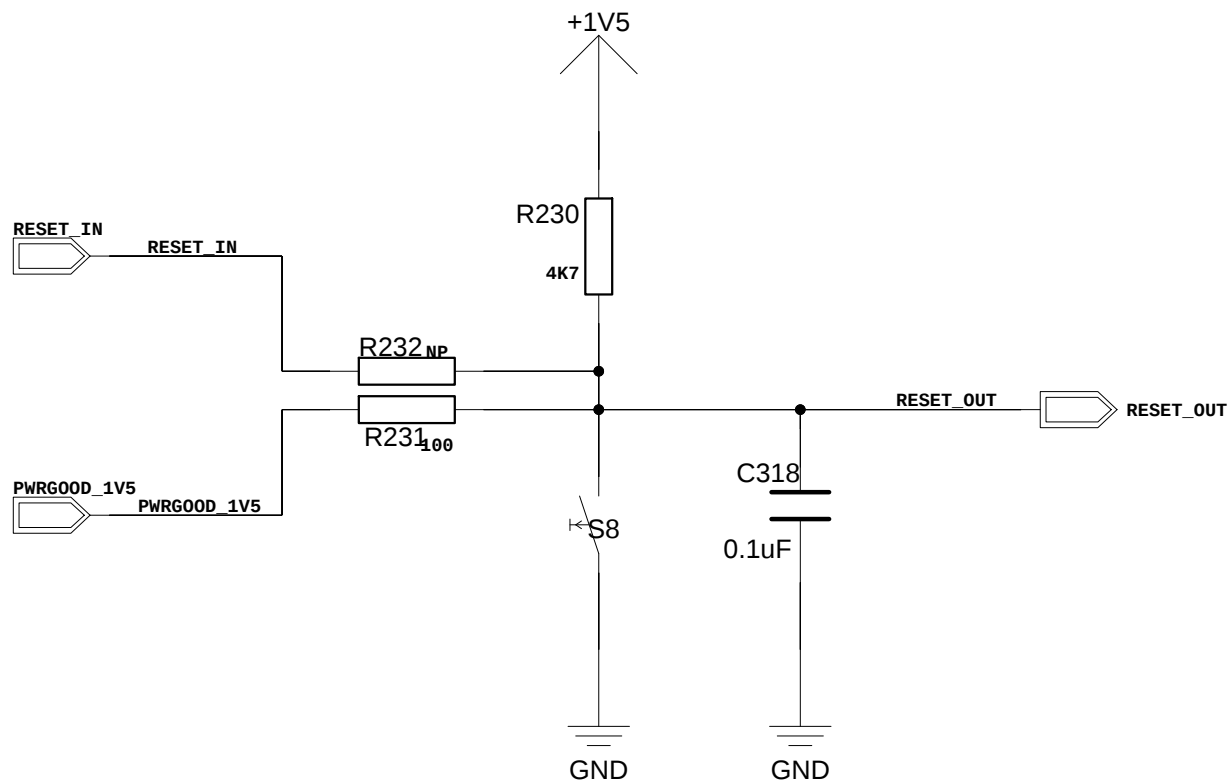
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