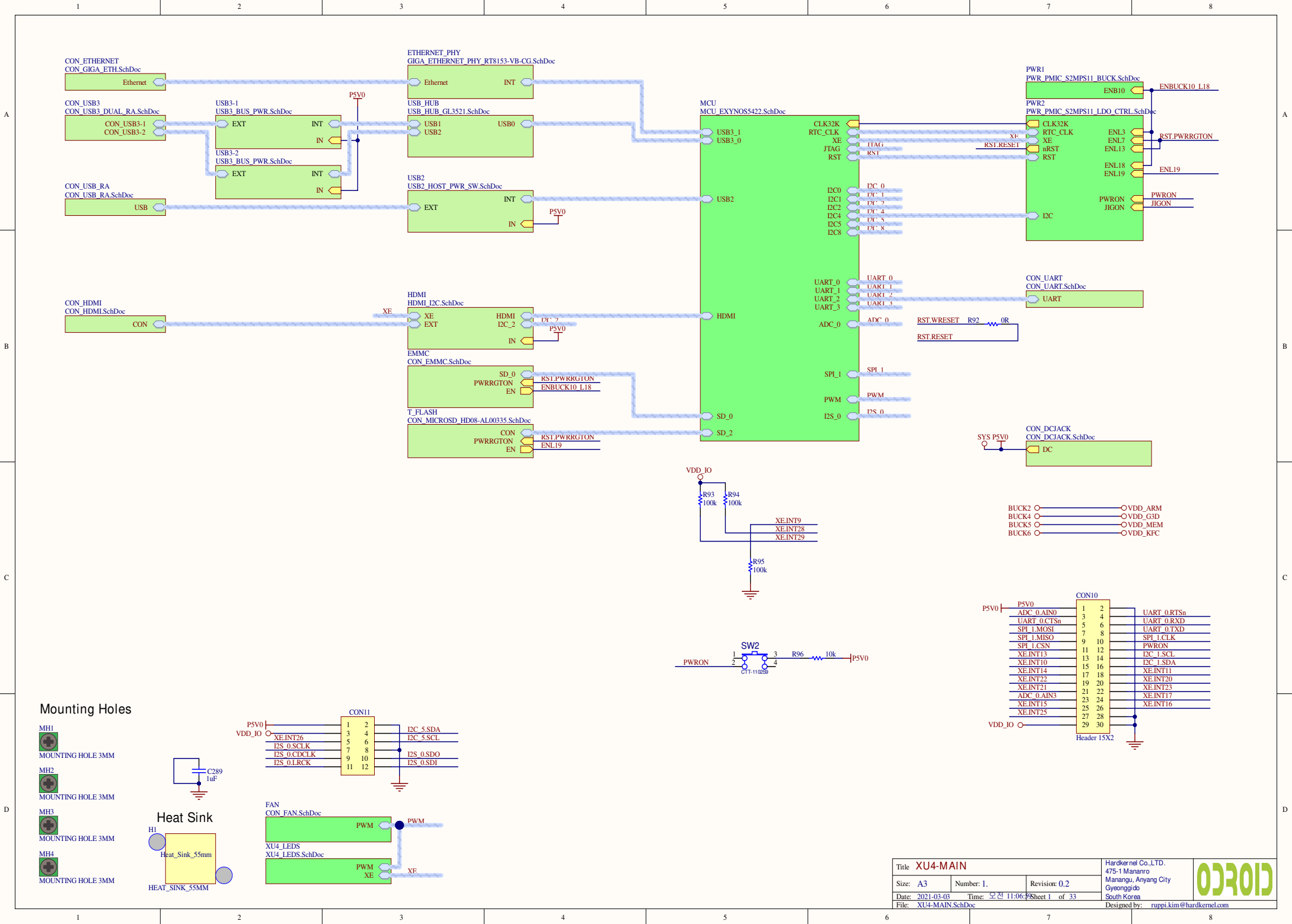
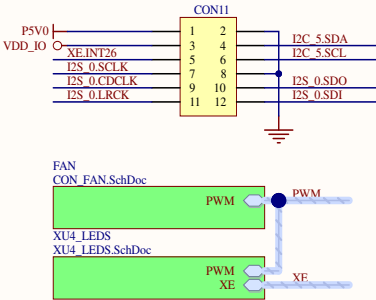
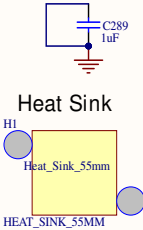


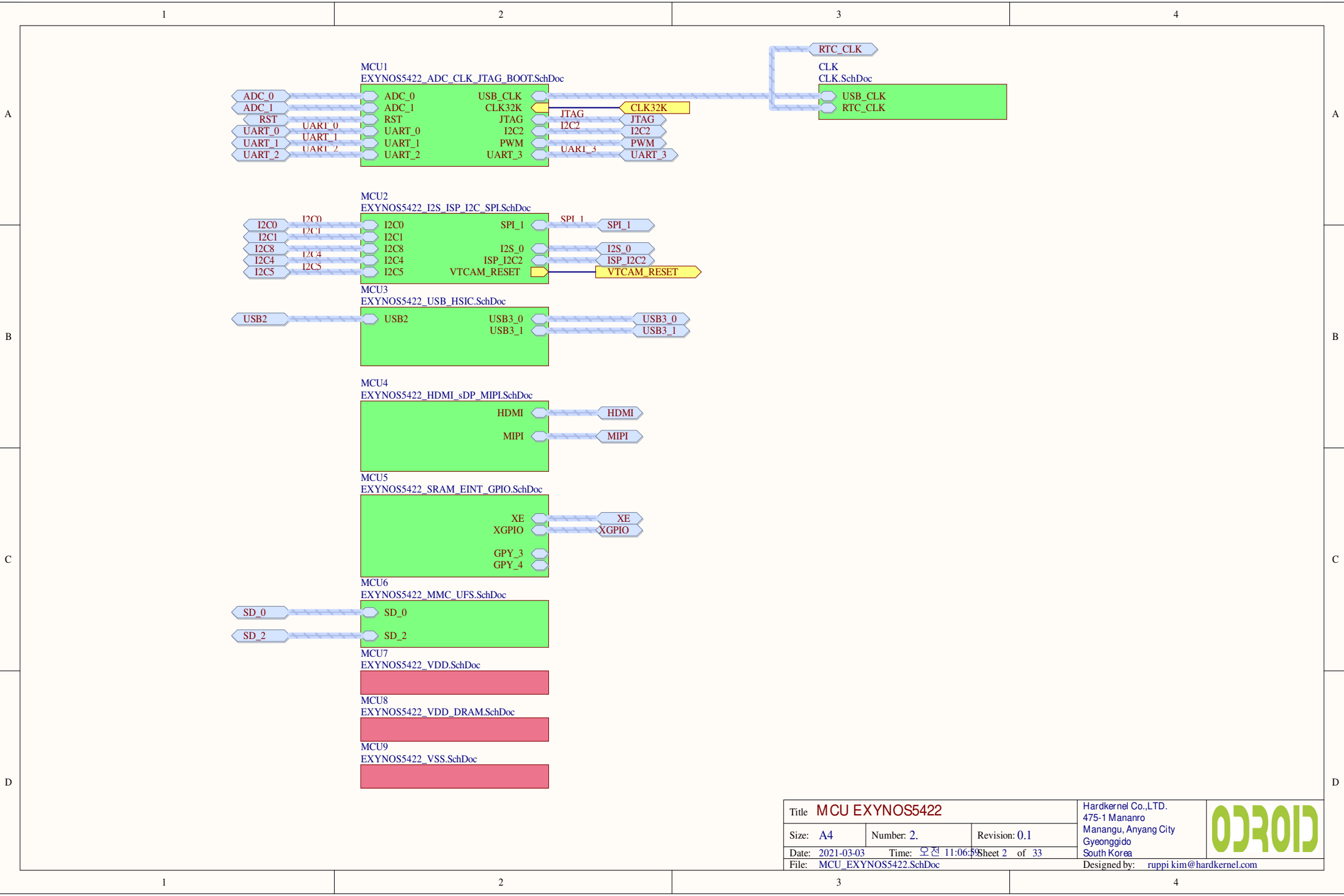


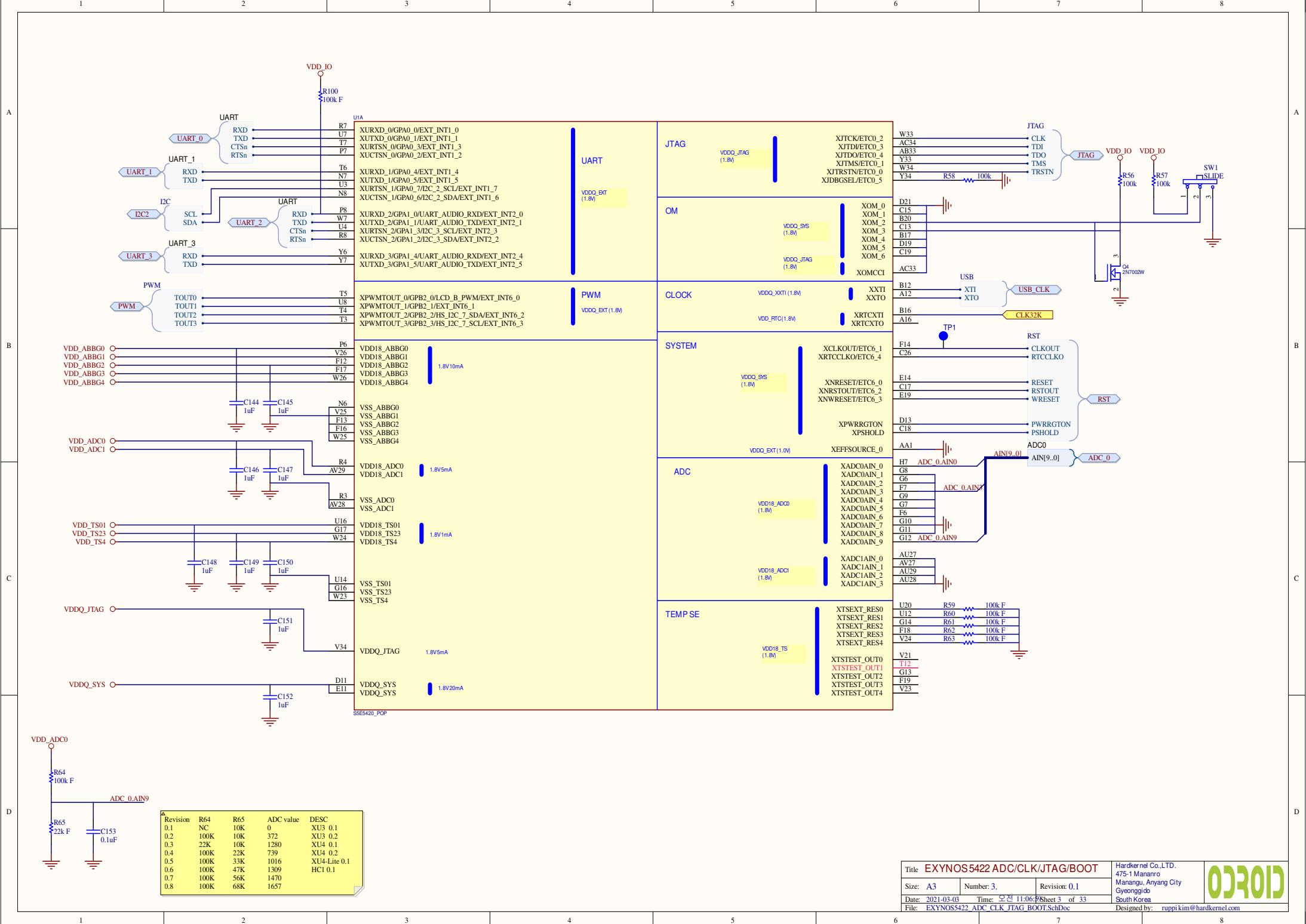
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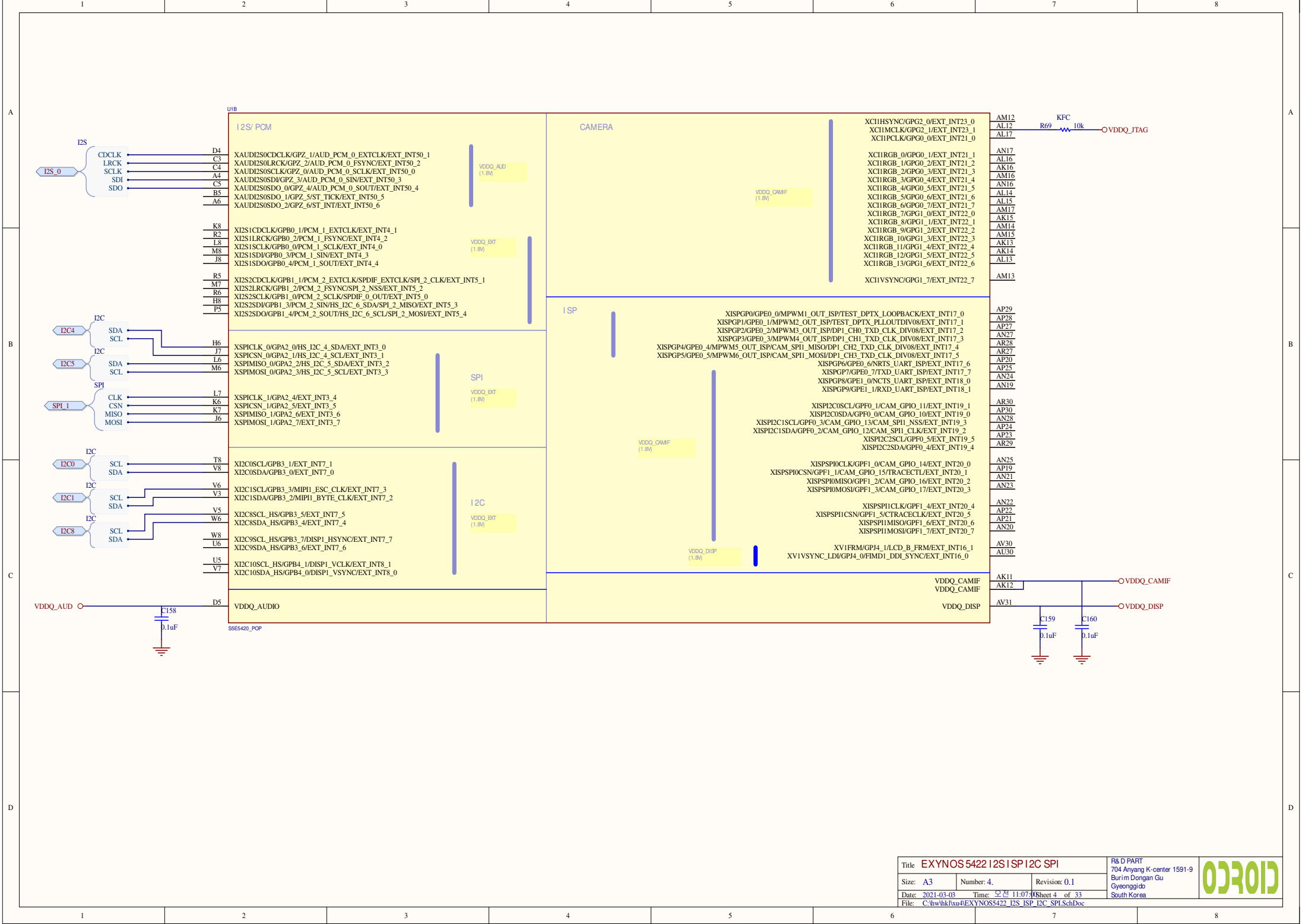
- MH1
MOUNTING HOLE 3MM
- MH2
MOUNTING HOLE 3MM
- MH3
MOUNTING HOLE 3MM
- MH4
MOUNTING HOLE 3MM



Title XU4-MAIN			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggi-do South Korea	
Size: A3	Number: 1.	Revision: 0.2		
Date: 2021-03-03	Time: 오전 11:06	Sheet 1 of 33		
File: XU4-MAIN.SchDoc			Designed by: ruppi.kim@hardkernel.com	







A

B

C

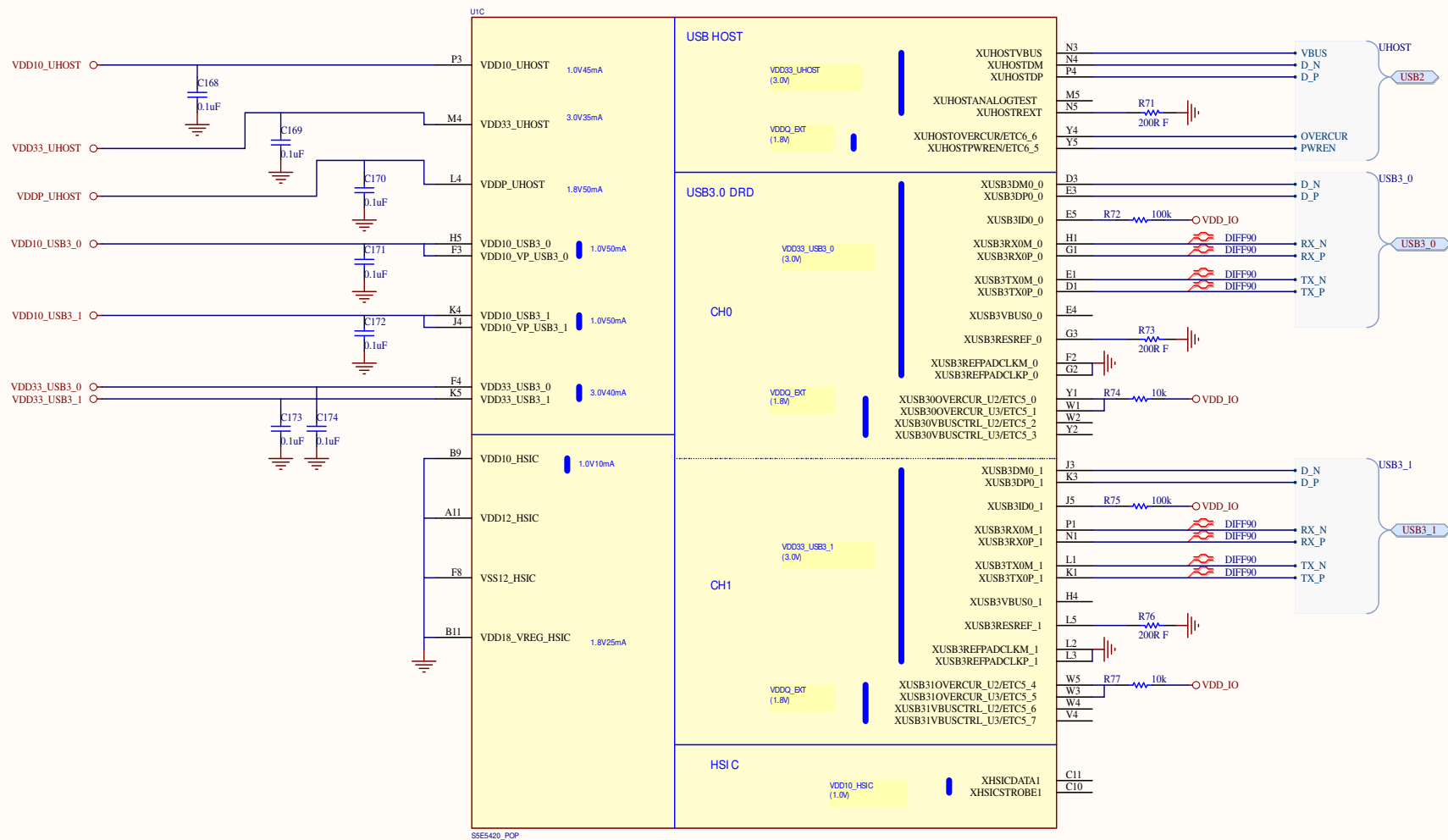
D

A

B

C

D



A

B

C

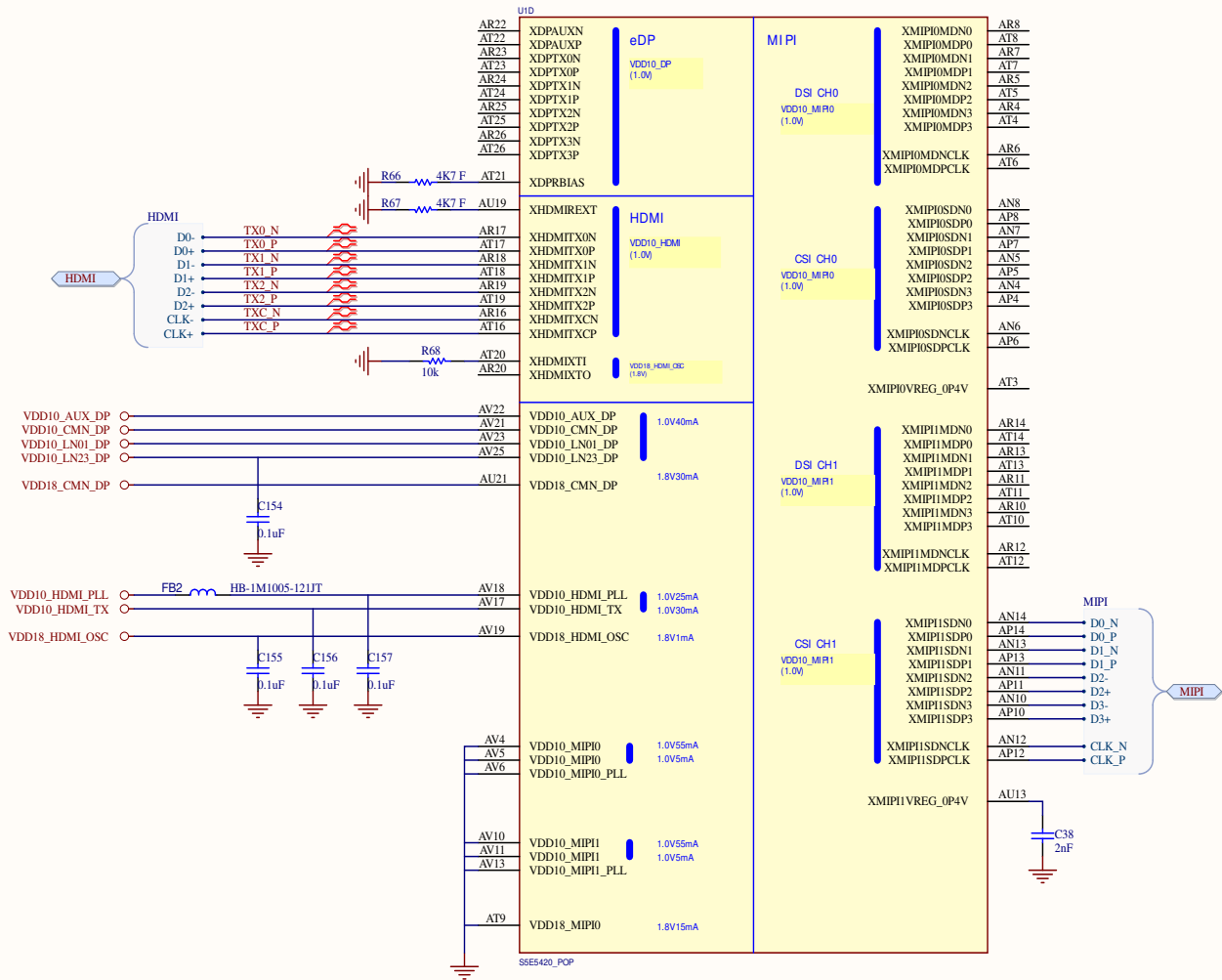
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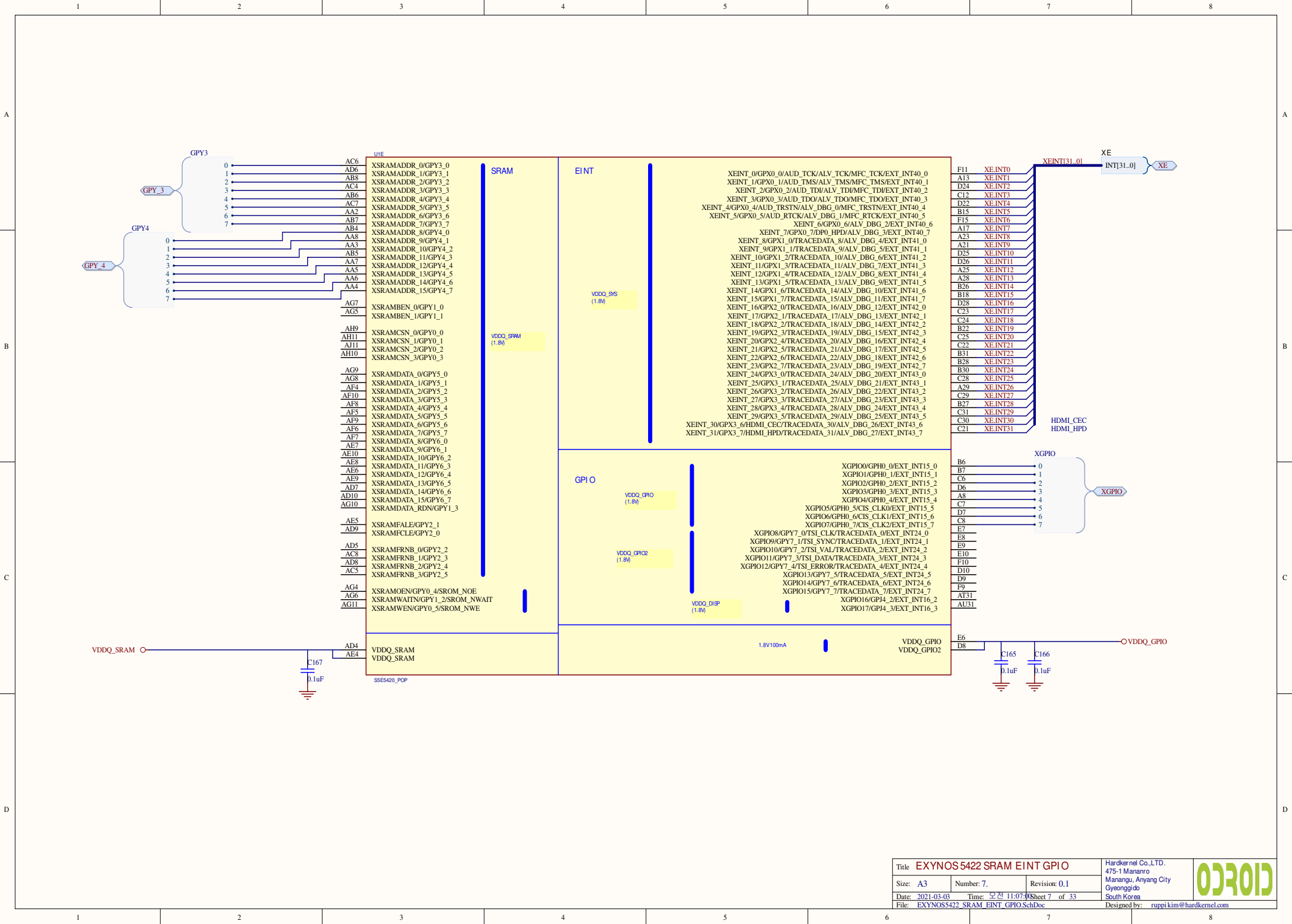
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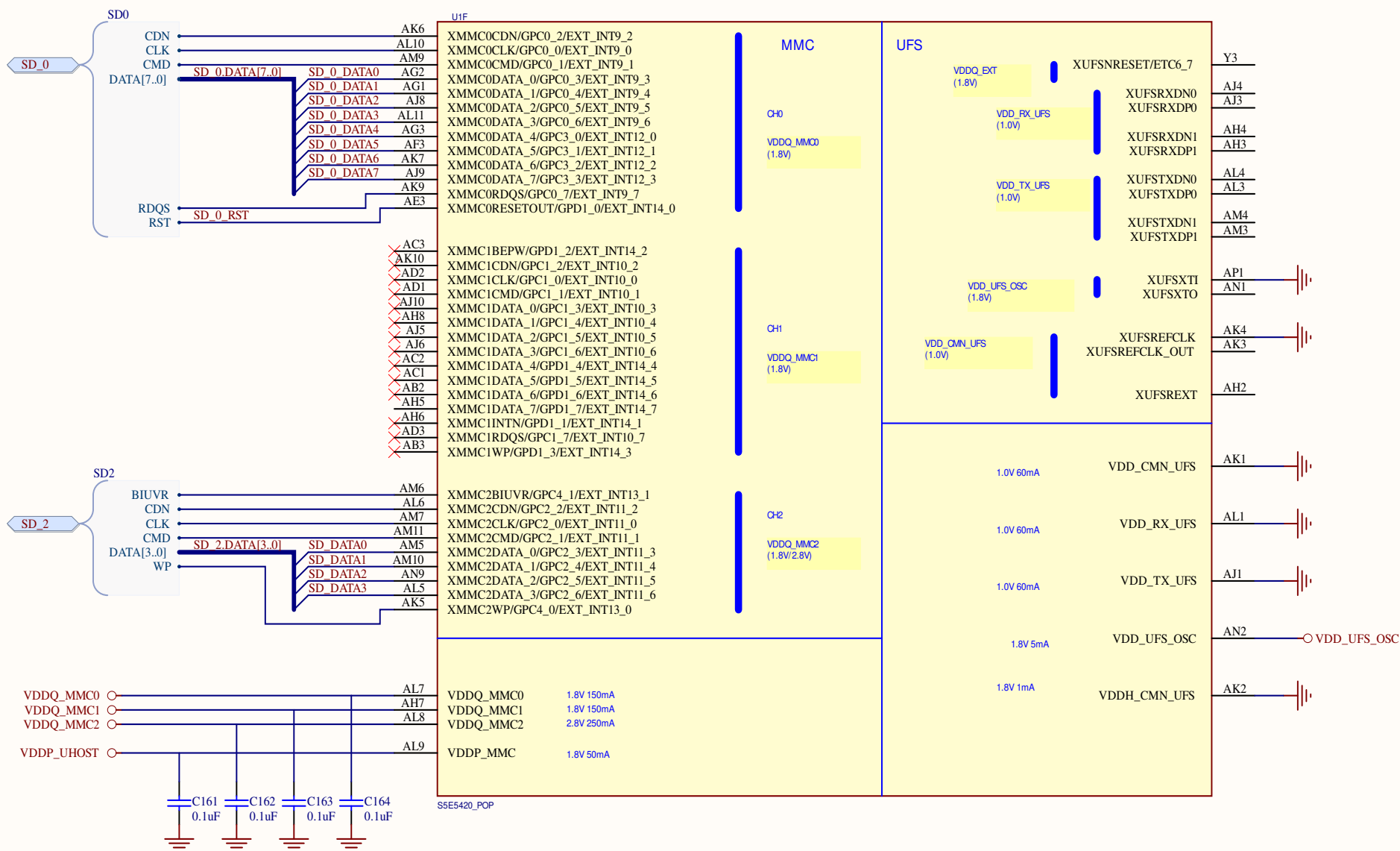
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C

D







Title EXYNOS 5422 MMC UFS

Size: A4

Number: 8.

Revision: 0.1

Date: 2021-03-03

Time: 오전 11:07:00

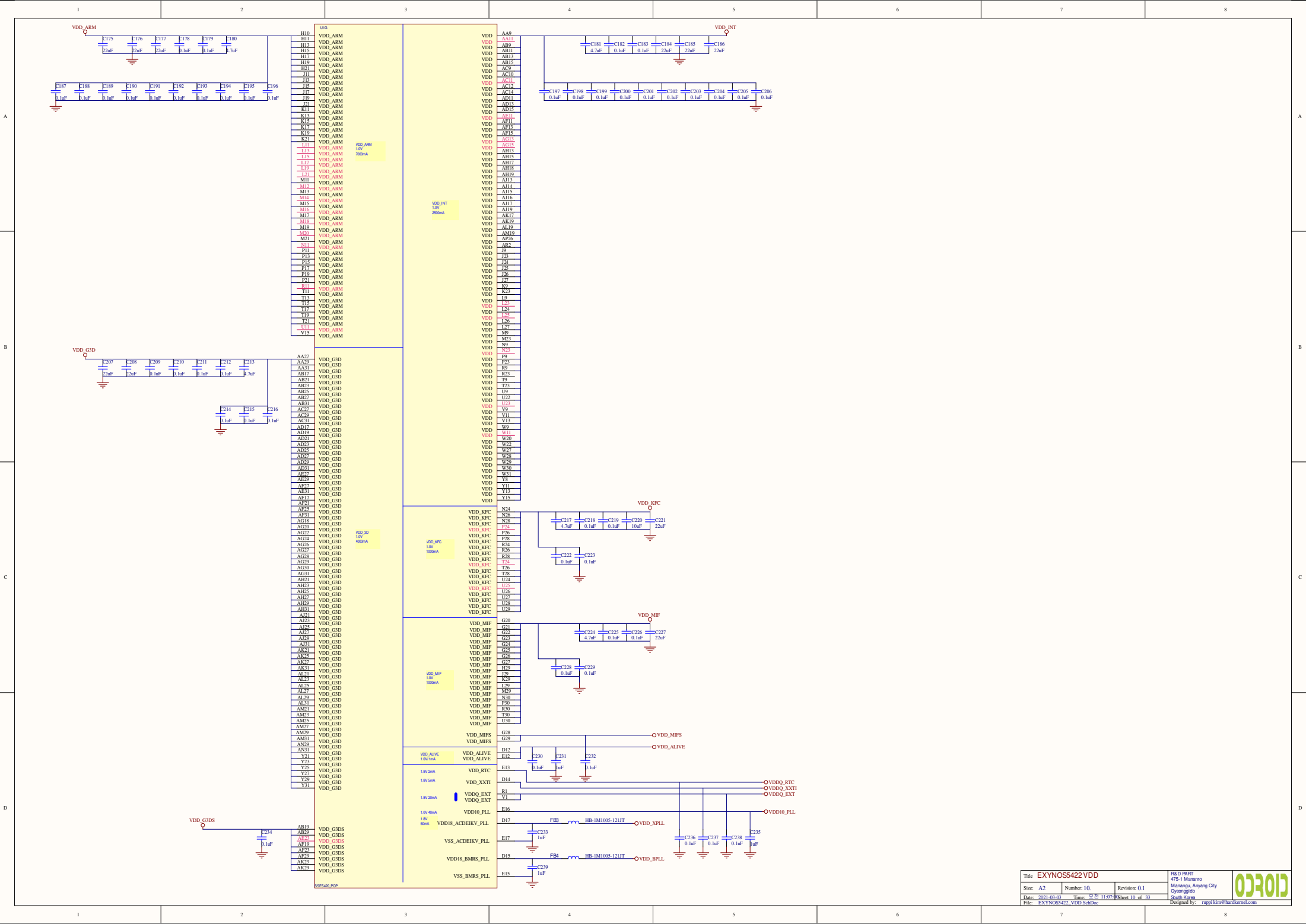
Sheet 8 of 33

File: EXYNOS5422_MMC_UFS.SchDoc

Hardkernel Co.,LTD.
475-1 Mananro
Manangu, Anyang City
Gyeonggido
South Korea

Designed by: ruppi kim@hardkernel.com

03010D



A1	VSS	A1	VSS	A7	VSS	A7	VSS
A2	VSS	A2	VSS	A8	VSS	A8	VSS
A3	VSS	A3	VSS	A9	VSS	A9	VSS
A4	VSS	A4	VSS	AA10	VSS	AA10	VSS
A5	VSS	A5	VSS	AA11	VSS	AA11	VSS
A6	VSS	A6	VSS	AA12	VSS	AA12	VSS
AA27	VSS	AA27	VSS	AA28	VSS	AA28	VSS
AA29	VSS	AA29	VSS	AA30	VSS	AA30	VSS
AA31	VSS	AA31	VSS	AA32	VSS	AA32	VSS
AB14	VSS	AB14	VSS	AB20	VSS	AB20	VSS
AB15	VSS	AB15	VSS	AB34	VSS	AB34	VSS
AC18	VSS	AC18	VSS	AC22	VSS	AC22	VSS
AC20	VSS	AC20	VSS	AC30	VSS	AC30	VSS
AD24	VSS	AD24	VSS	AD26	VSS	AD26	VSS
AD32	VSS	AD32	VSS	AD33	VSS	AD33	VSS
AE16	VSS	AE16	VSS	AE18	VSS	AE18	VSS
AE24	VSS	AE24	VSS	AE26	VSS	AE26	VSS
AE32	VSS	AE32	VSS	AE33	VSS	AE33	VSS
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AH33	VSS	AH33	VSS	AJ34	VSS	AJ34	VSS
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AK18	VSS	AK18	VSS	AK30	VSS	AK30	VSS
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AN18	VSS	AN18	VSS	AN26	VSS	AN26	VSS
AN33	VSS	AN33	VSS	AN34	VSS	AN34	VSS
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AP18	VSS	AP18	VSS	AP31	VSS	AP31	VSS
AP44	VSS	AP44	VSS	AP18	VSS	AP18	VSS
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AR33	VSS	AR33	VSS	AR34	VSS	AR34	VSS
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AV1	VSS	AV1	VSS	AV2	VSS	AV2	VSS
AV15	VSS	AV15	VSS	AV20	VSS	AV20	VSS
AV33	VSS	AV33	VSS	AV34	VSS	AV34	VSS
B4	VSS	B4	VSS	B25	VSS	B25	VSS
B34	VSS	B34	VSS	C1	VSS	C1	VSS
C16	VSS	C16	VSS	C34	VSS	C34	VSS
D29	VSS	D29	VSS	D30	VSS	D30	VSS
D34	VSS	D34	VSS	E5	VSS	E5	VSS
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G20	VSS	G20	VSS	H2	VSS	H2	VSS
H12	VSS	H12	VSS	H14	VSS	H14	VSS
H20	VSS	H20	VSS	H22	VSS	H22	VSS
H25	VSS	H25	VSS	H26	VSS	H26	VSS
H30	VSS	H30	VSS	H32	VSS	H32	VSS
J10	VSS	J10	VSS	J12	VSS	J12	VSS
J18	VSS	J18	VSS	J20	VSS	J20	VSS
J30	VSS	J30	VSS	J32	VSS	J32	VSS
K10	VSS	K10	VSS	K16	VSS	K16	VSS
K18	VSS	K18	VSS	K20	VSS	K20	VSS
K25	VSS	K25	VSS	K26	VSS	K26	VSS
K30	VSS	K30	VSS	L17	VSS	L17	VSS
L10	VSS	L10	VSS	L20	VSS	L20	VSS
L30	VSS	L30	VSS	L32	VSS	L32	VSS
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M26	VSS	M26	VSS	M27	VSS	M27	VSS
M32	VSS	M32	VSS	M33	VSS	M33	VSS
N12	VSS	N12	VSS	N14	VSS	N14	VSS
N20	VSS	N20	VSS	N27	VSS	N27	VSS
N29	VSS	N29	VSS	N32	VSS	N32	VSS
P32	VSS	P32	VSS	P33	VSS	P33	VSS
R12	VSS	R12	VSS	R14	VSS	R14	VSS
R20	VSS	R20	VSS	R22	VSS	R22	VSS
R29	VSS	R29	VSS	R31	VSS	R31	VSS
T25	VSS	T25	VSS	T27	VSS	T27	VSS
T34	VSS	T34	VSS	U10	VSS	U10	VSS
U12	VSS	U12	VSS	U33	VSS	U33	VSS
V12	VSS	V12	VSS	V27	VSS	V27	VSS
V30	VSS	V30	VSS	V31	VSS	V31	VSS
W10	VSS	W10	VSS	W12	VSS	W12	VSS
Y9	VSS	Y9	VSS	Y28	VSS	Y28	VSS
Y26	VSS	Y26	VSS	Y30	VSS	Y30	VSS

BSE400_POP

BU			
V22	NC0	NC39	AA11
Y20	NC1	NC40	AA15
Y19	NC2	NC41	AA16
Y18	NC3	NC42	AA17
Y17	NC4	NC43	AA18
Y16	NC5	NC44	AA19
Y15	NC6	NC45	AA21
W21	NC7	NC46	AB14
W19	NC8	NC47	AB16
W18	NC9	NC48	AB18
W17	NC10	NC49	AB20
W16	NC11	NC50	AB22
W15	NC12	NC51	AC11
W14	NC13	NC52	AC15
W13	NC14	NC53	AC19
W12	NC15	NC54	AC17
V20	NC16	NC55	AC21
V19	NC17	NC56	AD16
V18	NC18	NC57	AD18
V17	NC19	NC58	AD20
V16	NC20	NC59	AD22
V15	NC21	NC60	AD23
V14	NC22	NC61	R15
V13	NC23	NC62	R17
V12	NC24	NC63	R19
V11	NC25	NC64	R21
V10	NC26	NC65	T14
V9	NC27	NC66	T16
V8	NC28	NC67	T18
V7	NC29	NC68	AF16
V6	NC30	NC69	P28
V5	NC31	NC70	AF18
V4	NC32	NC71	P14
V3	NC33	NC72	AF20
V2	NC34	NC73	P16
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U10	NC38	NC77	P18

BSE440_POP

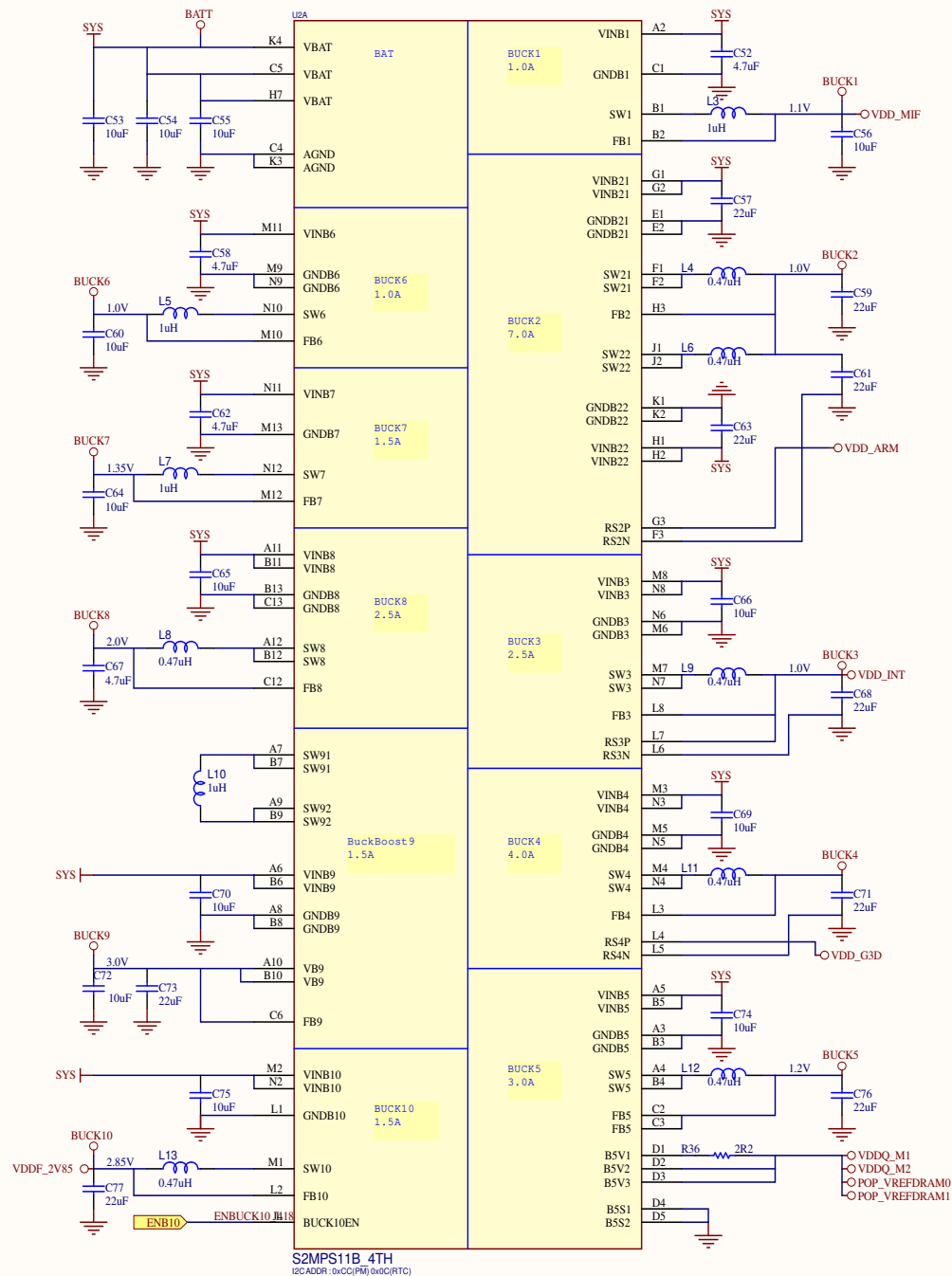


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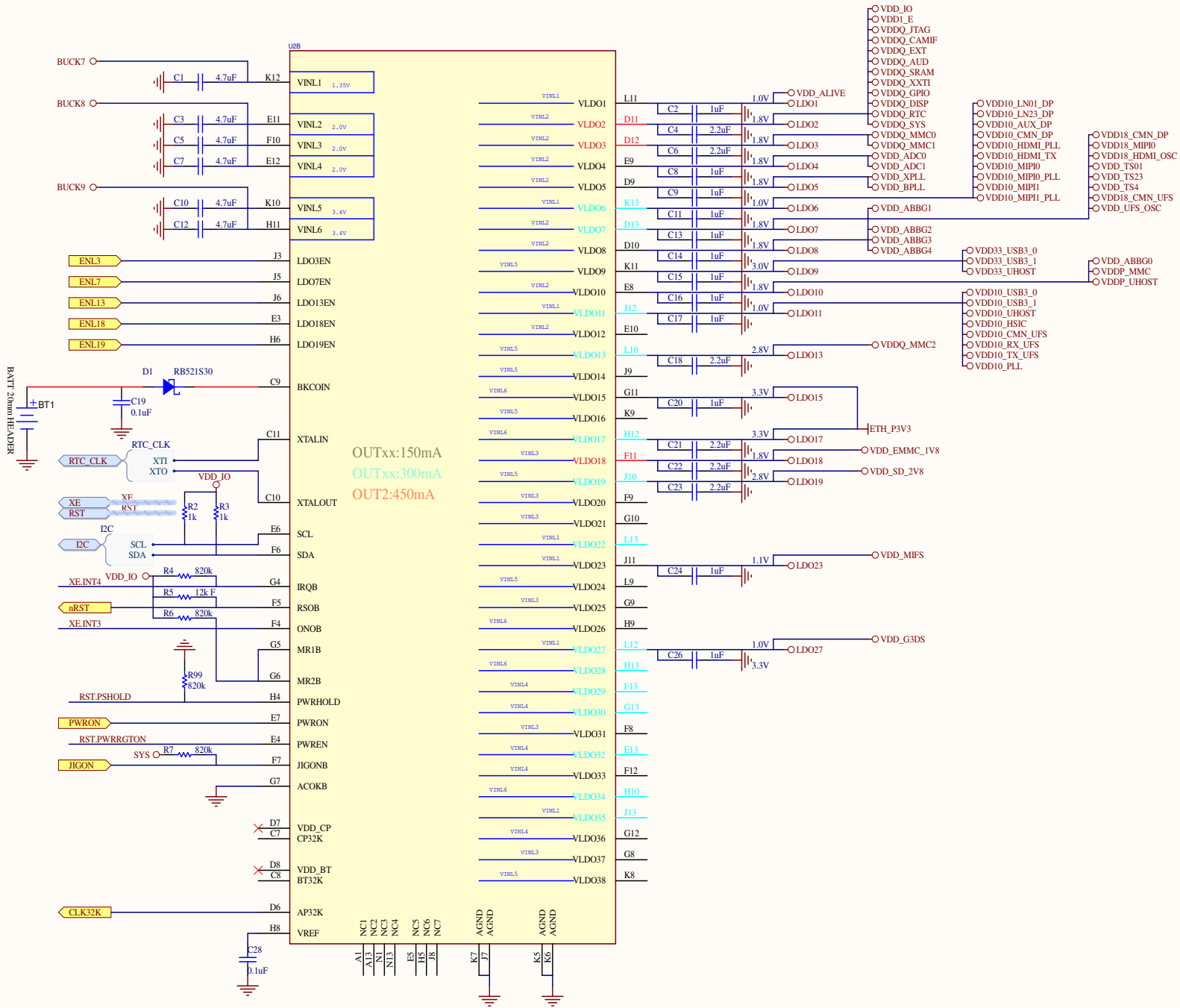
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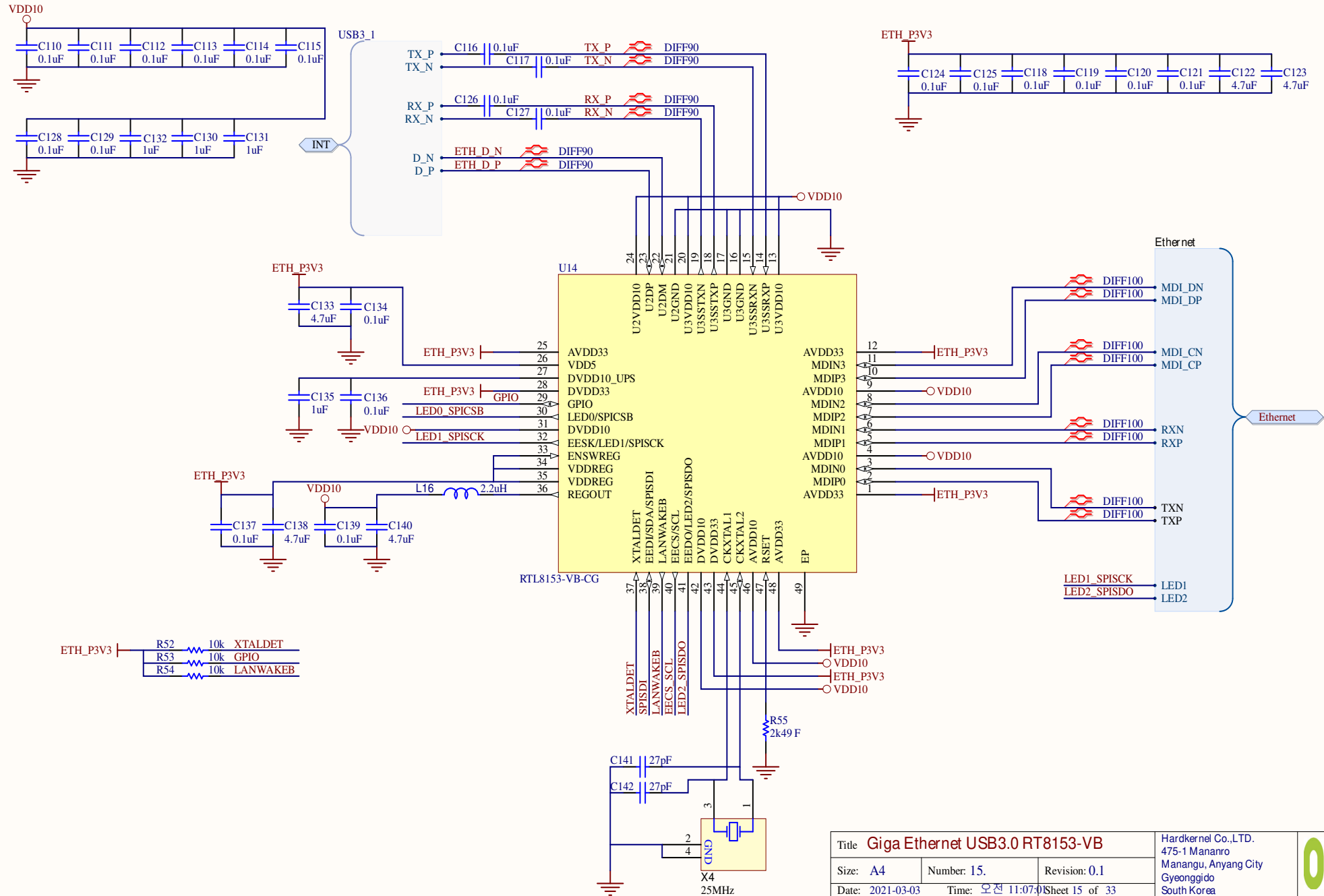


- VDD_MEM
- VDDCA_E
- VDD2_E
- POP_VREFCA_E
- VDDQ_DRAM0_CKE
- VDDQ_DRAM1_CKE
- VDDQ_E
- POP_VREFDQ_E

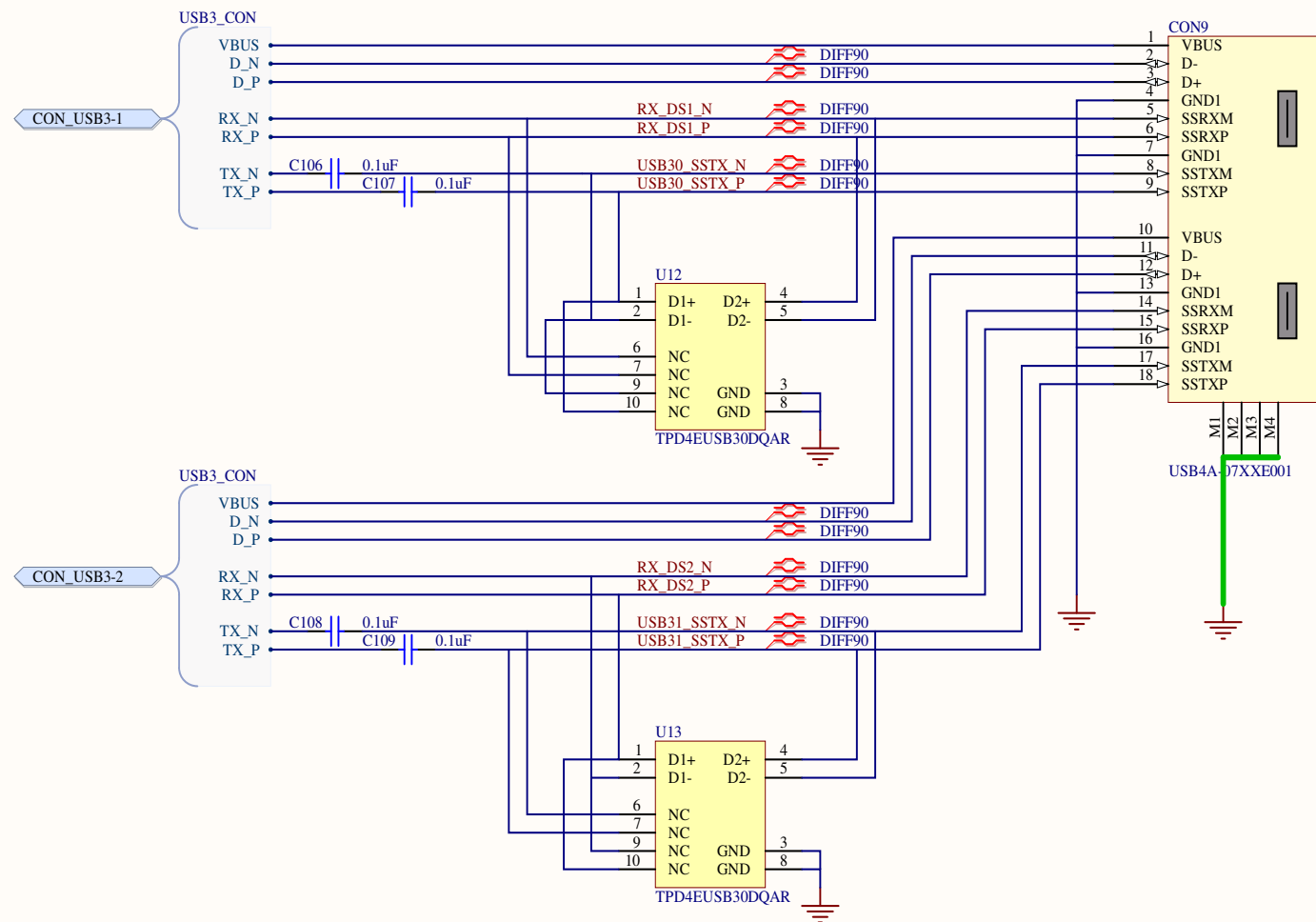
S2MPS11B 4TH
I2C ADDR: 0xCC(PM) 0x0C(RTC)

Title: S2MPS11X BUCK			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea		03010
Size: A3	Number: 12.	Revision: 0.1			
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 12 of 33			
File: PWR PMIC S2MPS11 BUCK.SchDoc			Designed by: ruppi.kim@hardkernel.com		

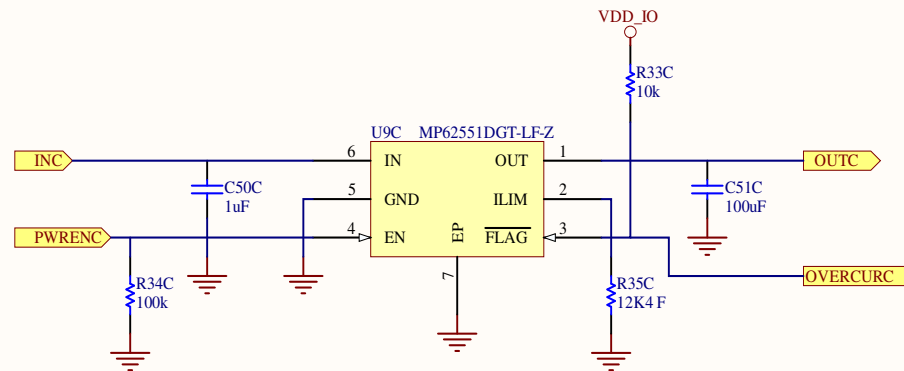




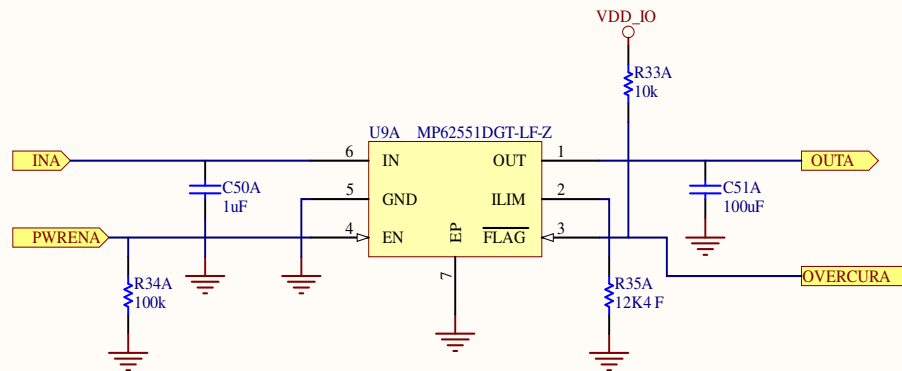
Title Giga Ethernet USB3.0 RT8153-VB			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 15.	Revision: 0.1		
Date: 2021-03-03	Time: 오전 11:07	Sheet 15 of 33		
File: GIGA_ETHERNET_PHY_RT8153-VB-CG.SchDoc				
Designed by:			ruppi.kim@hardkernel.com	



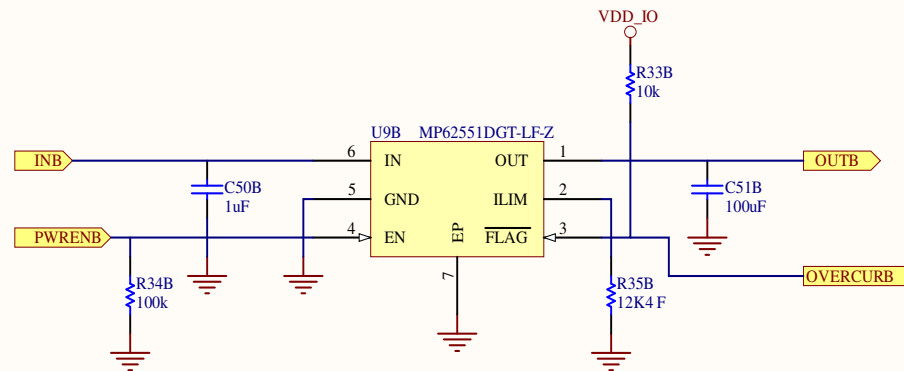
Title USB 3.0 Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea Designed by: ruppi.kim@hardkernel.com	
Size: A4	Number: 16.	Revision: 0.1		
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 16 of 33		
File: CON_USB3_DUAL_RA.SchDoc				



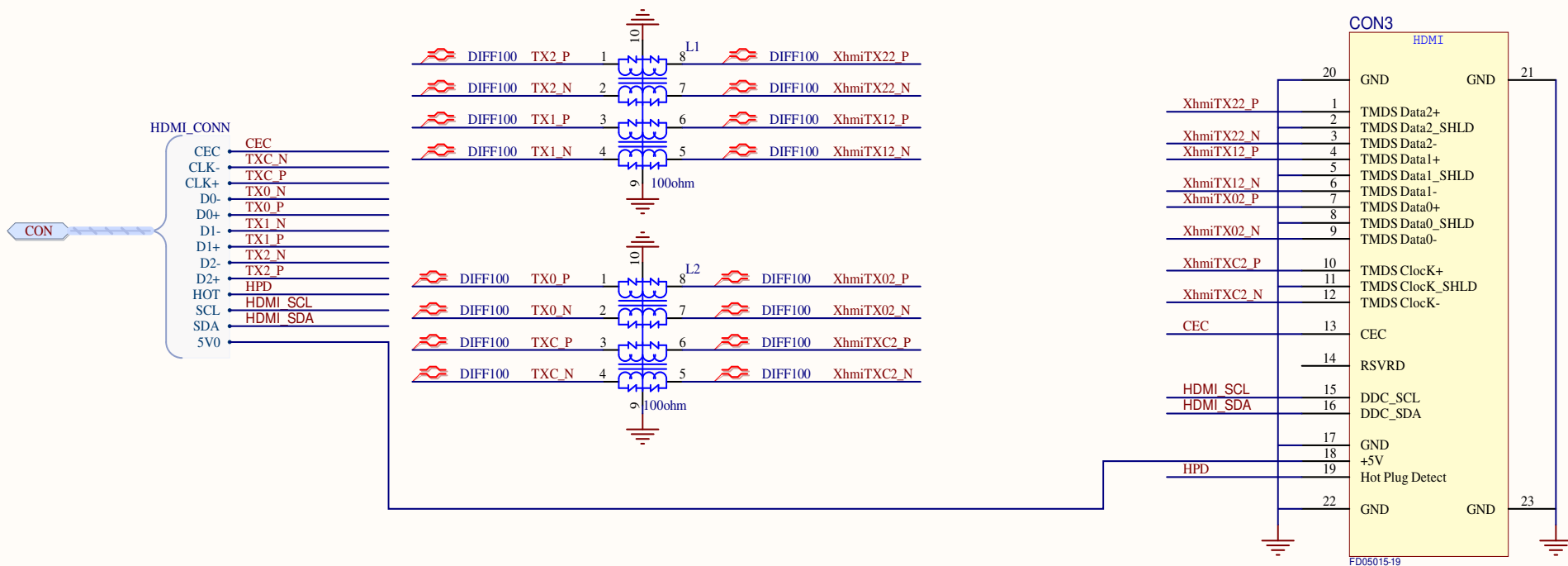
Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea 
Size: A4	Number: 17.	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 17 of 33	
File: MP62551.SchDoc			
Designed by: ruppi kim@hardkernel.com			

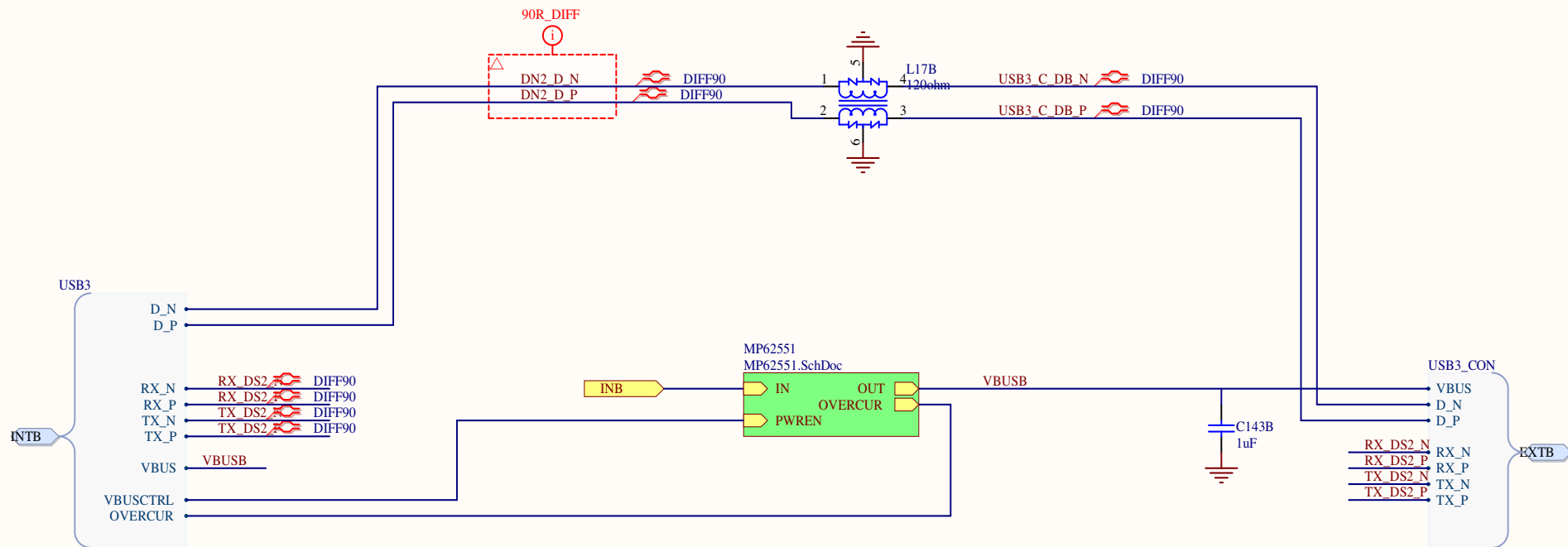


Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeongido South Korea 
Size: A4	Number: 17.1.1	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 17. of 33	
File: MP62551.SchDoc			
Designed by: ruppi kim@hardkernel.com			

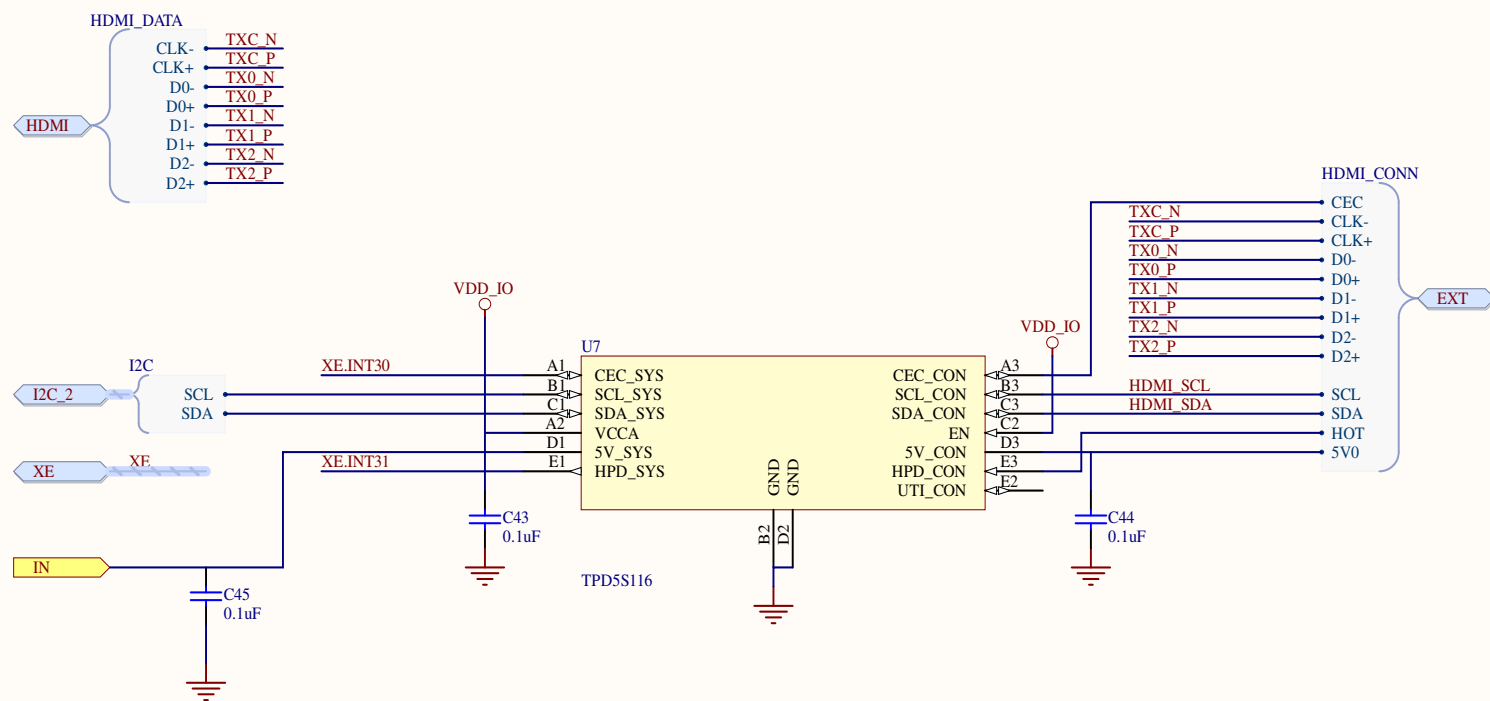


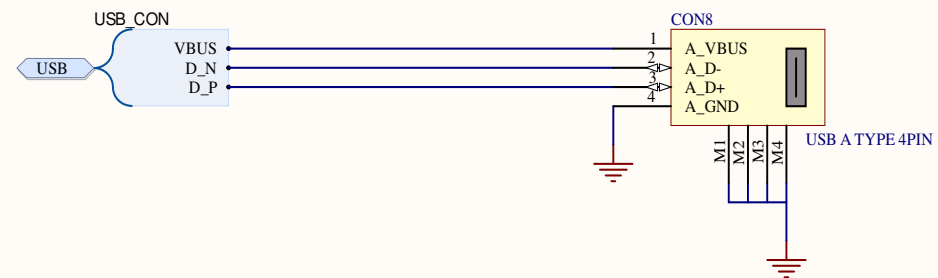
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Size: A4	Number: 17.2.1	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:03	Sheet 17.2.1 of 33	
File: MP62551.SchDoc			
Designed by: ruppi kim@hardkernel.com			



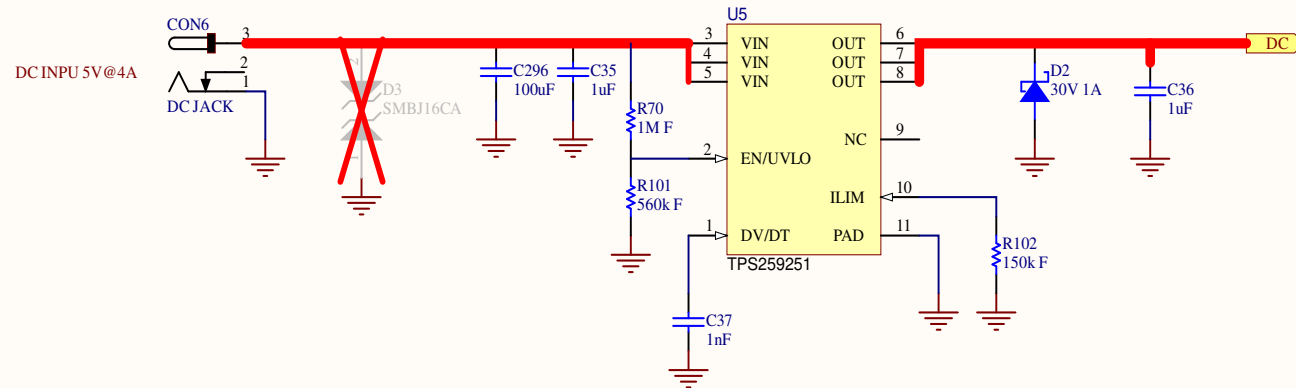


Title USB3 BUS POWER			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 19.2	Revision: 0.1		
Date: 2021-03-03	Time: 오전 11:07:03	Sheet 19 of 33		
File: USB3_BUS_PWR.SchDoc				
			Designed by:	ruppi.kim@hardkernel.com

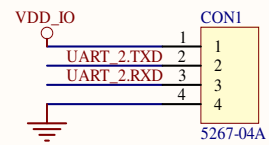
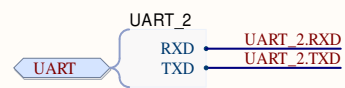




Title USB 2.0 Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea 
Size: A4	Number: 21.	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:05	Sheet 21 of 33	
File: CON_USB_RA.SchDoc			
Designed by: ruppi kim@hardkernel.com			



Title DC Jack and Potection IC			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea 
Size: A4	Number: 22.	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:05	Sheet 22 of 33	
File: CON_DCJACK.SchDoc			
Designed by: ruppi kim@hardkernel.com			



Title UART Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 23.	Revision: 0.1		
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 23 of 33		
File: CON_UART.SchDoc				
			Designed by: ruppi kim@hardkernel.com	

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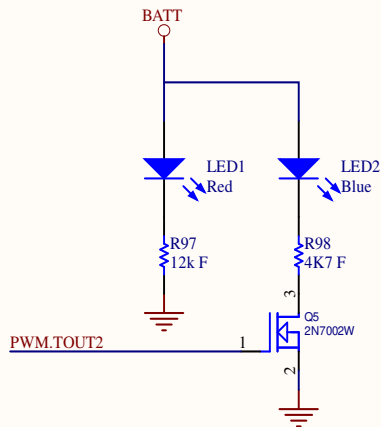
B

C

C

D

D



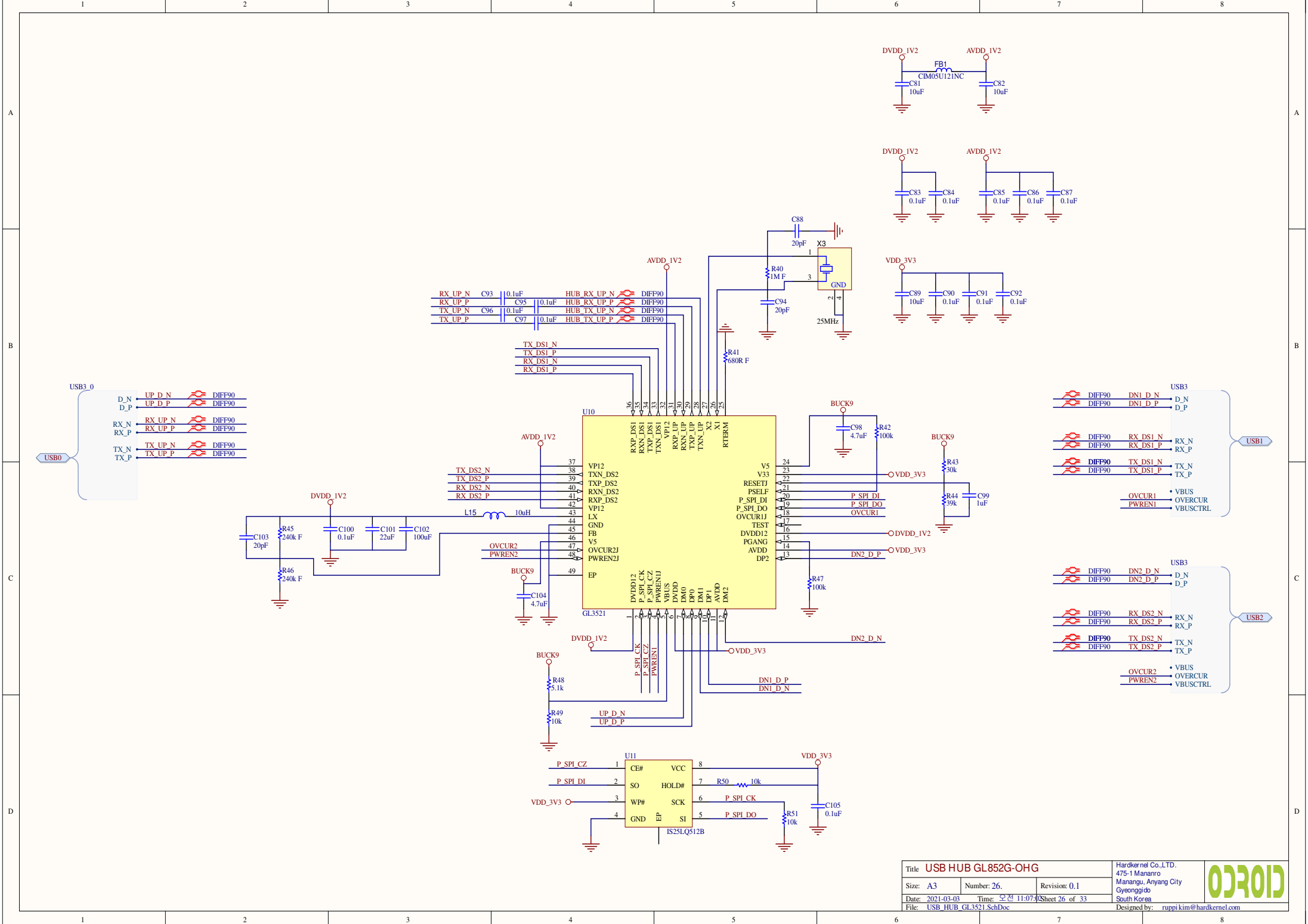
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Date: 2021-03-03	Time: 오전 11:07:00	Sheet 25 of 33	
File: XU4_LEDS.SchDoc			
Designed by: ruppi.kim@hardkernel.com			

1

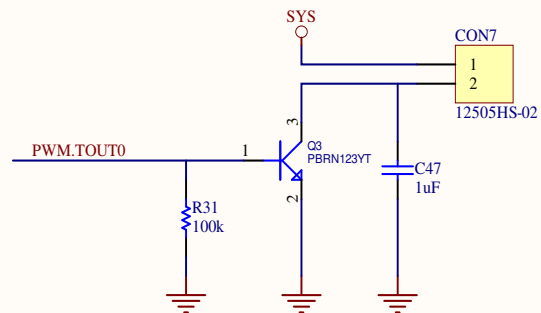
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3

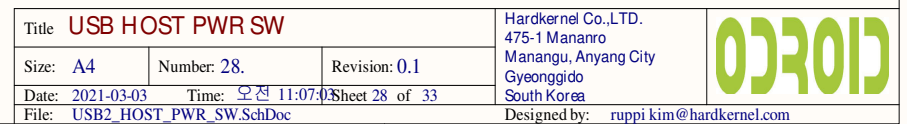
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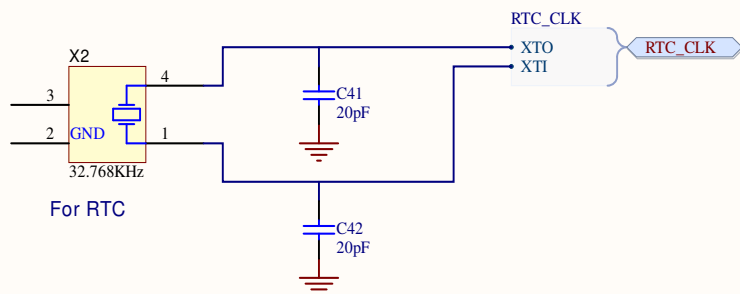
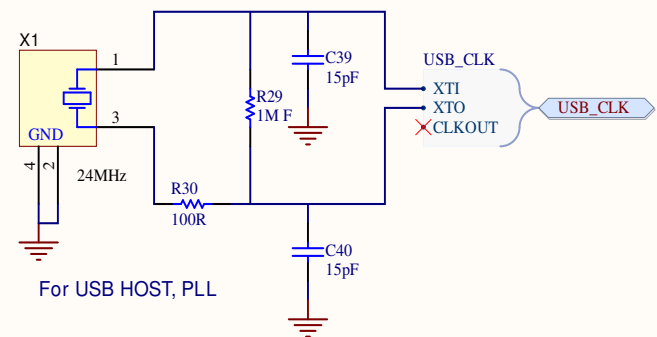


PWM



Title FAN Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea 
Size: A4	Number: 27.	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:00	Sheet 27 of 33	
File: CON_FAN.SchDoc			
Designed by: ruppi kim@hardkernel.com			





Title CLK			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea 
Size: A4	Number: 30.	Revision: 0.1	
Date: 2021-03-03	Time: 오전 11:07:05	Sheet 30 of 33	
File: CLK.SchDoc			
Designed by: ruppi kim@hardkernel.com			