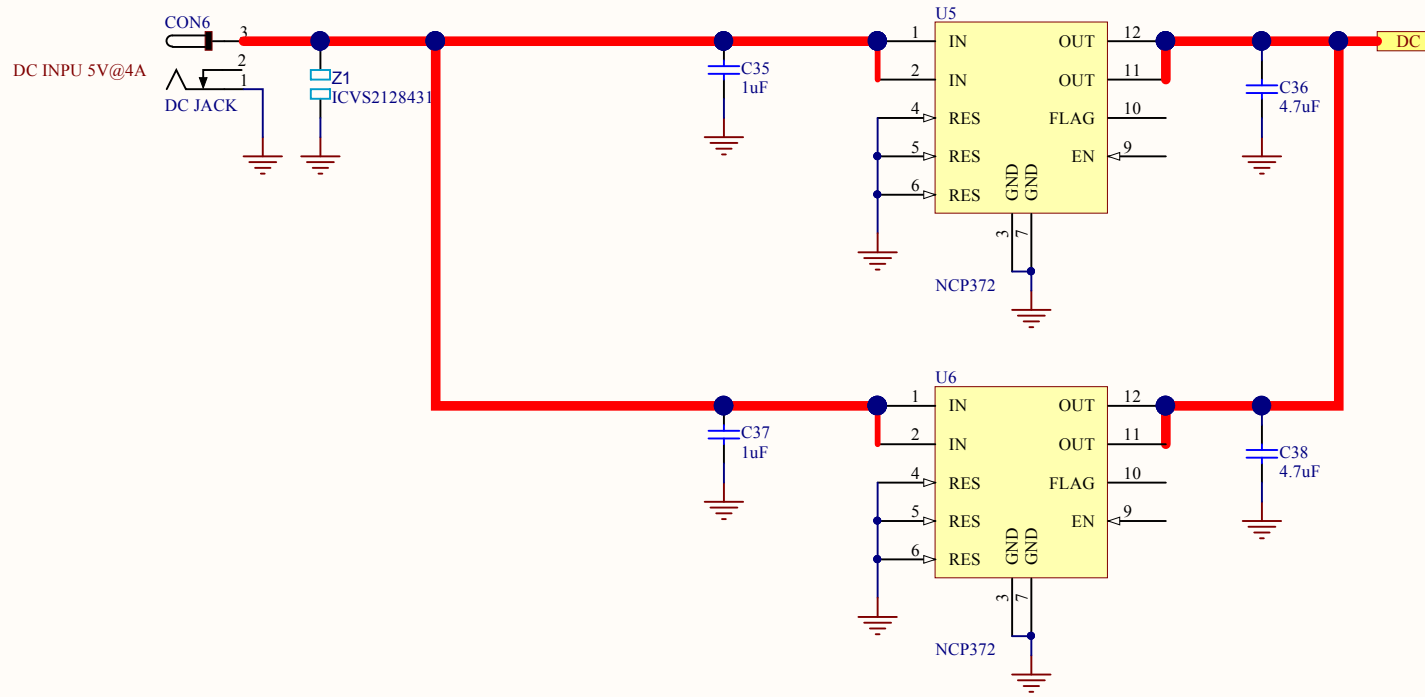
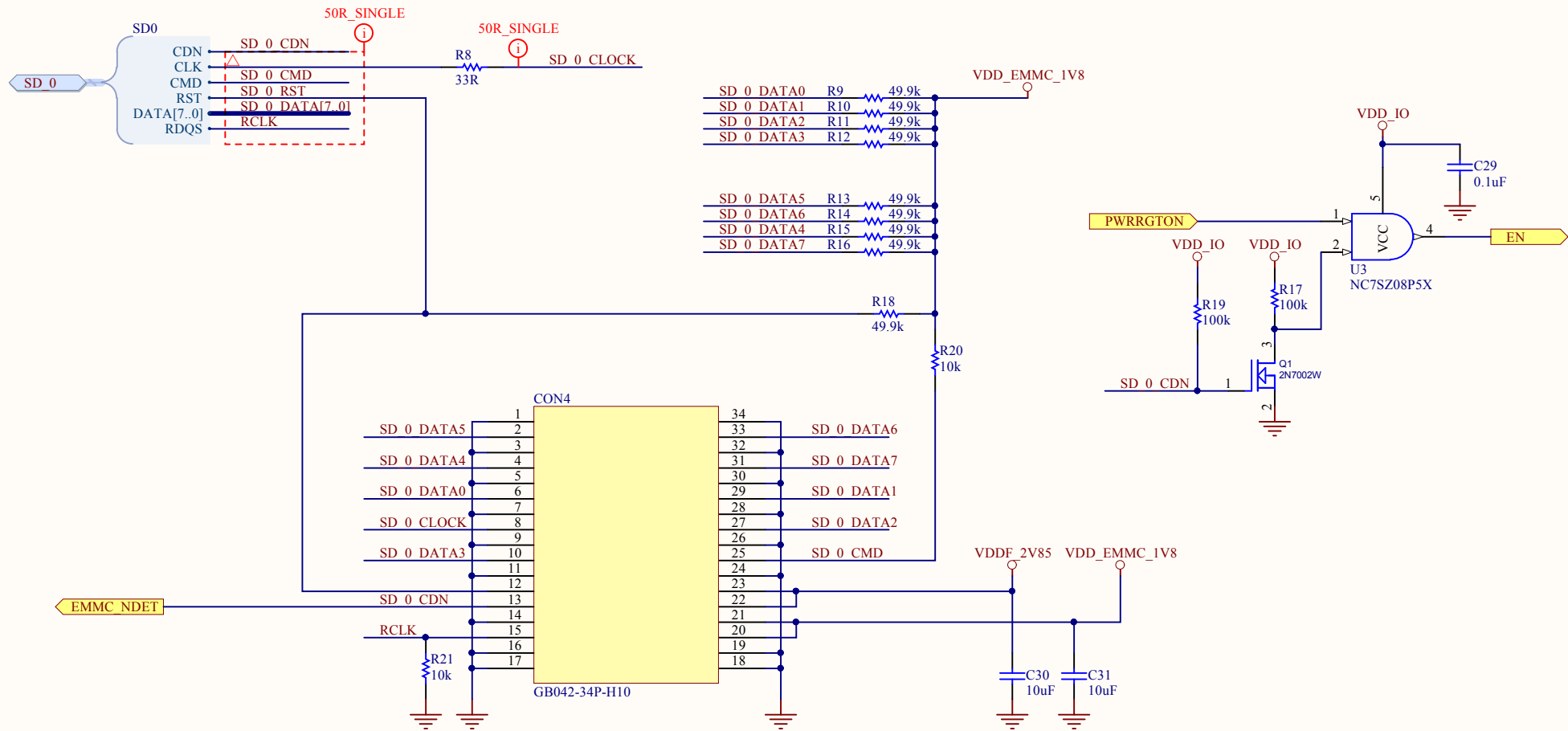


Title CLK			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:30.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00	Sheet 1 of 33	Designed by: rupper.kim@hardkernel.com	
File: CLK.SchDoc				



Title DC Jack and Protection IC			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:22.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 2 of 33		
File: CON_DCJACK.SchDoc			Designed by: ruppi.kim@hardkernel.com	



Title eMMC Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 29.	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet 3 of 33		
File: CON_EMMC.SchDoc			Designed by: ruppi.kim@hardkernel.com	

1

2

3

4

A

A

B

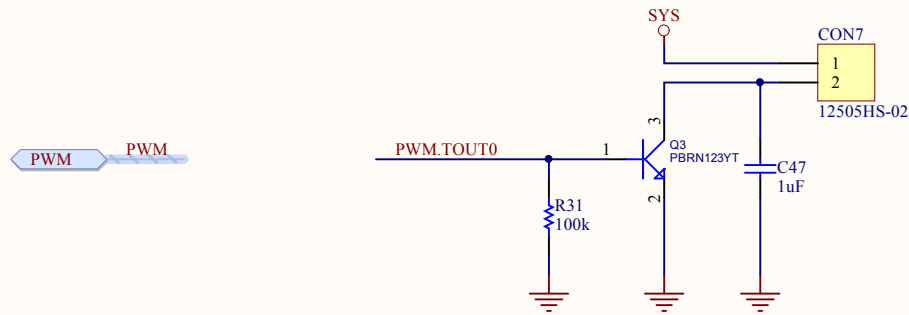
B

C

C

D

D



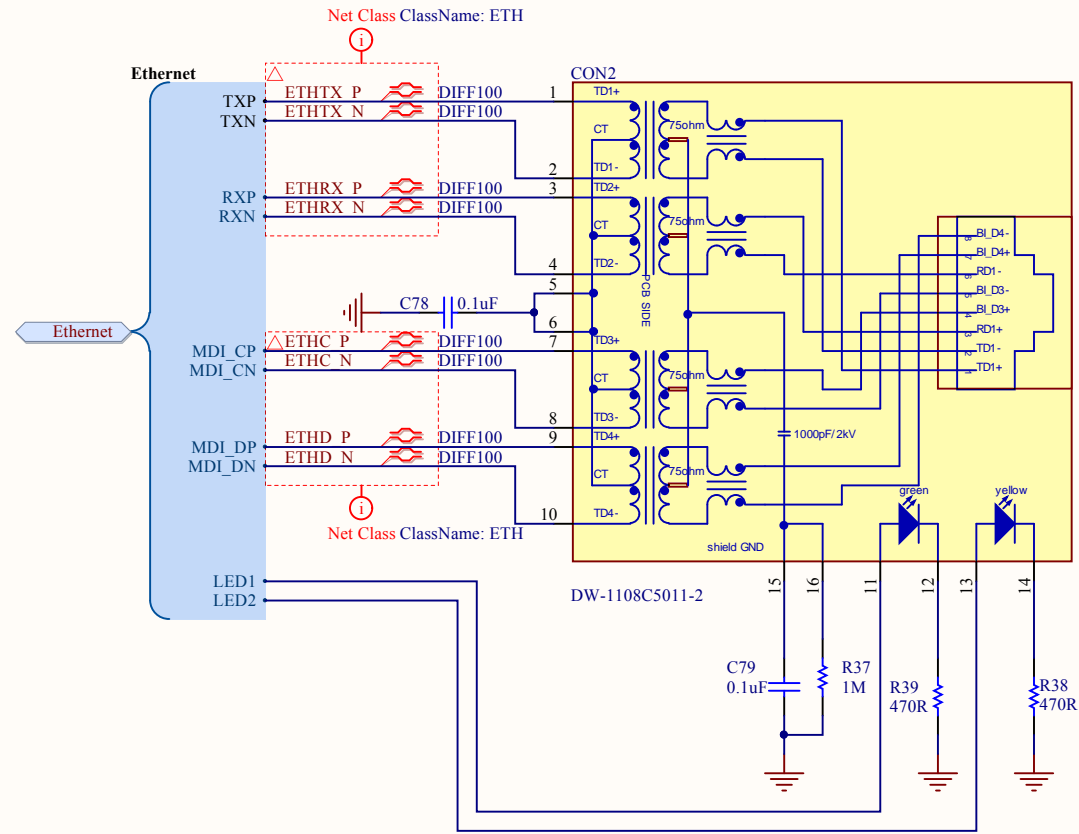
Title FAN Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:27.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 4 of 33	Designed by: rupperkim@hardkernel.com	
File: CON_FAN.SchDoc				

1

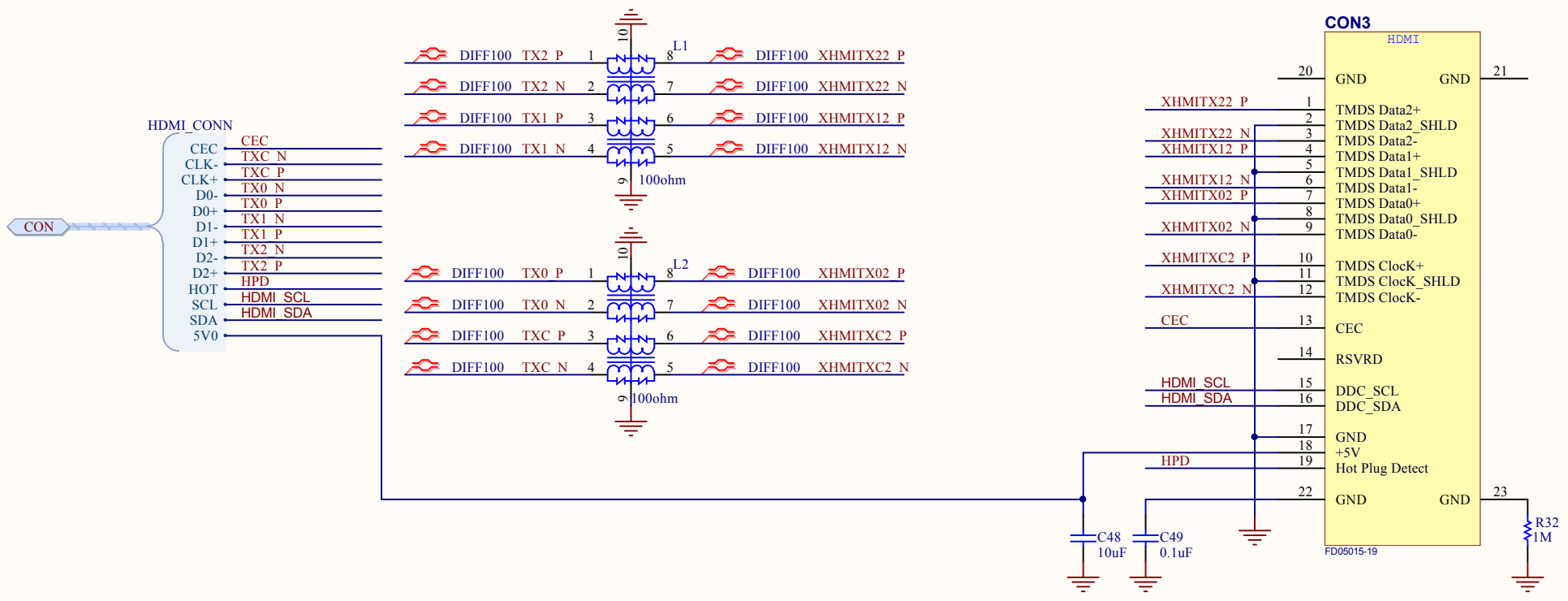
2

3

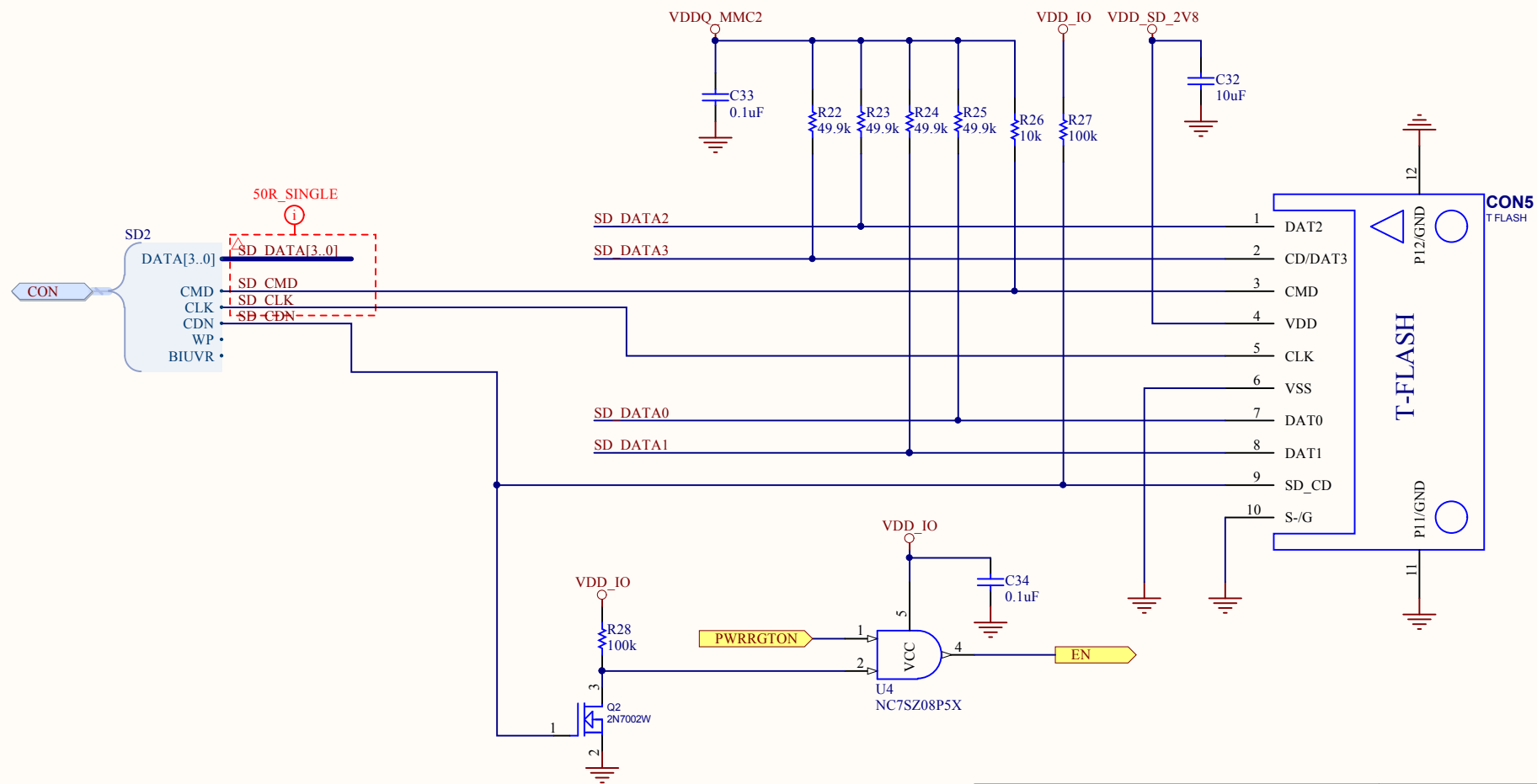
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Title Giga Ethernet Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:13.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet5 of 33		
File: CON_GIGA_ETH.SchDoc			Designed by: ruppi.kim@hardkernel.com	



Title HDMI Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 18.	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet: 6 of 33		
File: CON_HDMI.SchDoc			Designed by: ruppi.kim@hardkernel.com	



Title Micro SD Socket			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:24.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 7 of 33		
File: CON_MICROSD_HD08-AL00335.SchDoc			Designed by: ruppi kim@hardkernel.com	

1

2

3

4

A

A

B

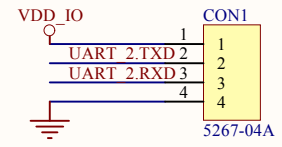
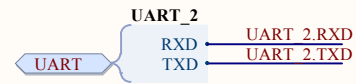
B


C

C

D

D



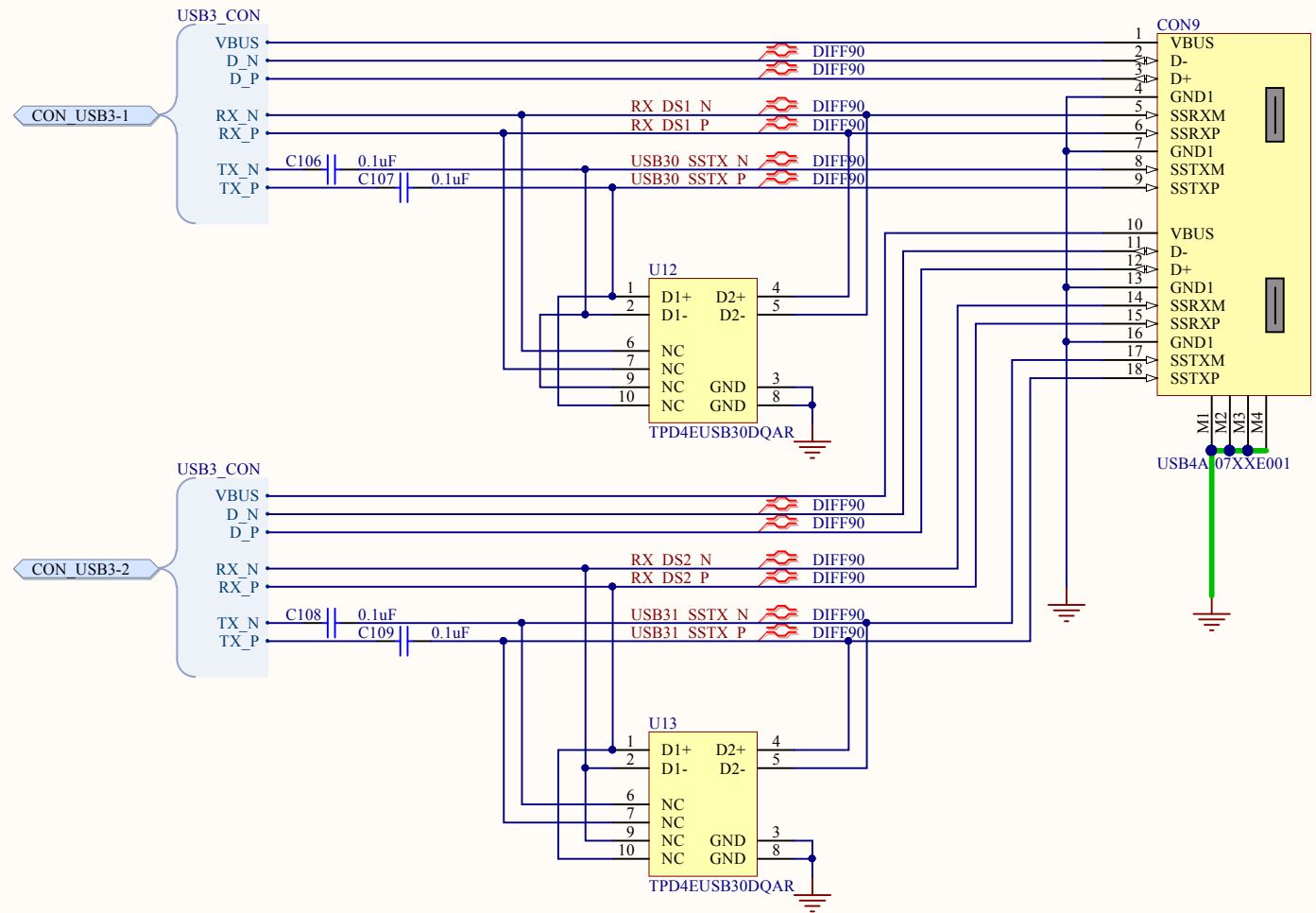
Title UART Connector			<i>Hardkernel Co.,LTD.</i> 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea Designed by: ruppi.kim@hardkernel.com	
Size: A4	Number:23.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00	Sheet 8 of 33		
File: CON_UART.SchDoc				

1

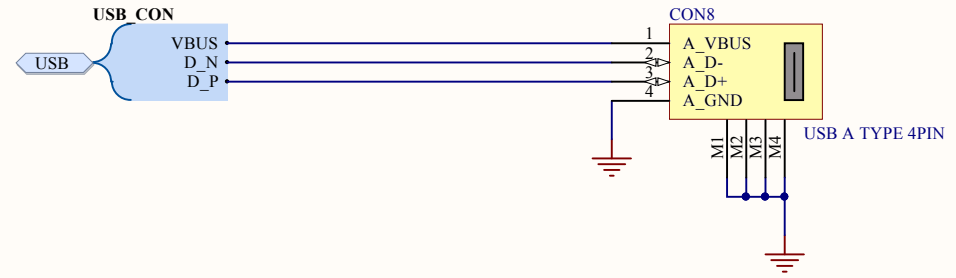
2

3

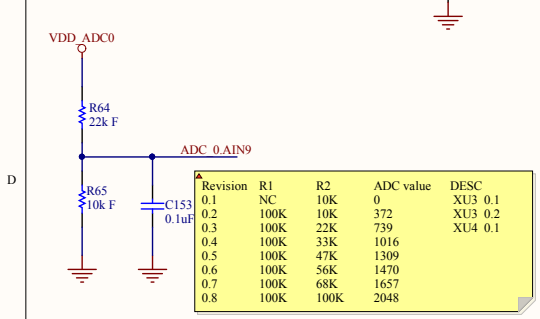
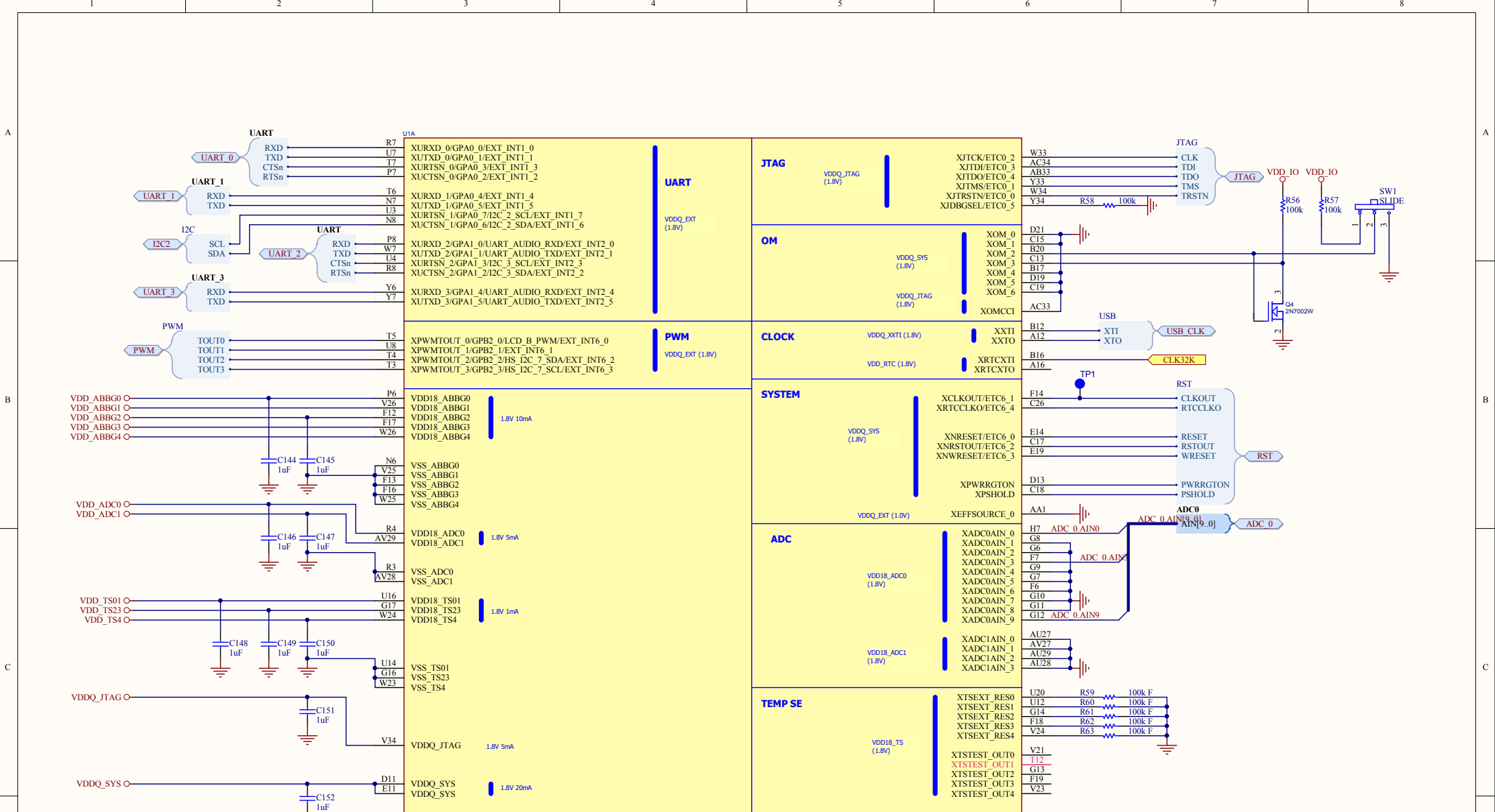
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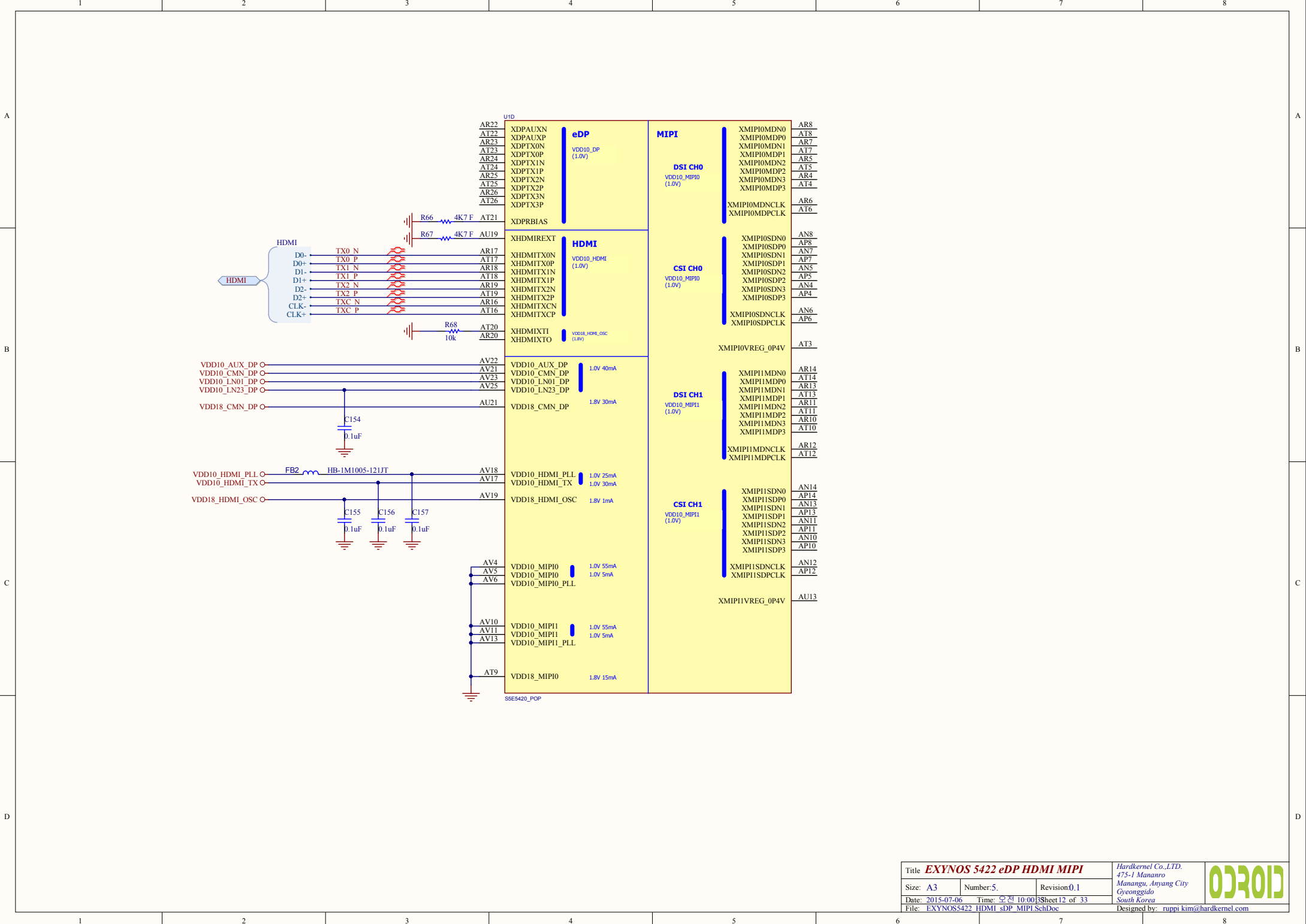


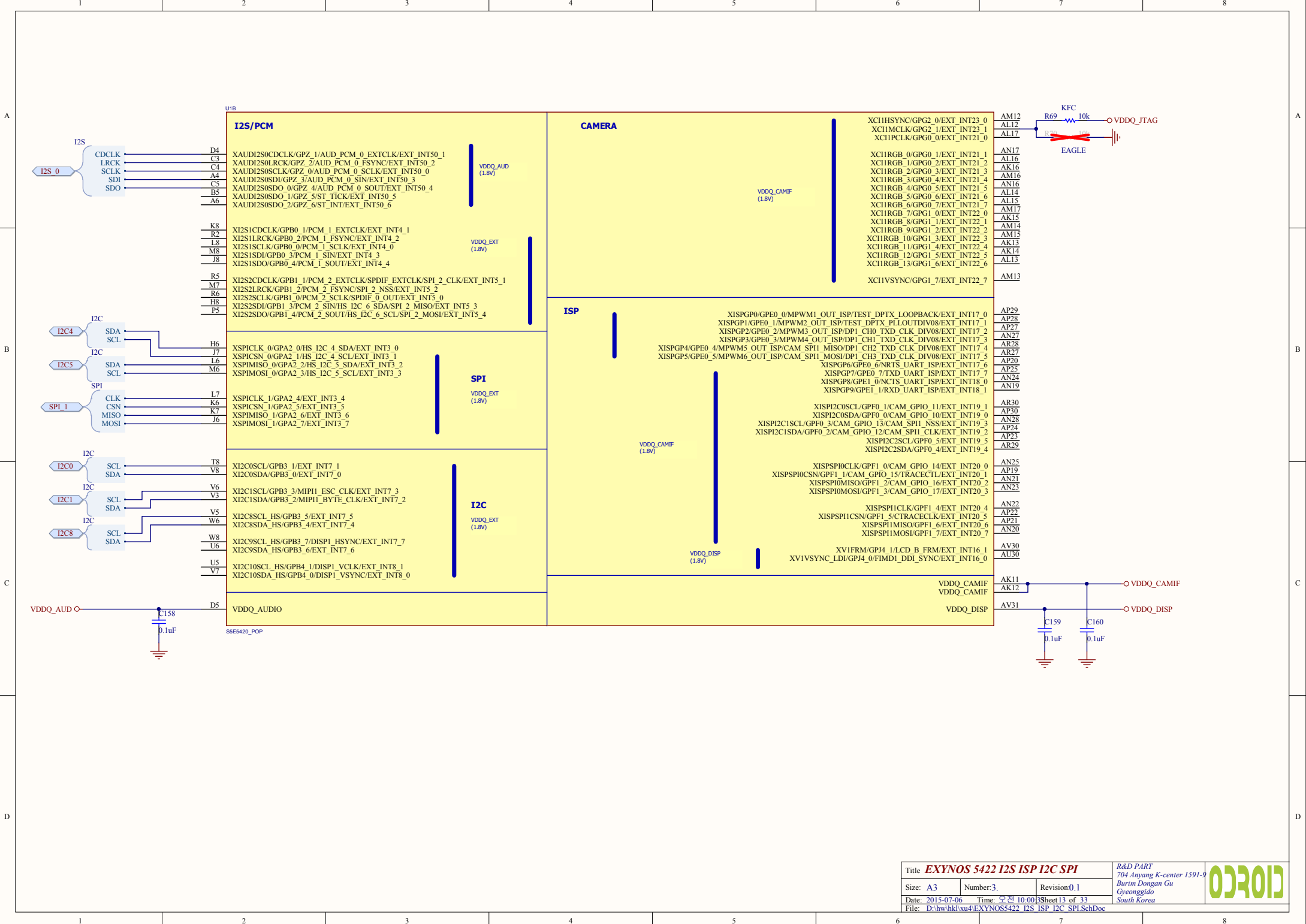
Title USB 3.0 Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:15.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet:9 of 33		
File: CON_USB3_DUAL_RA.SchDoc			Designed by: ruppi kim@hardkernel.com	



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: 2015-07-06	Time: 오전 10:00:33	Sheet 10 of 33	Designed by: ruppi.kim@hardkernel.com	
File: CON_USB_RA.SchDoc				







A

A

B

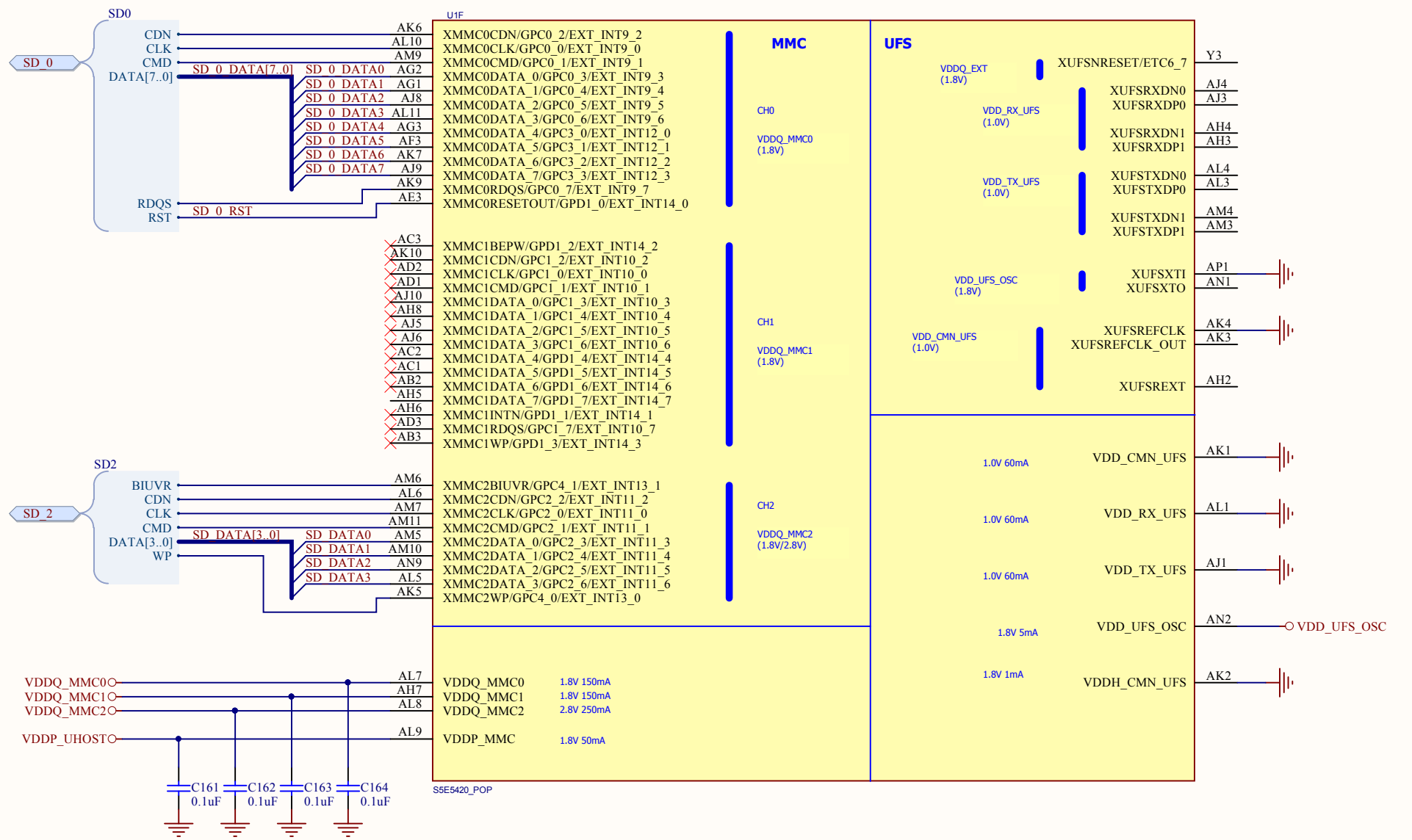
B

C

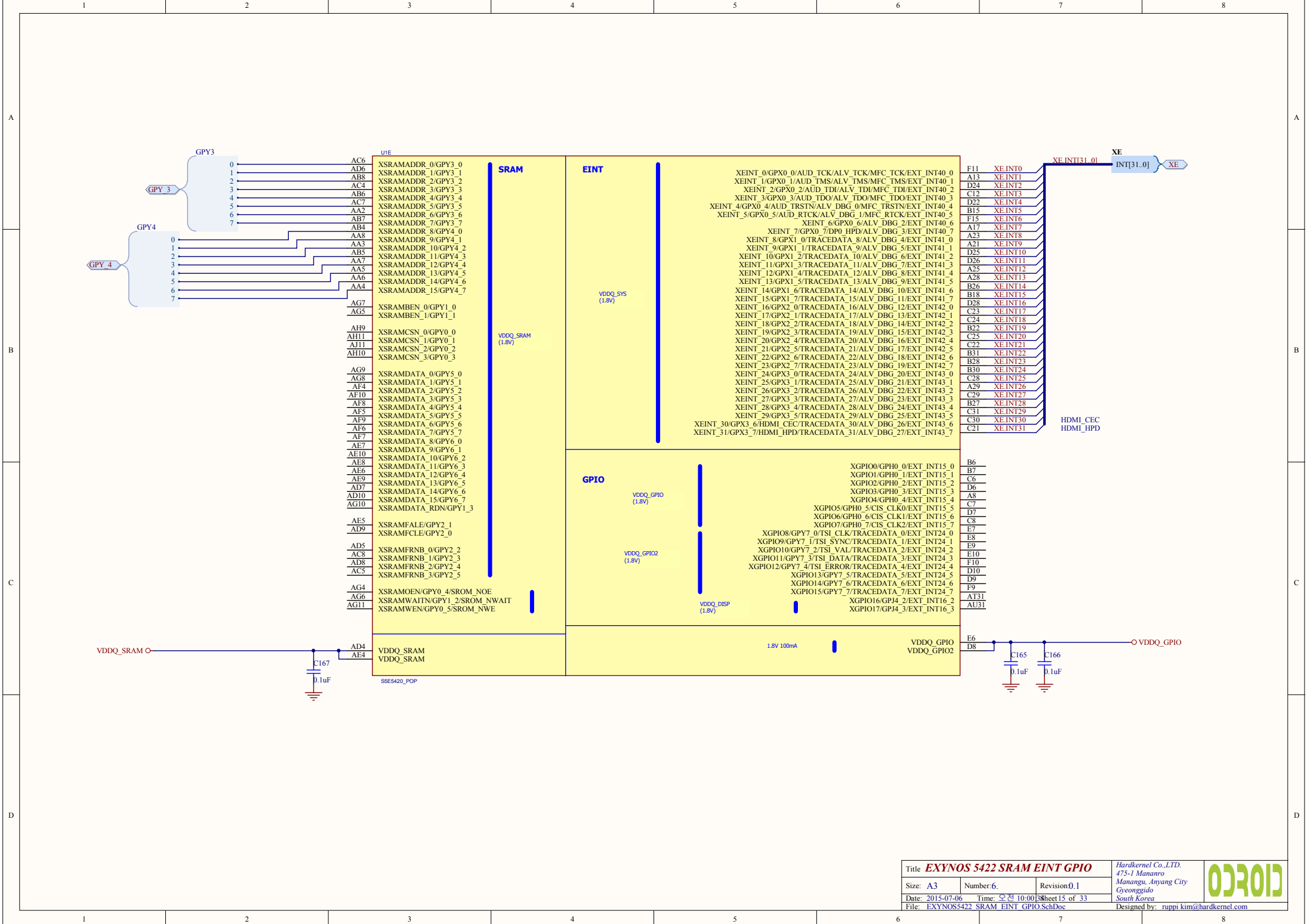
C

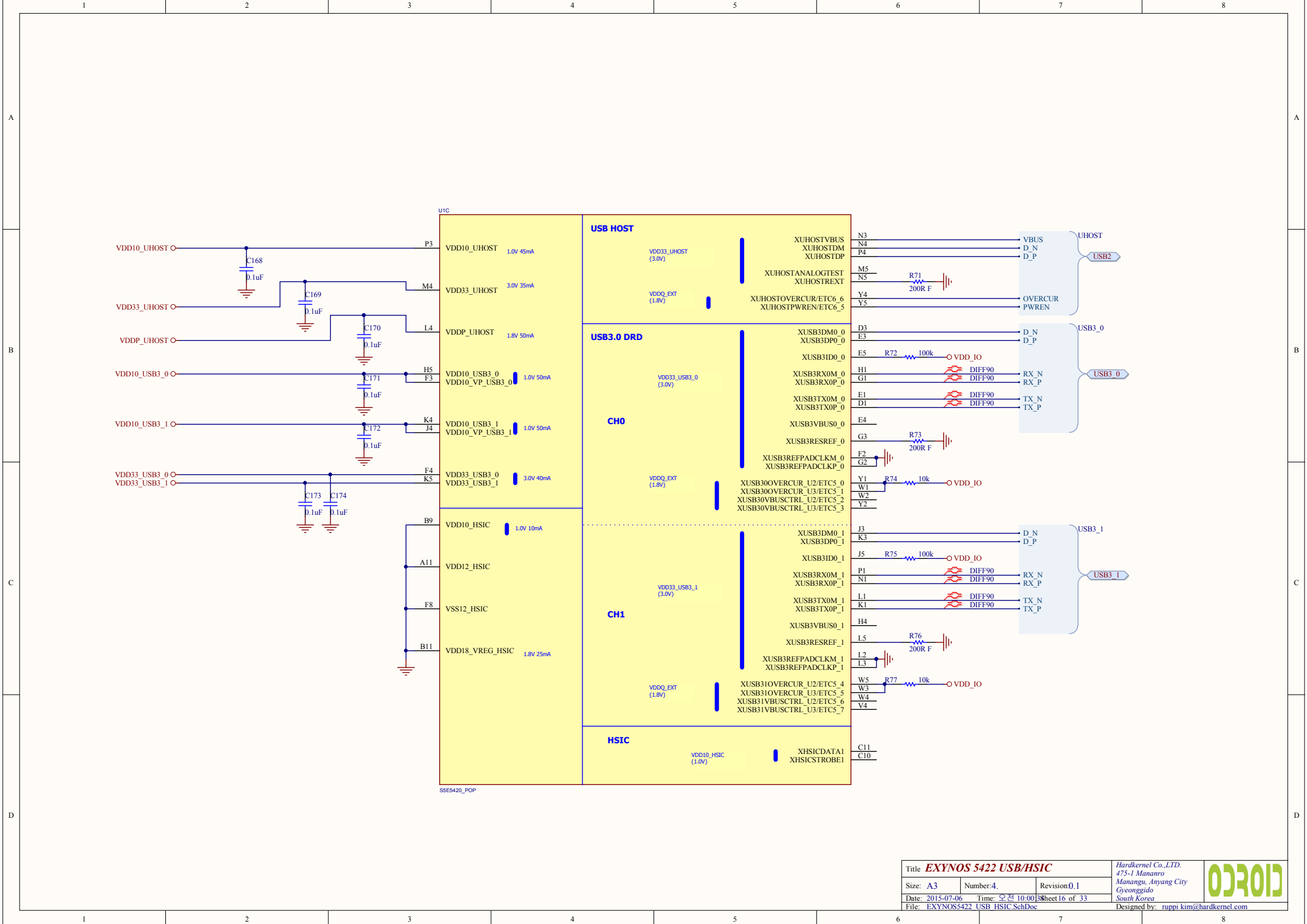
D

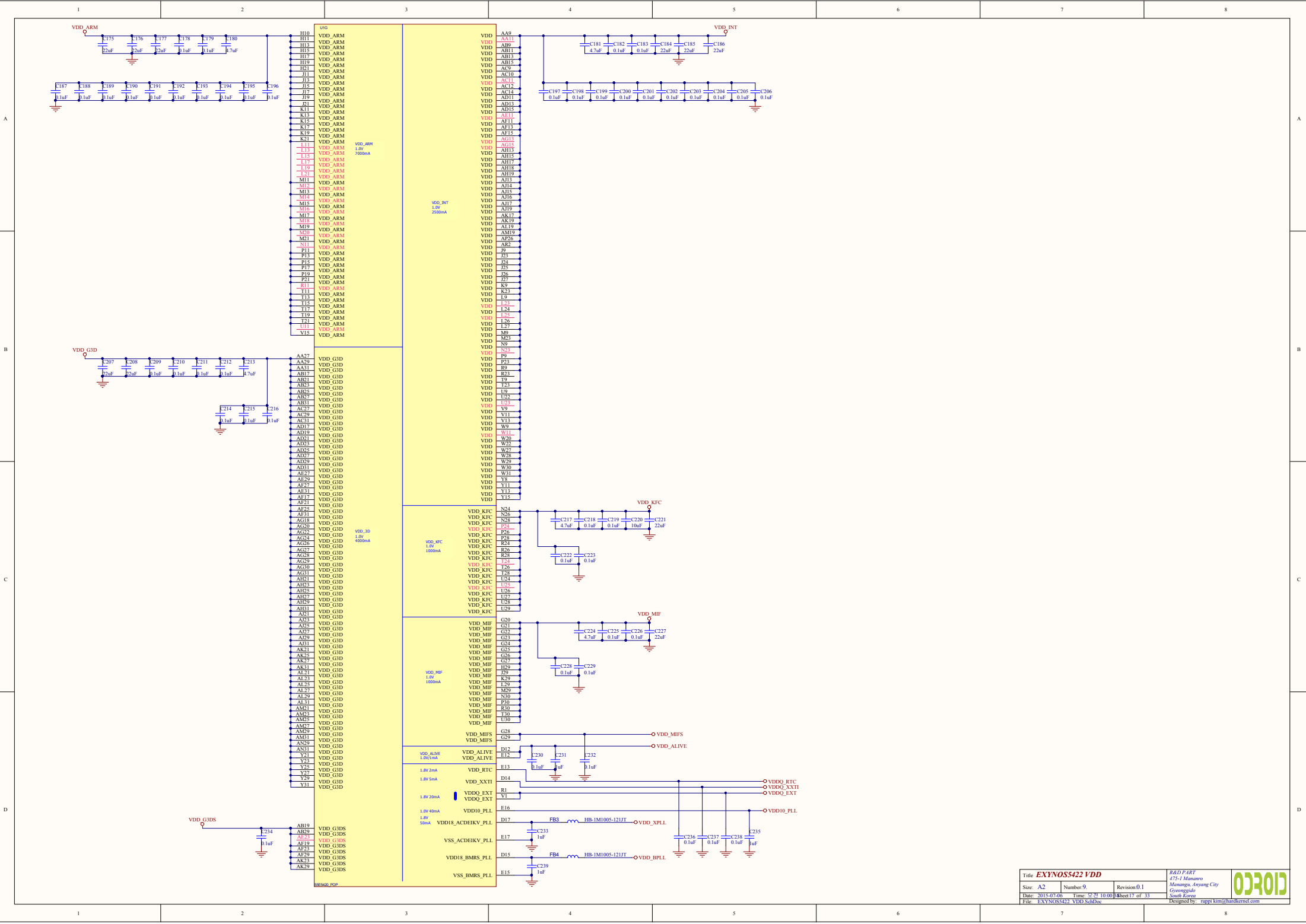
D

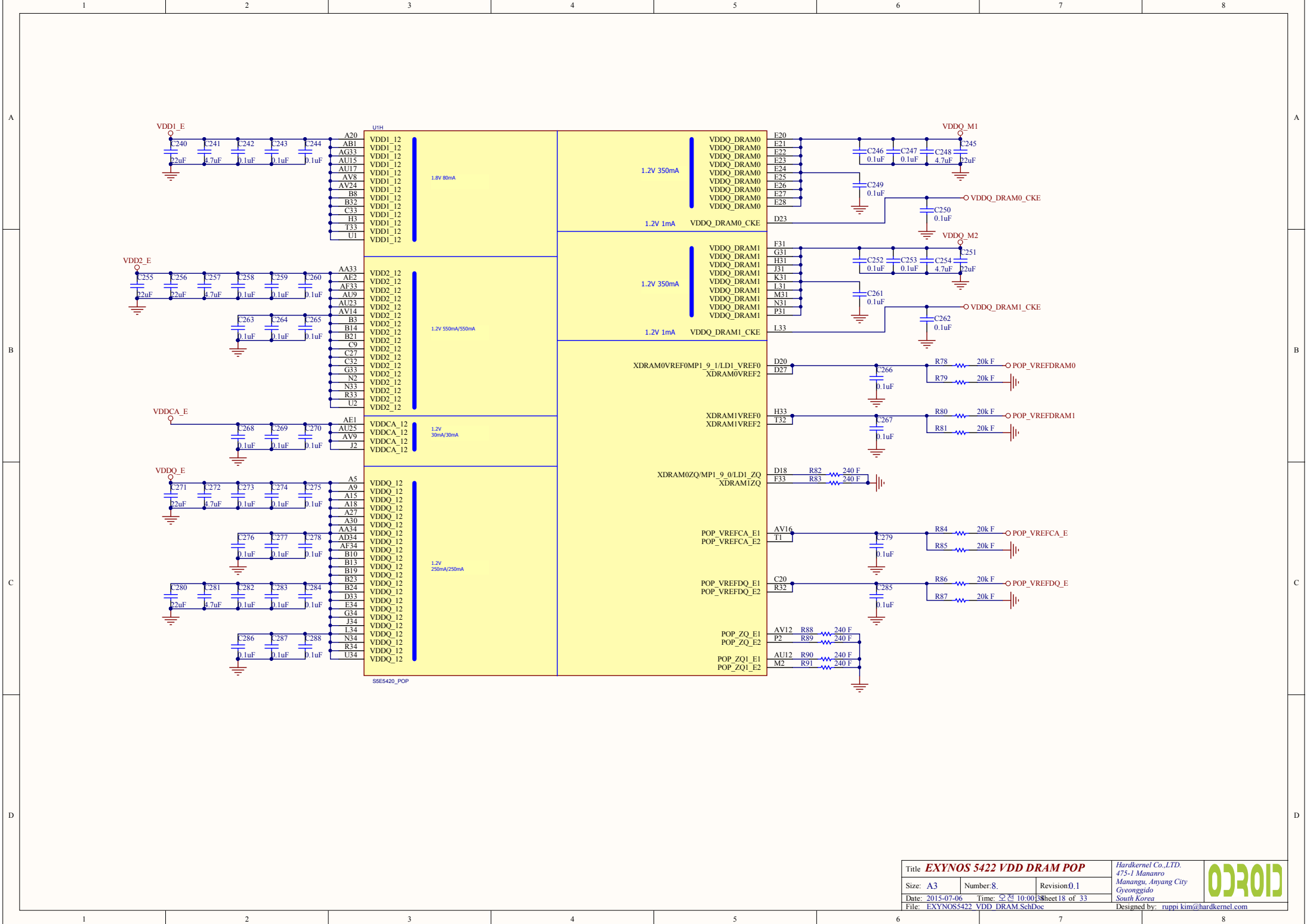


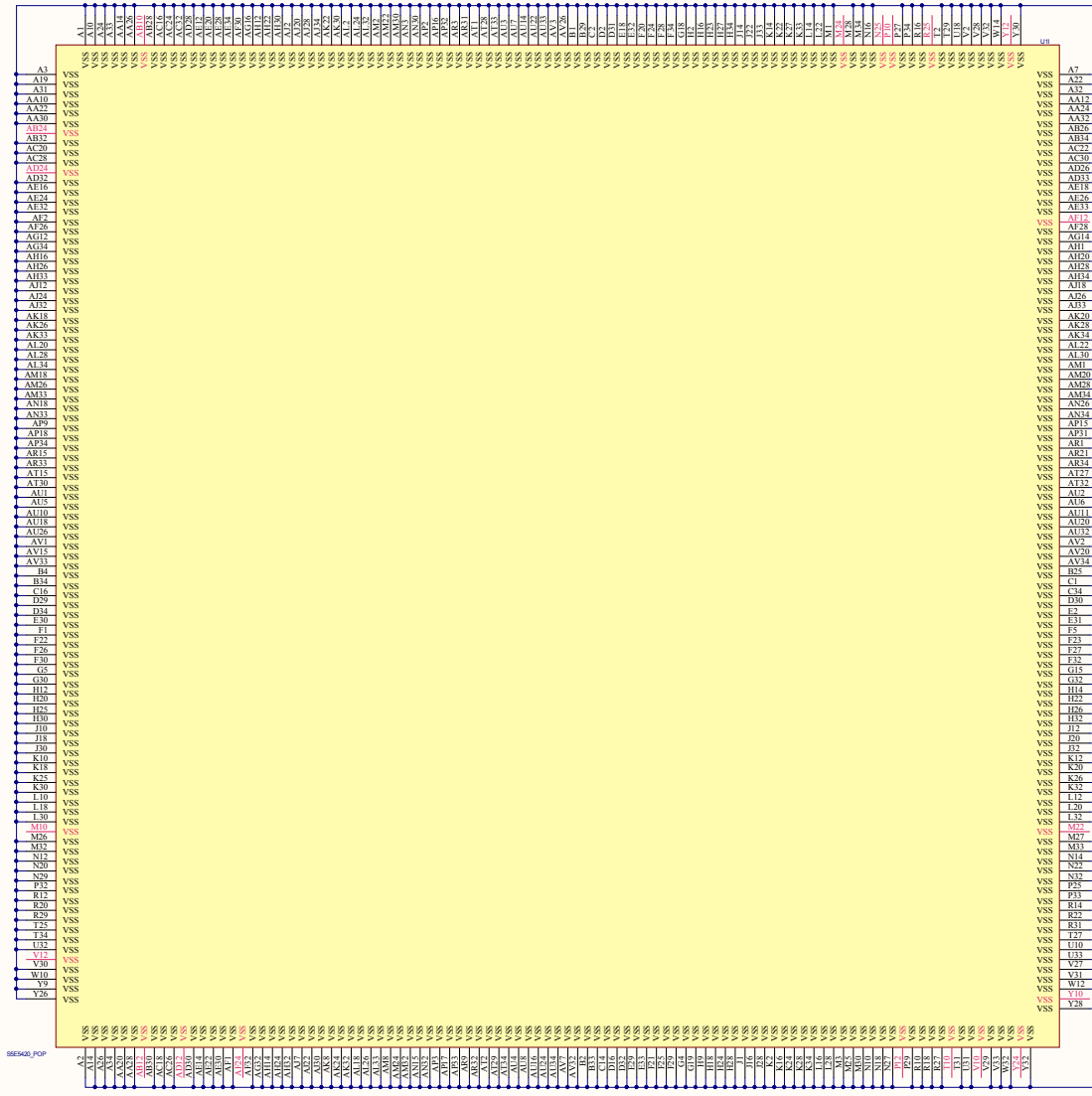
Title EXYNOS 5422 MMC UFS			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:7.	Revision:0.1	Designed by: ruppi kim@hardkernel.com	
Date: 2015-07-06	Time: 오전 10:00:33	Sheet 14 of 33		
File: EXYNOS5422_MMC_UFS.SchDoc				





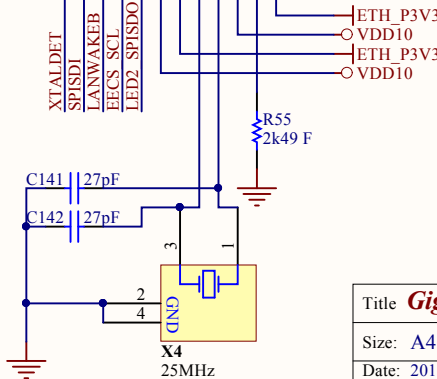
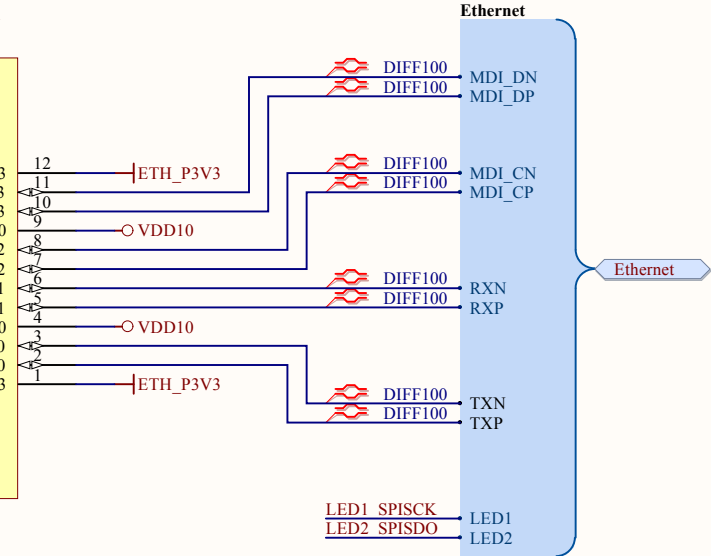
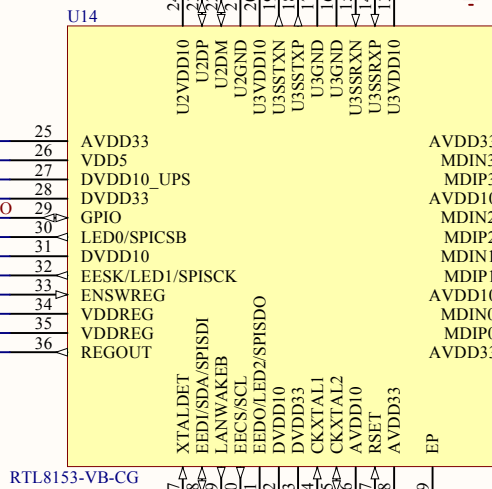
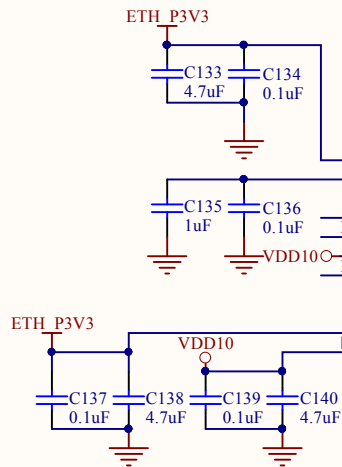
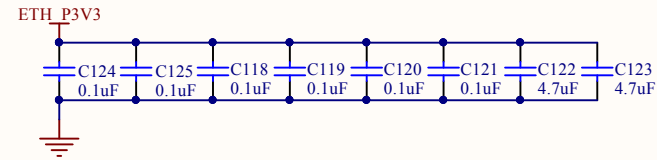
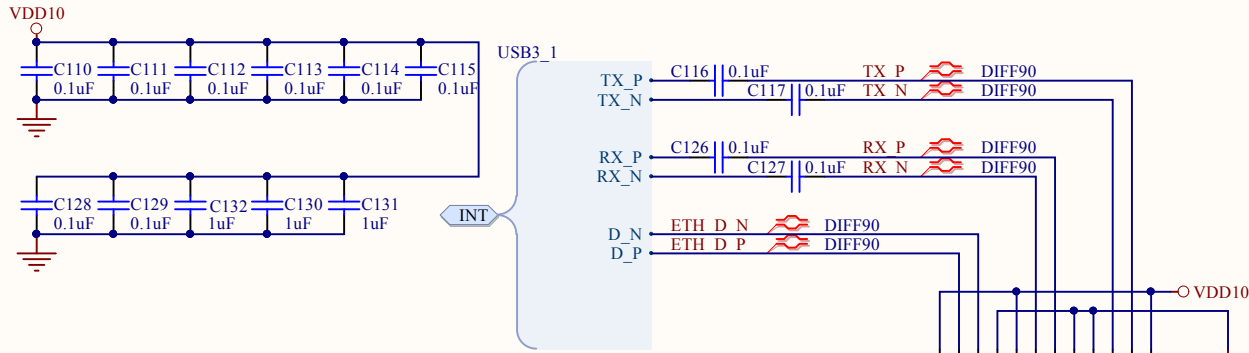






U31			
Y22	NC0	NC39	AA13
Y20	NC1	NC40	AA15
Y19	NC1	NC40	AA16
Y18	NC2	NC41	AA19
Y17	NC3	NC42	AA18
Y16	NC4	NC43	AA19
Y14	NC5	NC44	AA21
Y14	NC6	NC45	AA21
W19	NC7	NC46	AB16
W18	NC8	NC47	AB16
W17	NC9	NC48	AB20
W16	NC10	NC49	AB20
W15	NC11	NC50	AC13
W15	NC12	NC51	AC13
W13	NC13	NC52	AC15
W12	NC14	NC53	AC17
W10	NC15	NC54	AC19
W10	NC16	NC55	AC11
W15	NC17	NC56	AD14
W11	NC18	NC57	AD16
W11	NC19	NC58	AD16
W10	NC20	NC59	AD18
W11	NC21	NC60	AD20
W12	NC22	NC61	AD22
W12	NC23	NC62	R14
W15	NC24	NC63	R17
W13	NC25	NC64	R19
W12	NC26	NC66	R31
W18	NC27	NC66	T14
W18	NC28	NC67	T16
W13	NC29	NC68	T16
W17	NC30	NC69	T28
W17	NC31	NC70	AF18
W19	NC32	NC71	P14
W19	NC33	NC72	P25
W19	NC34	NC73	AF20
W19	NC35	NC74	P16
W19	NC36	NC75	AF14
W19	NC37	NC76	AF22
W19	NC38	NC77	P18





Title **Giga Ethernet USB3.0 RT8153-VB**

Size: A4 Number:14. Revision:0.1

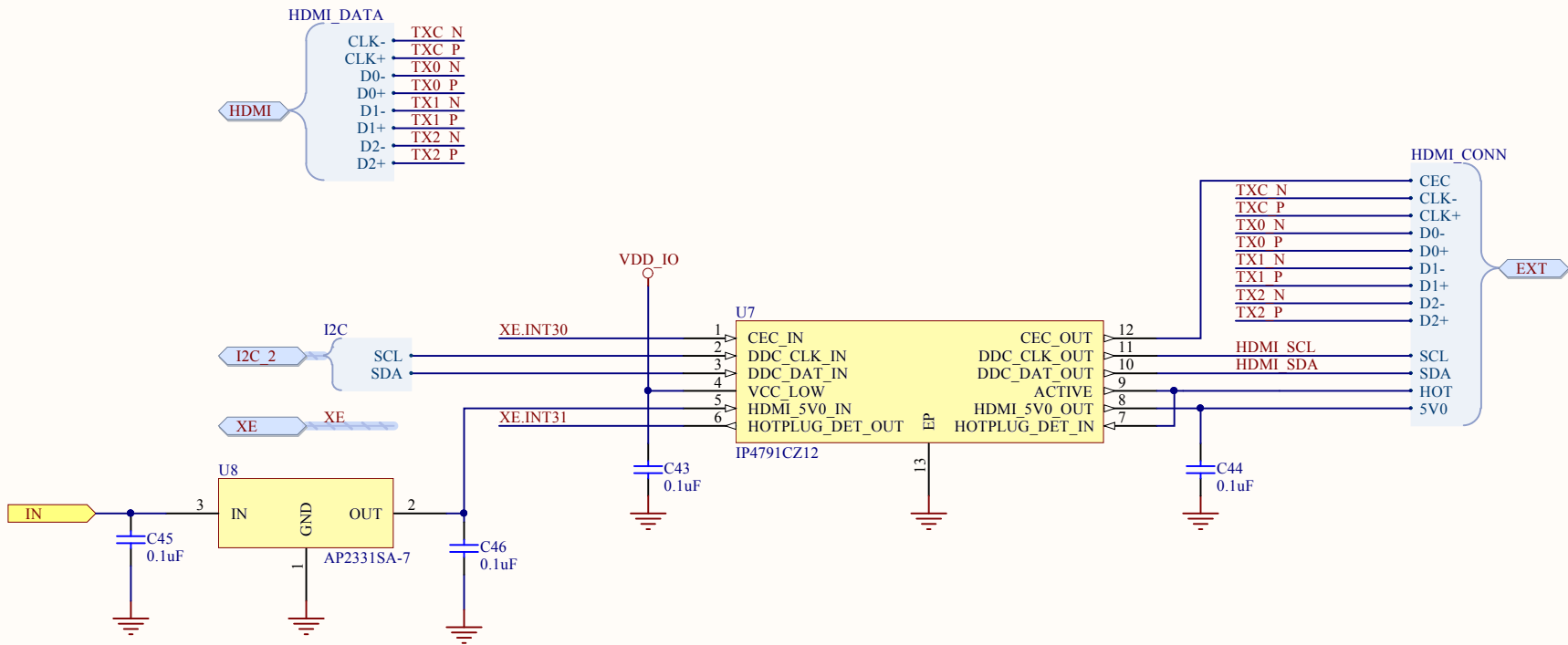
Date: 2015-07-06 Time: 오전 10:00:38 sheet 20 of 33

File: GIGA_ETHERNET_PHY_RT8153-VB-CG.SchDoc

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

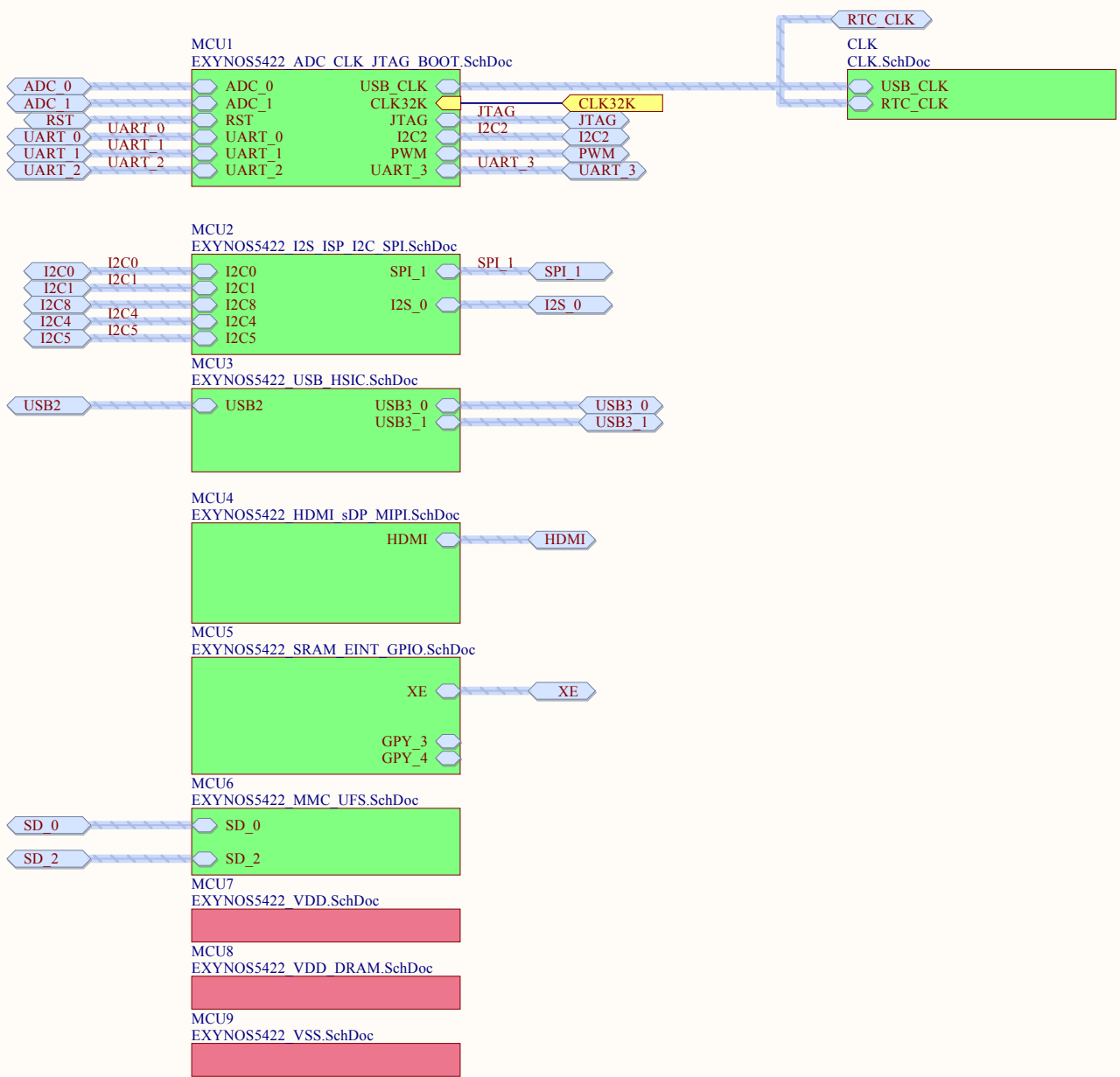
Designed by: ruppi.kim@hardkernel.com



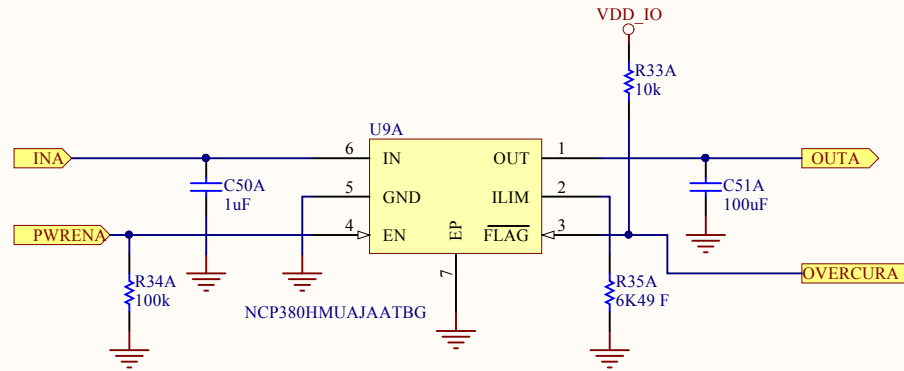


Title HDMI I2C		Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:20.	Revision:0.1	
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 21 of 33	
File: HDMI_I2C.SchDoc		Designed by: ruppi.kim@hardkernel.com	

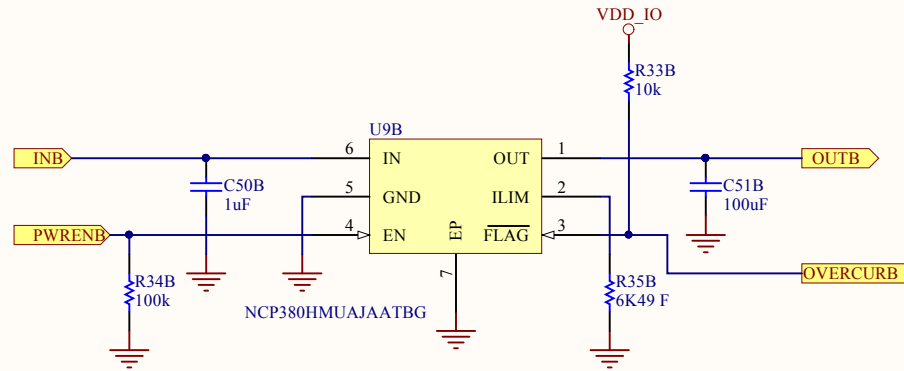





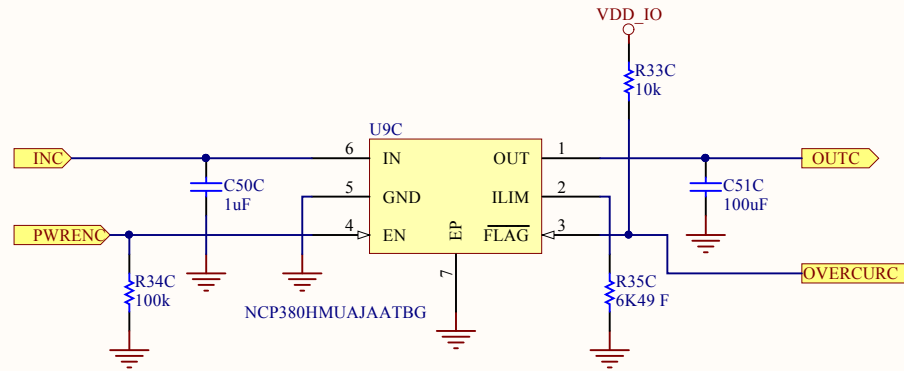
Title MCU EXYNOS5422			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 1.	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet: 22 of 33	Designed by: ruppi.kim@hardkernel.com	
File: MCU_EXYNOS5422.SchDoc				




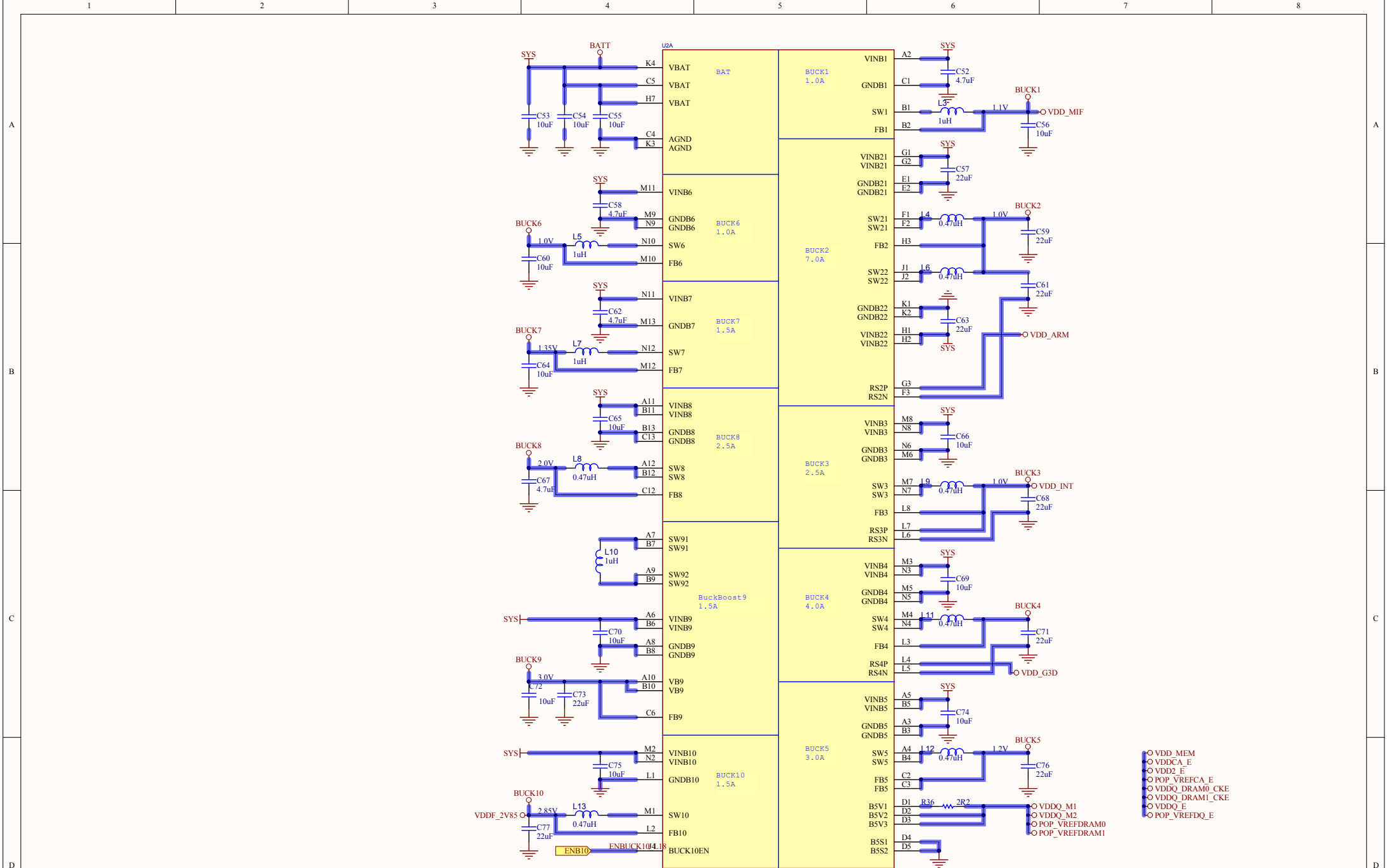
Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:16.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 23 of 33	Designed by: ruppi.kim@hardkernel.com	
File: NCP380HM.SchDoc				



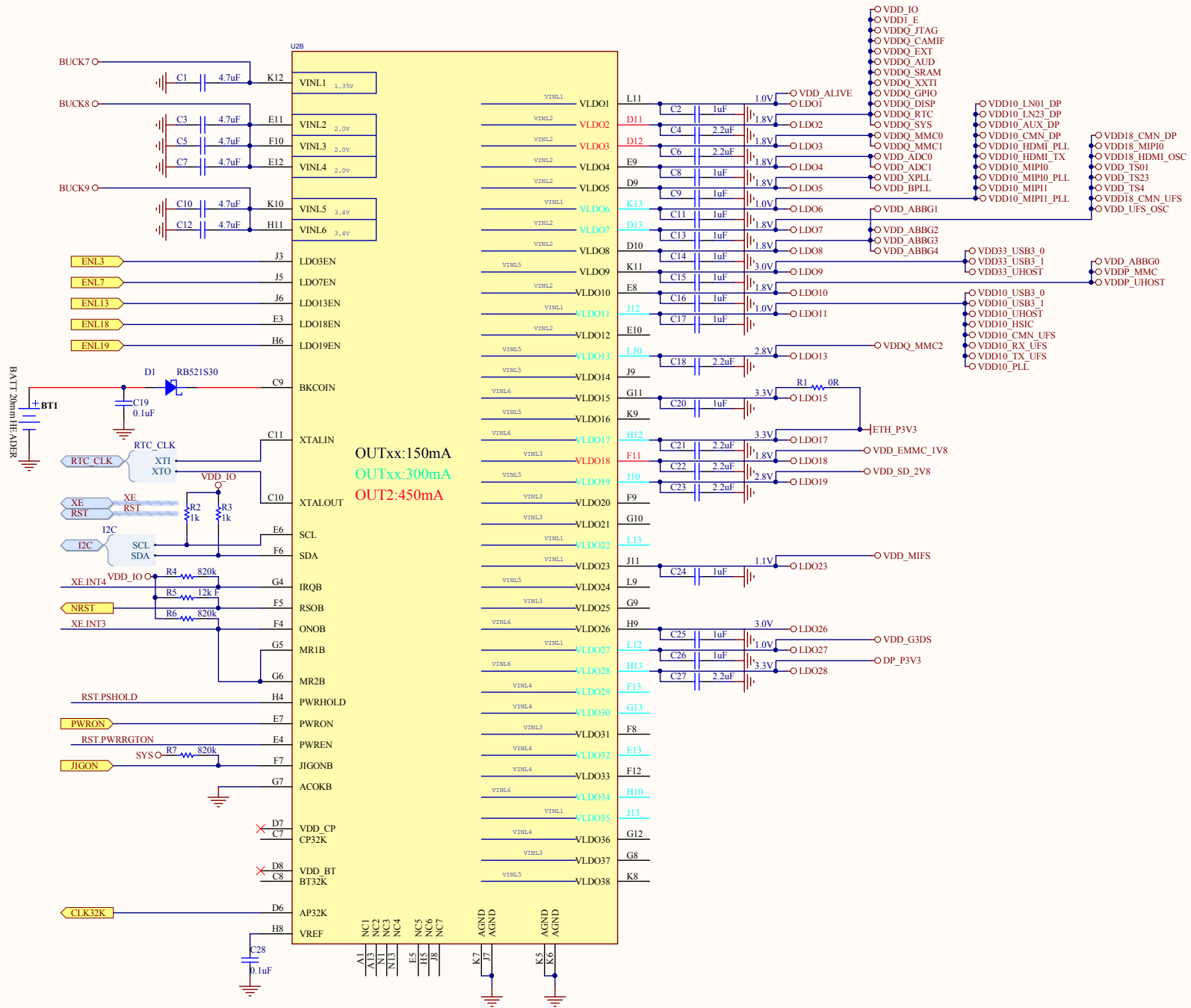
Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 16.1.1	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 24 of 33	Designed by: ruppi.kim@hardkernel.com	
File: NCP380HM.SchDoc				



Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 16.2.1	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00:38	Sheet 25 of 33	Designed by: ruppi.kim@hardkernel.com	
File: NCP380HM.SchDoc				

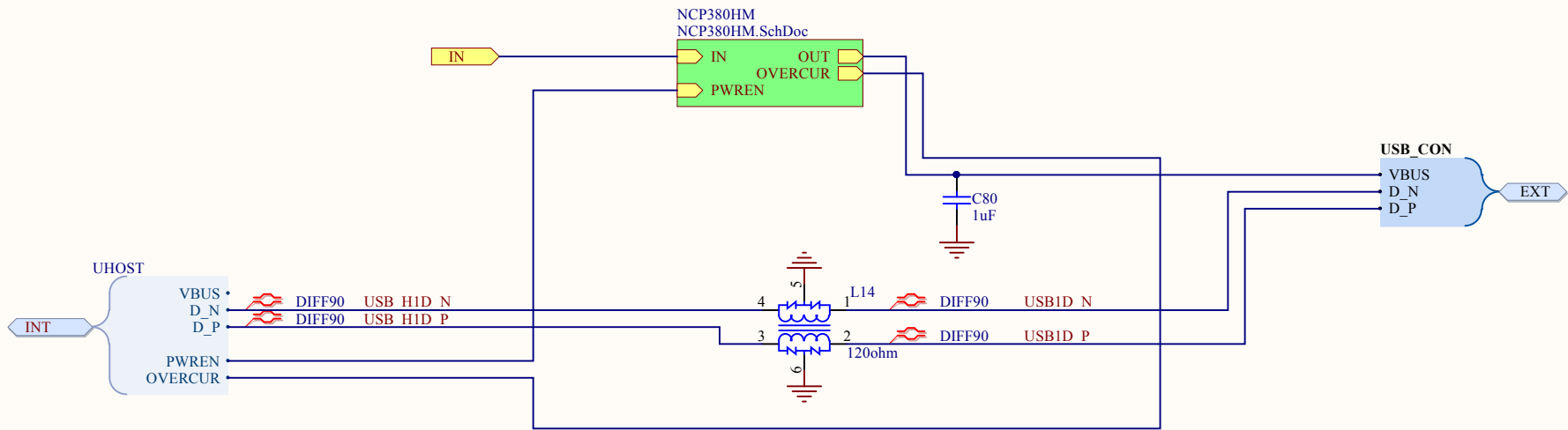


S2MPS11B 4TH
I2C ADDR: 0xCC(FR) 0x0C(RTC)

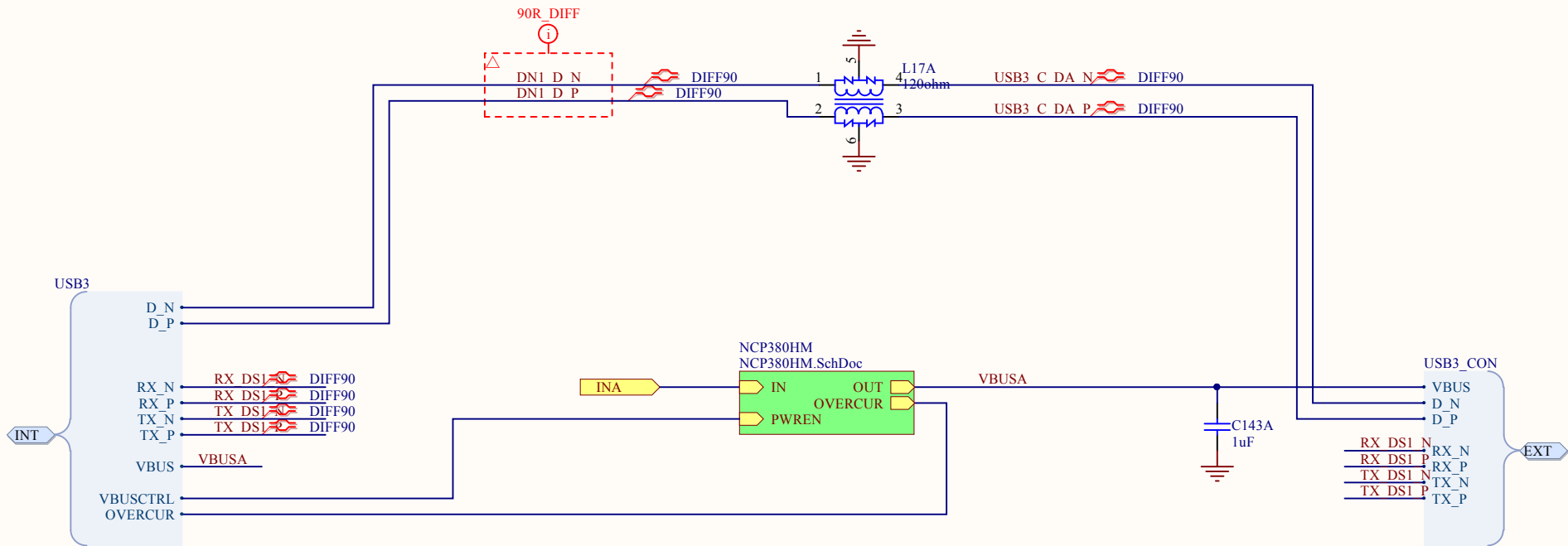


OUTxx:150mA
 OUTxx:300mA
 OUT2:450mA

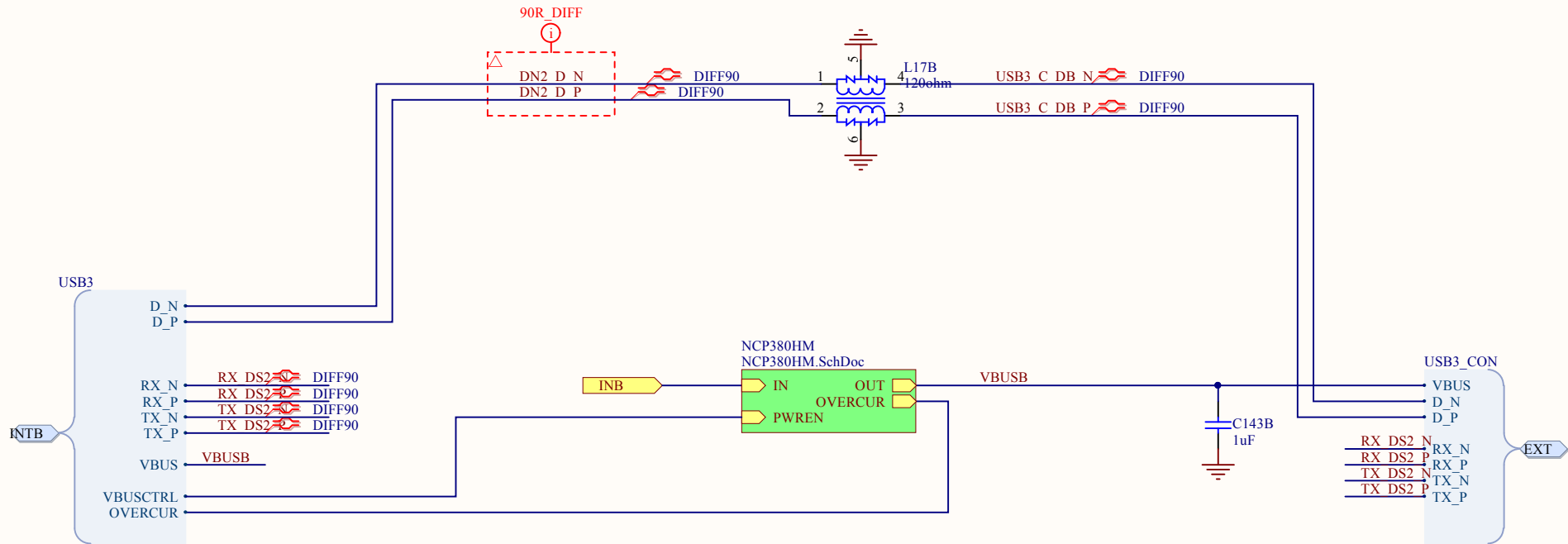
S2MPS11X_8
 I2C ADDR : 0xCC(FM) 0x0C(RTC)



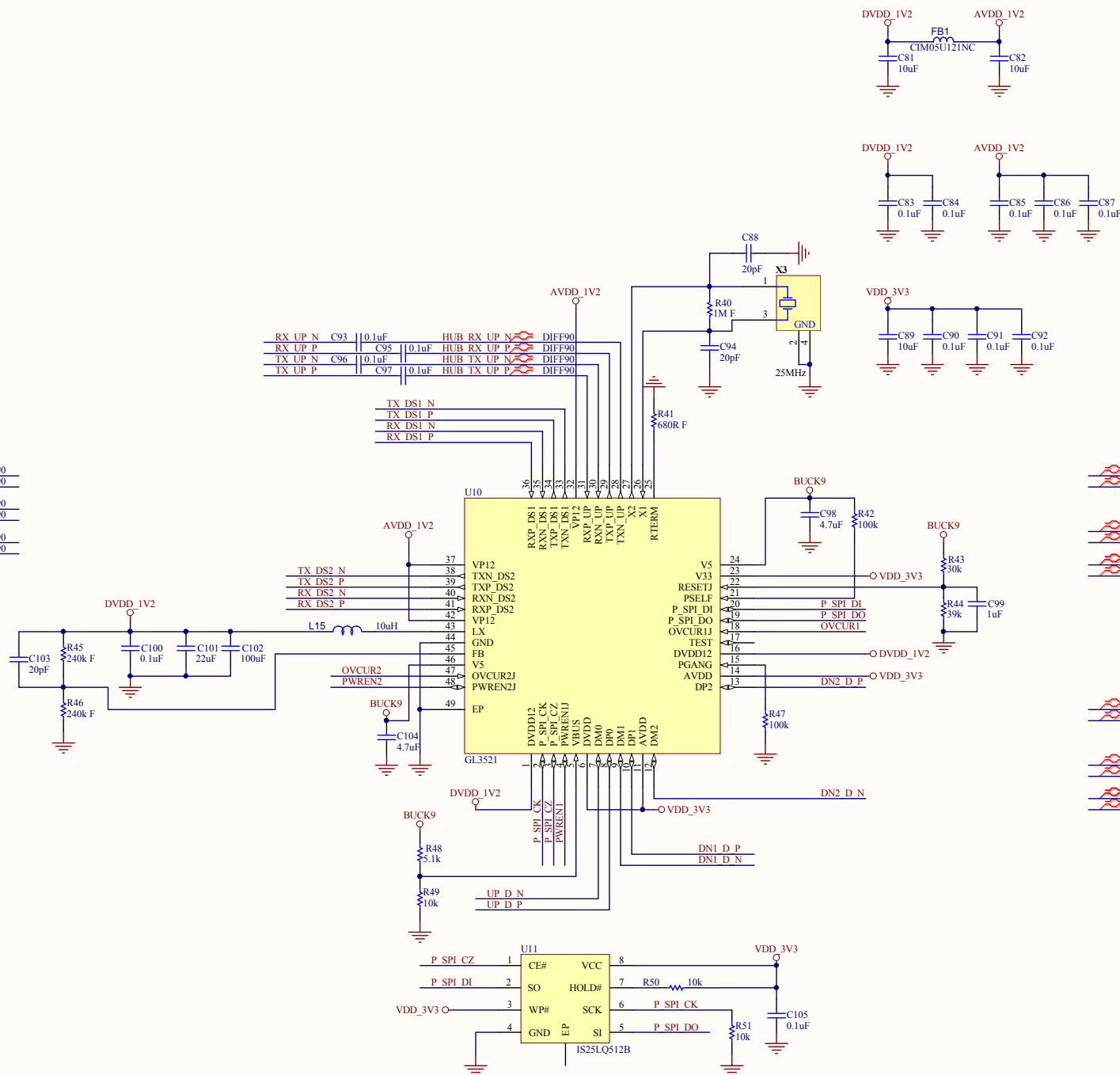
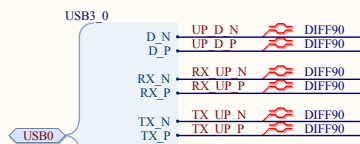
Title USB HOST PWR SW			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:28.	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet:28 of 33		
File: USB2_HOST_PWR_SW.SchDoc			Designed by: ruppi.kim@hardkernel.com	

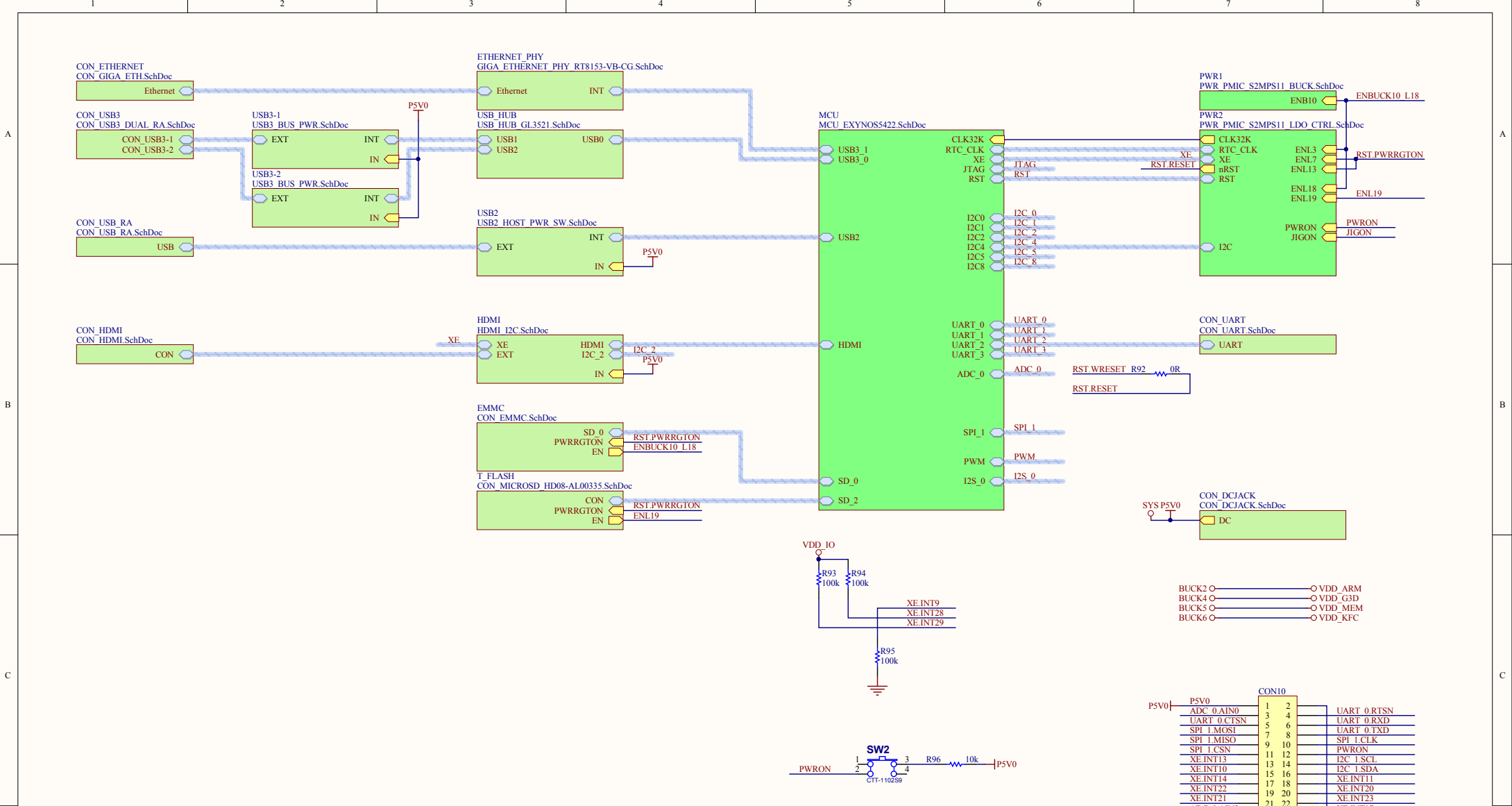


Title USB3 BUS POWER			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:19.1	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet 29 of 33		
File: USB3_BUS_PWR.SchDoc			Designed by: ruppi.kim@hardkernel.com	



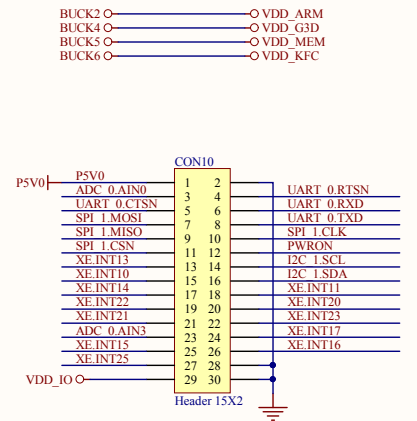
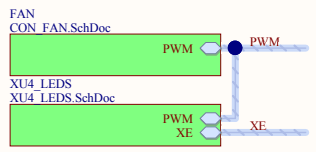
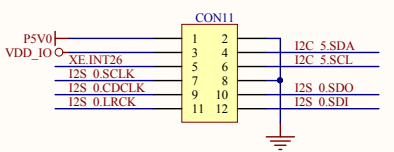
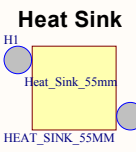
Title USB3 BUS POWER			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	03ROID
Size: A4	Number:19.2	Revision:0.1		
Date: 2015-07-06	Time: 오전 10:00:33	Sheet:30 of 33		
File: USB3_BUS_PWR.SchDoc			Designed by: ruppi.kim@hardkernel.com	

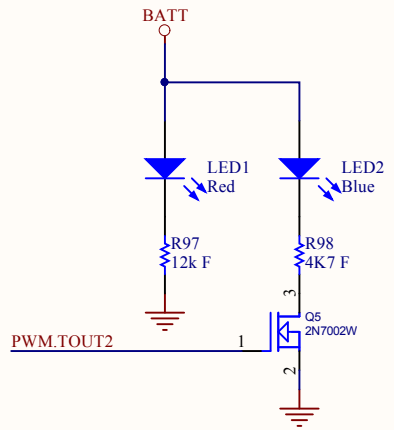





Mounting Holes

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





Title Indicator LEDs			<i>Hardkernel Co.,LTD.</i> 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea Designed by: rupperkim@hardkernel.com	
Size: A4	Number: 25.	Revision: 0.1		
Date: 2015-07-06	Time: 오전 10:00	Sheet: 33 of 33		
File: XU4_LEDS.SchDoc				