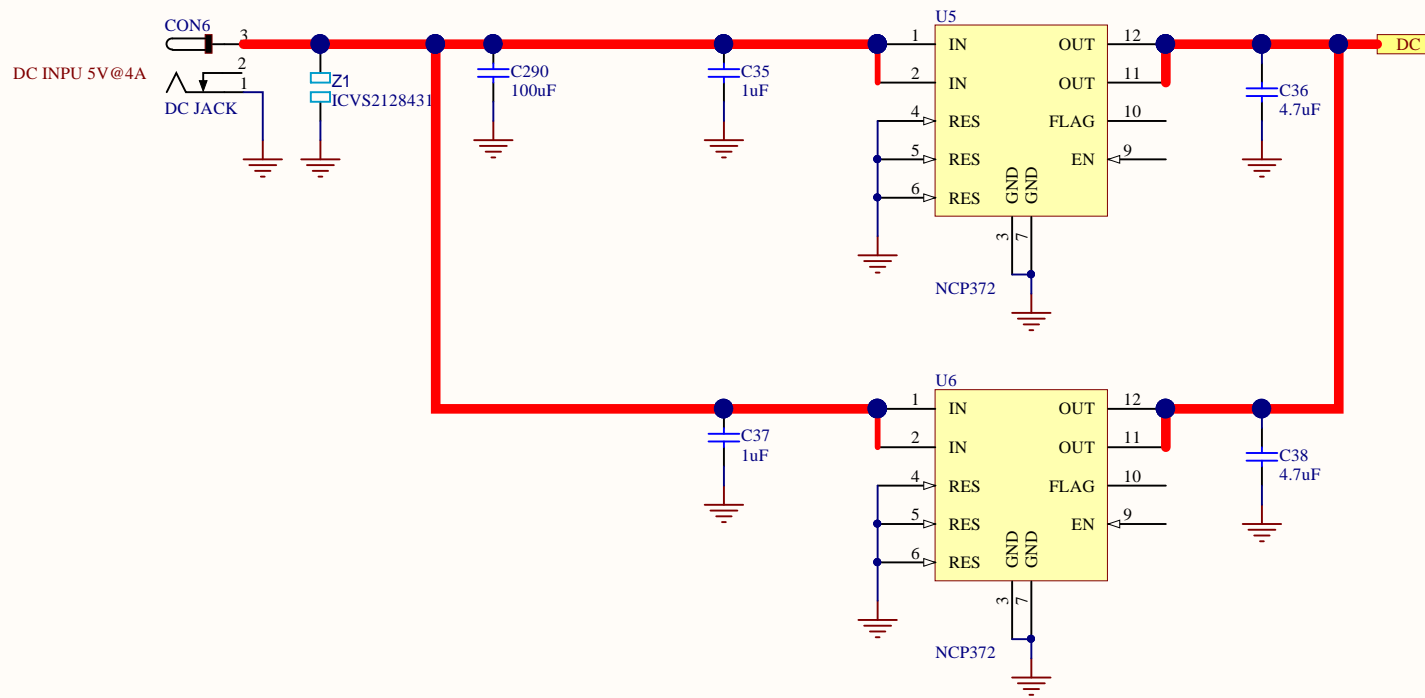
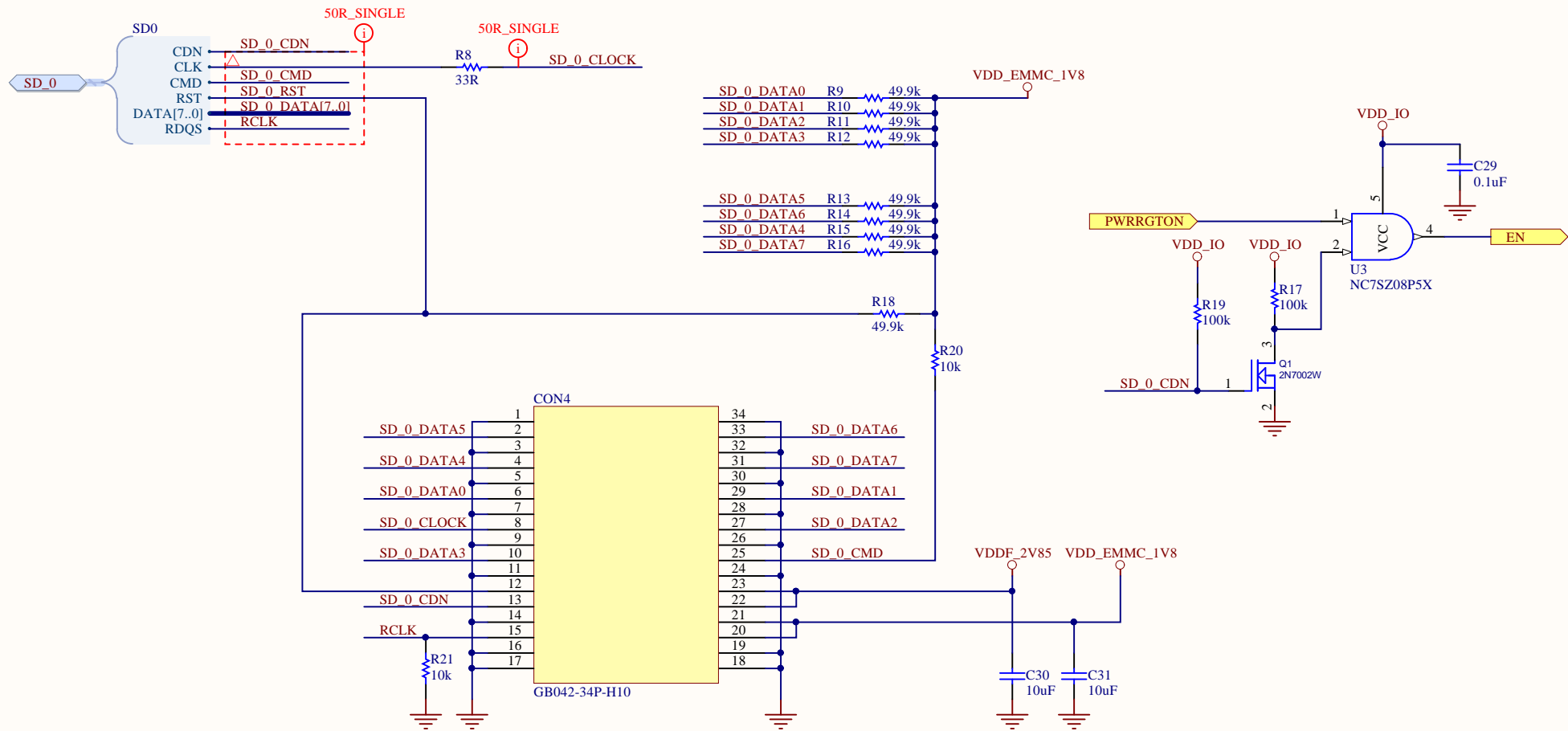


Title CLK			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:30.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43 Sheet 1 of 33		Designed by: ruppi.kim@hardkernel.com	
File: CLK.SchDoc				



Title DC Jack and Potection IC			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	ARDUINO
Size: A4	Number:22.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43 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	Designed by: ruppi.kim@hardkernel.com	
Date: 2016-02-01	Time: 오전 9:16:43	Sheet 3 of 33		
File: CON_EMMC.SchDoc				

1

2

3

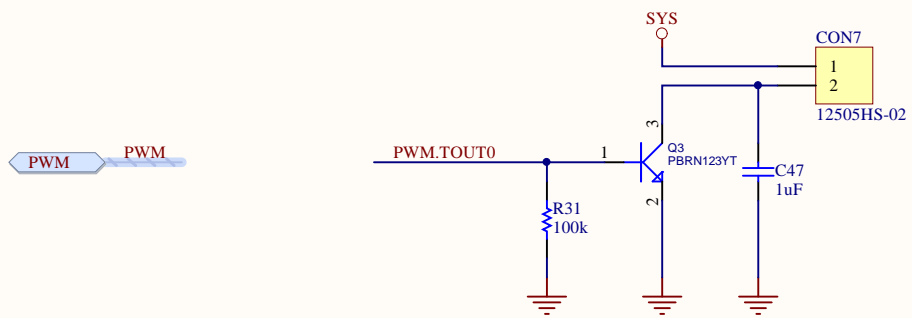
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1

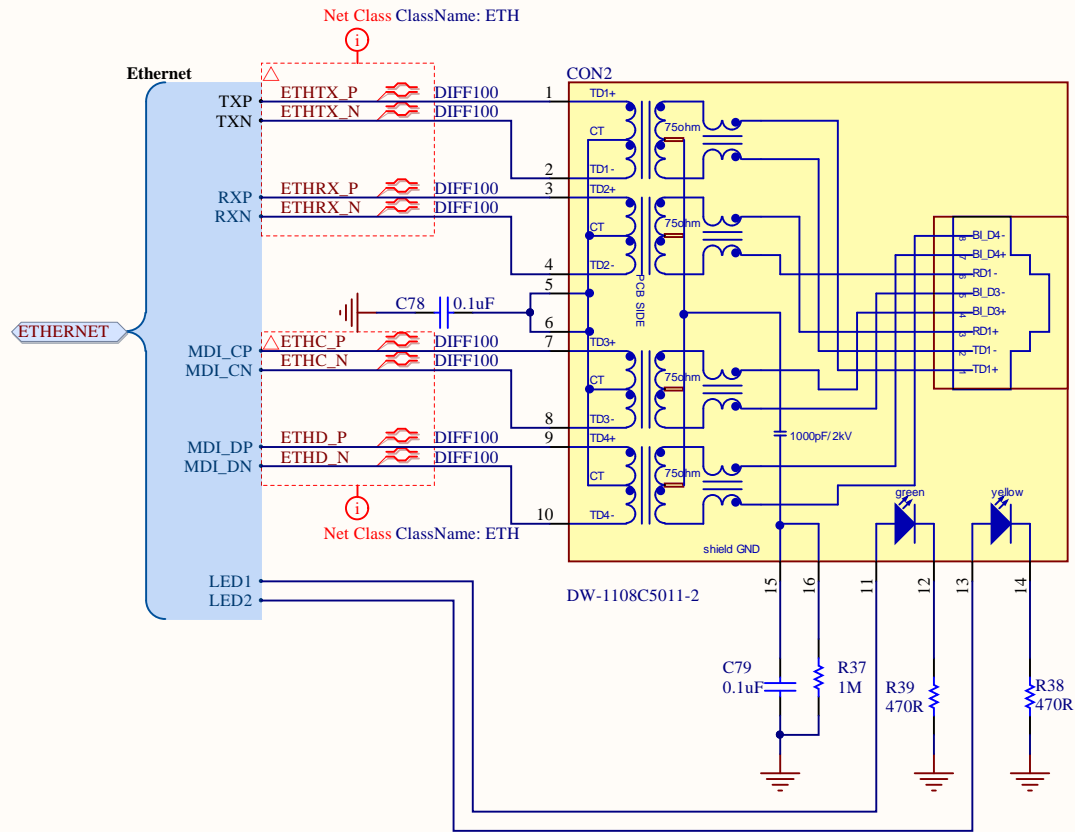
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3

4



Title FAN Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:27.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43		Sheet4 of 33	
File: CON_FAN.SchDoc			Designed by: ruppi.kim@hardkernel.com	



Title **Giga Ethernet Connector**

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



Size: A4

Number:13.

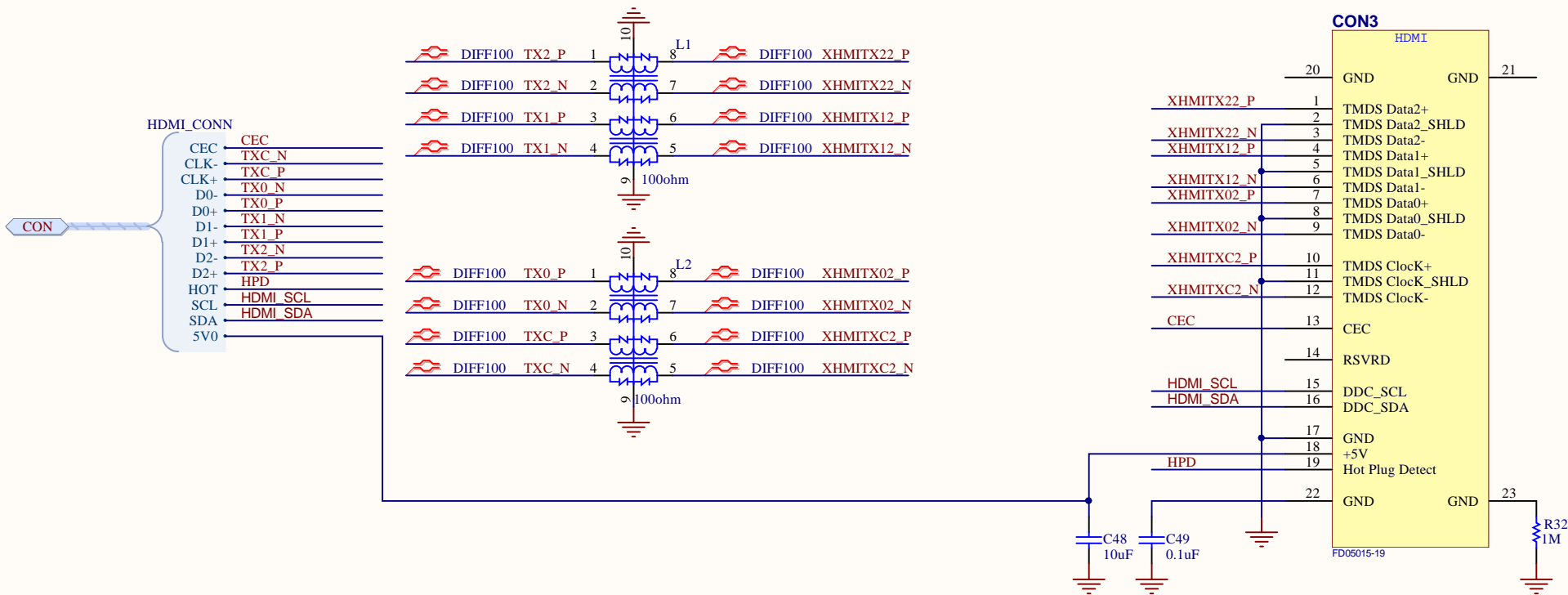
Revision0.1

Date: 2016-02-01

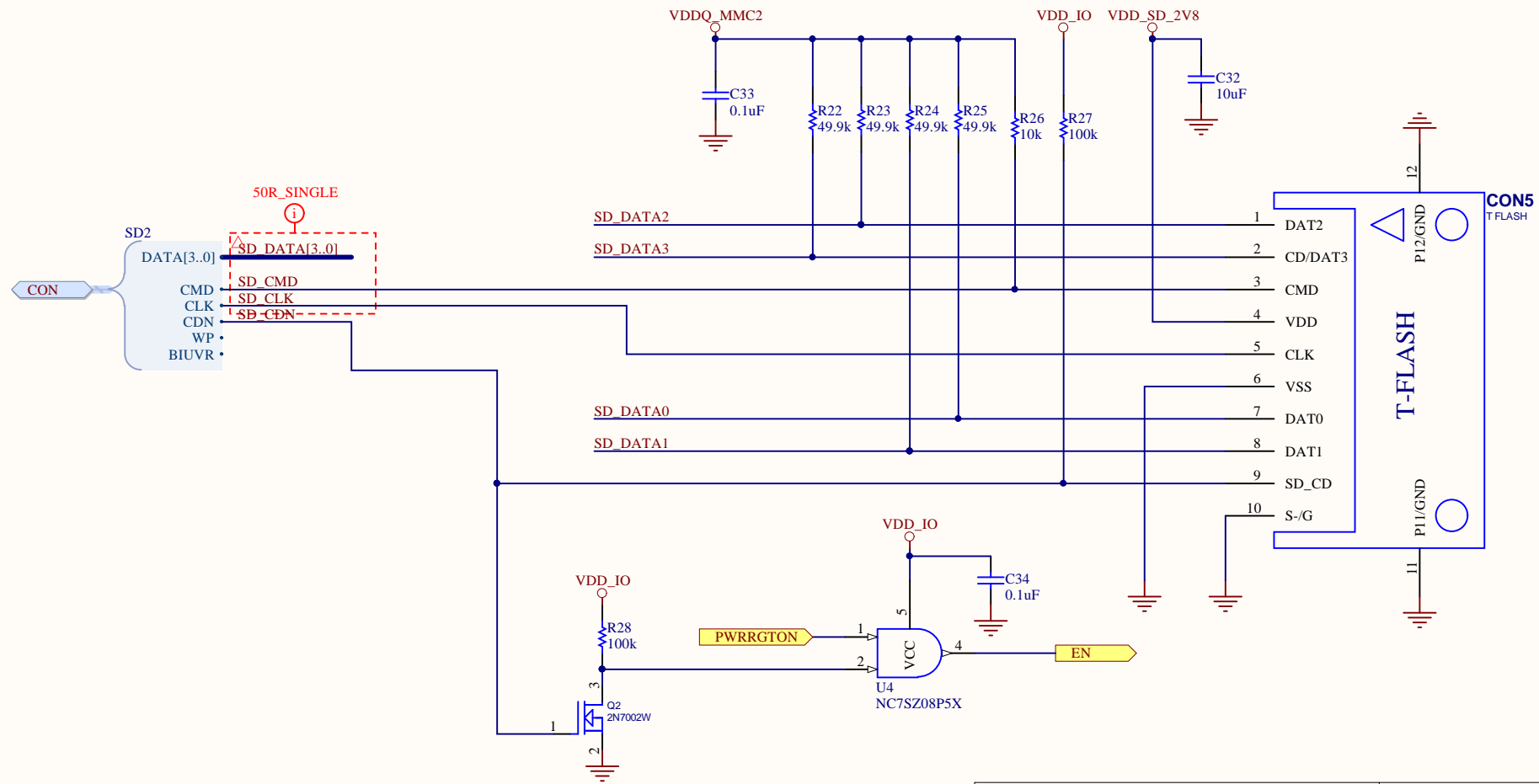
Time: 오전 9:16:43 Sheet5 of 33

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	03ROID
Size: A4	Number:18.	Revision:0.1	Designed by: ruppi.kim@hardkernel.com	
Date: 2016-02-01	Time: 오전 9:16:43	Sheet 6 of 33		
File: CON_HDMI.SchDoc				



Title Micro SD Socket		Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:24.	Revision:0.1	
Date: 2016-02-01	Time: 오전 9:16:43	Sheet 7 of 33	
File: CON_MICROSD_HD08-AL00335.SchDoc		Designed by: ruppi.kim@hardkernel.com	



1

2

3

4

A

A

B

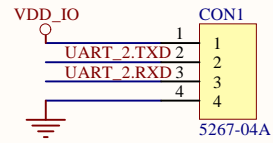
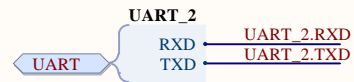
B


C

C

D

D



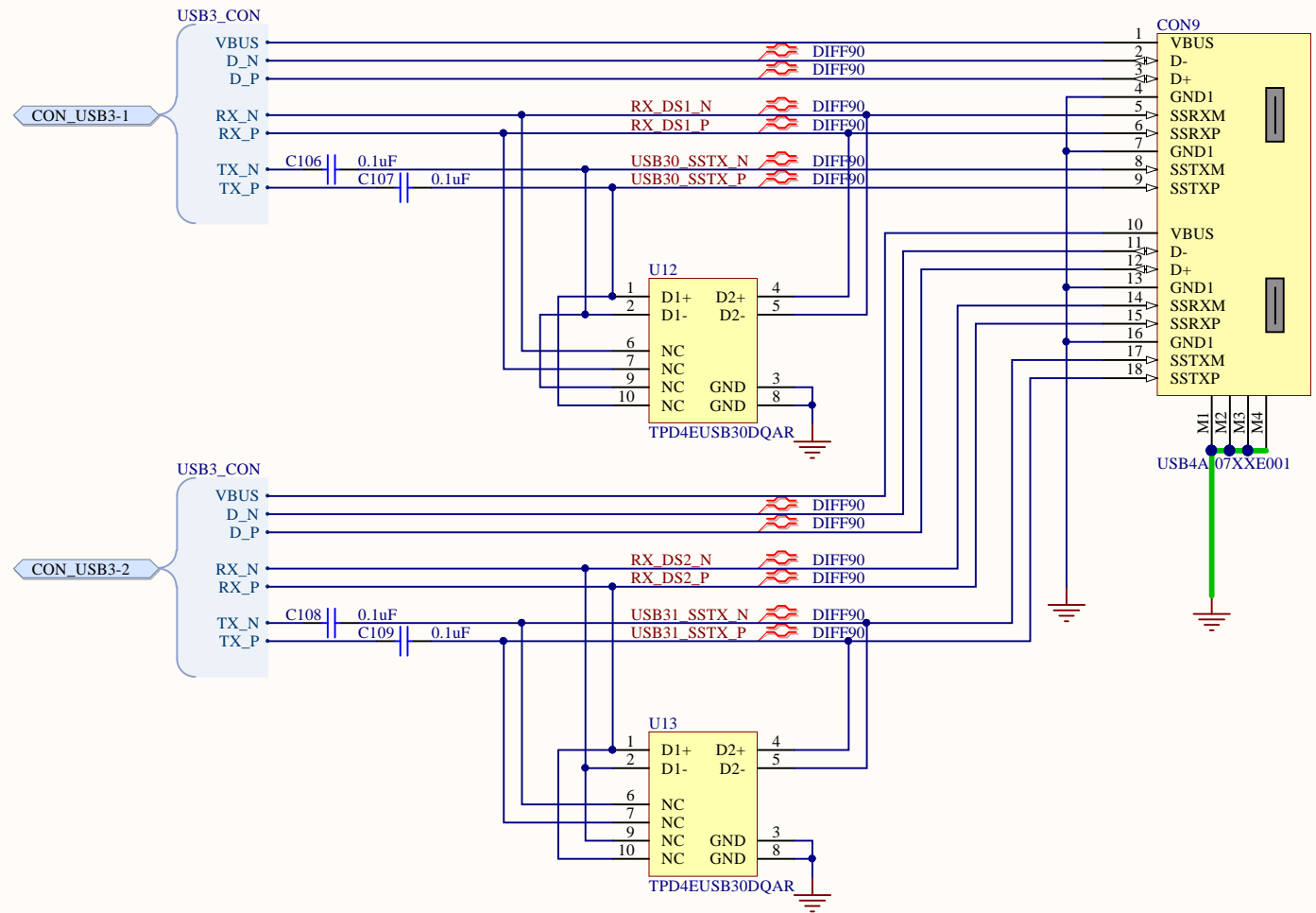
Title UART Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido	
Size: A4	Number:23.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43	Sheet 8 of 33	Designed by: ruppi.kim@hardkernel.com	
File: CON_UART.SchDoc				

1

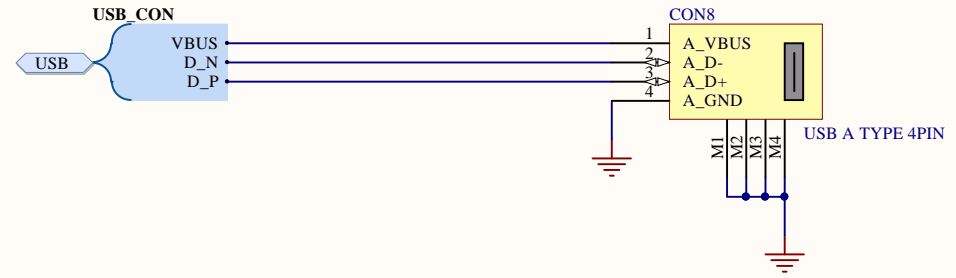
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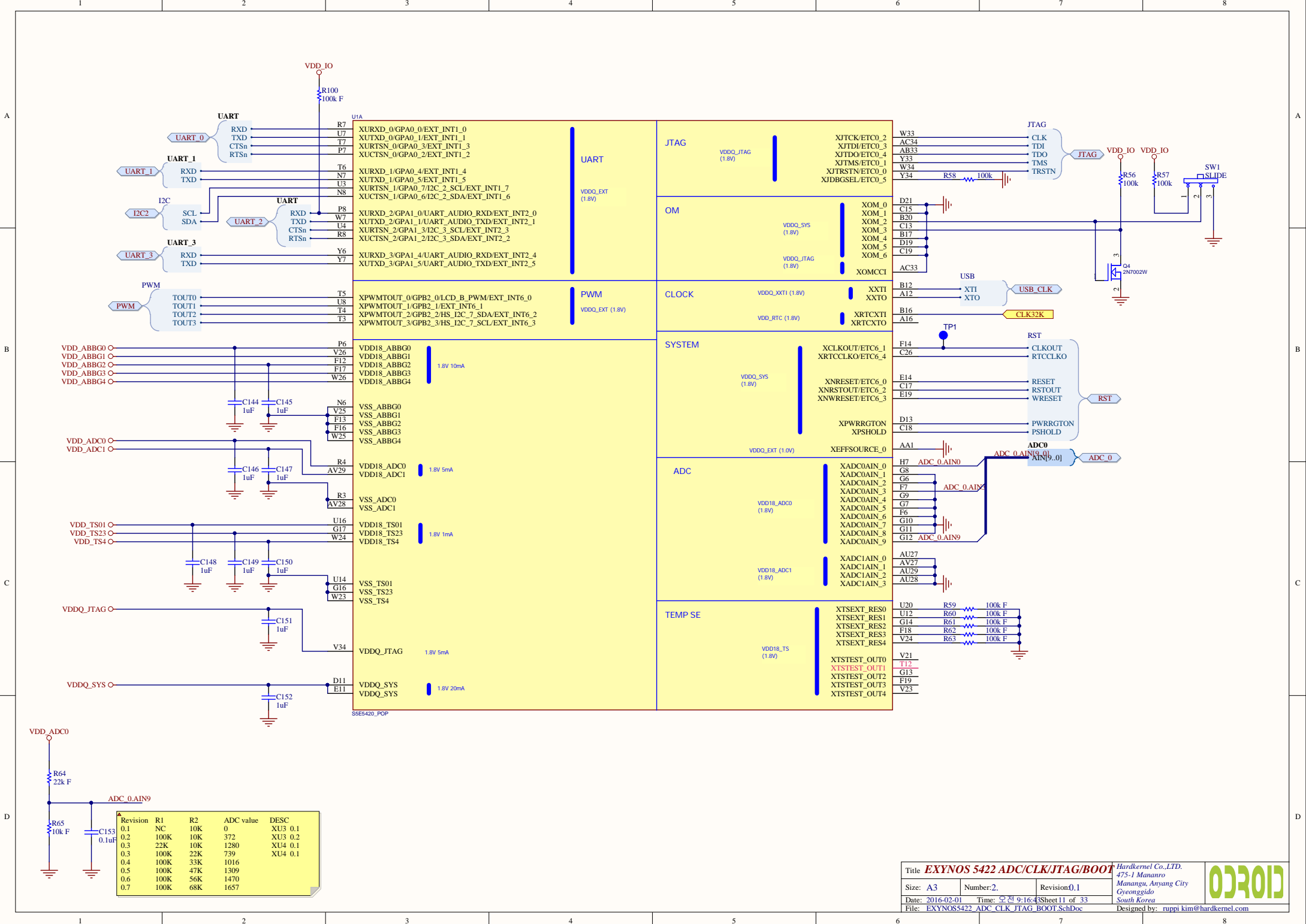
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Title USB 3.0 Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:15.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43	Sheet9 of 33		
File: CON_USB3_DUAL_RA.SchDoc			Designed by: ruppi kim@hardkernel.com	



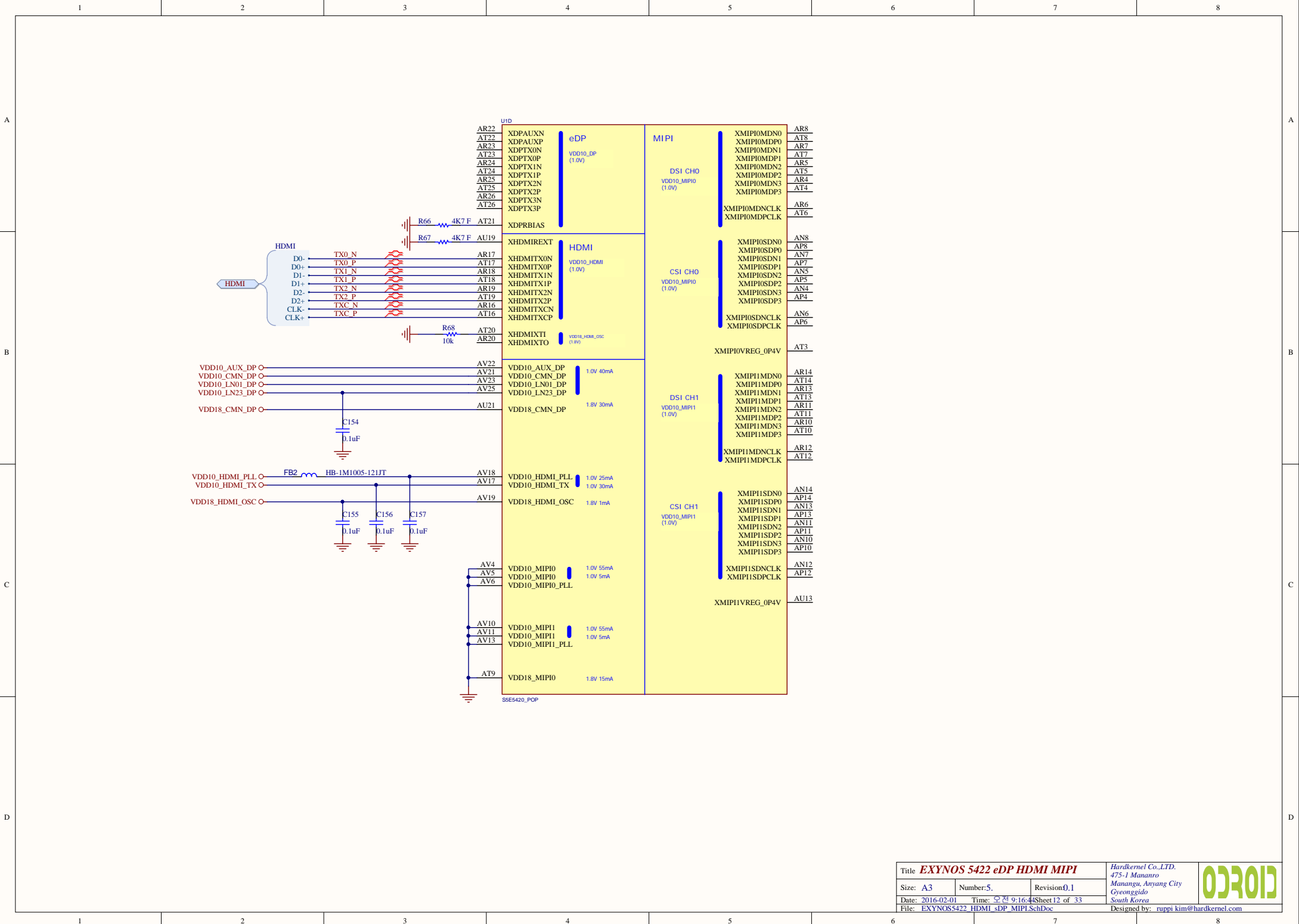
Title USB 2.0 Type A Connector			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea Designed by: ruppi.kim@hardkernel.com	
Size: A4	Number:21.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:43 Sheet 10 of 33			
File: CON_USB_RA.SchDoc				

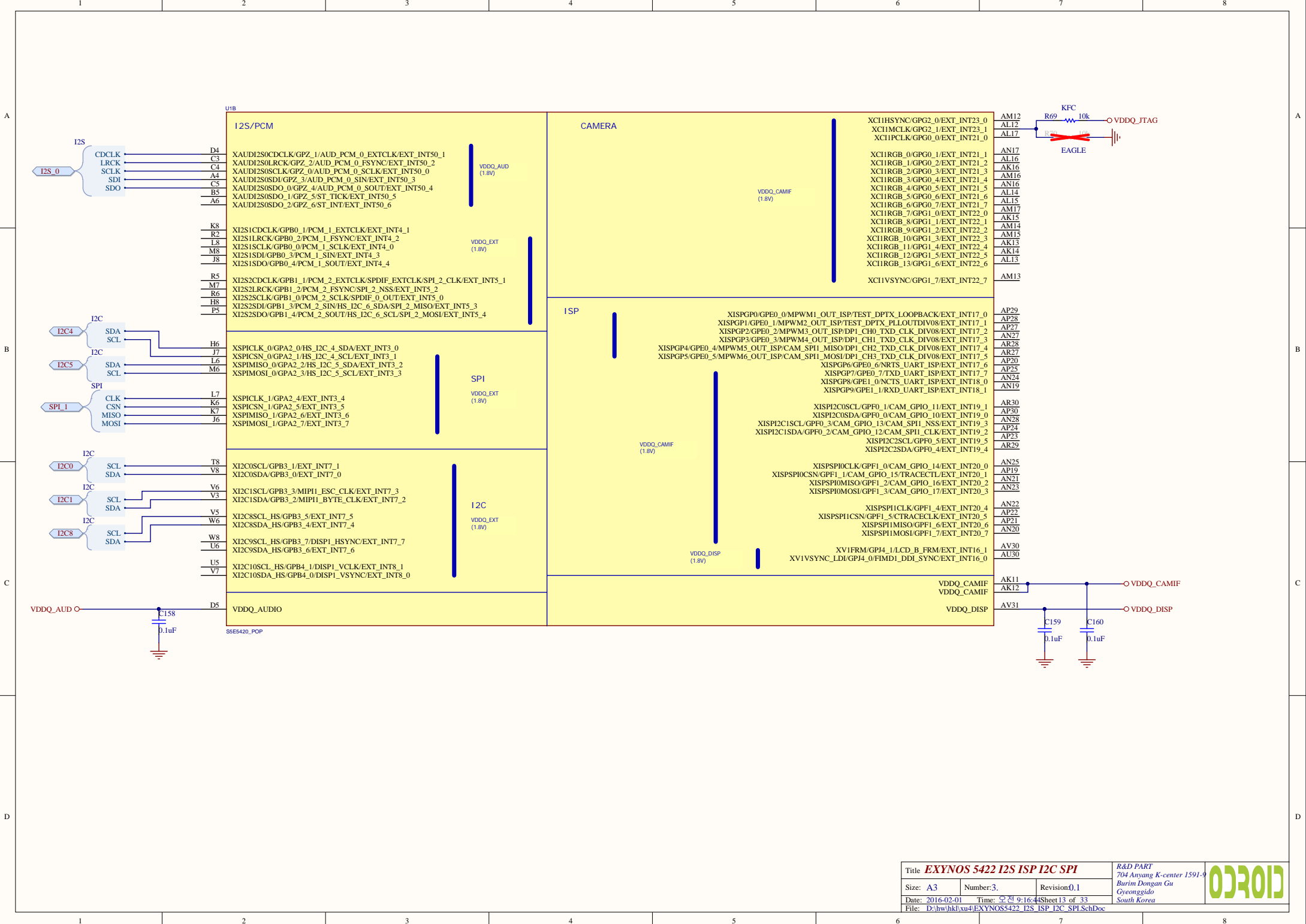


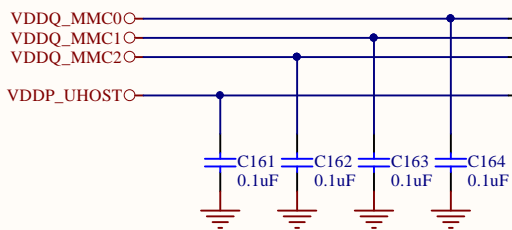
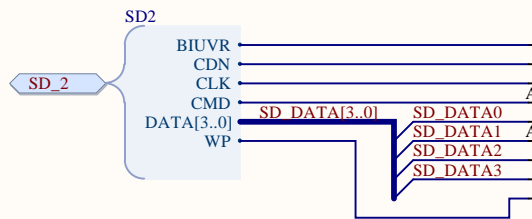
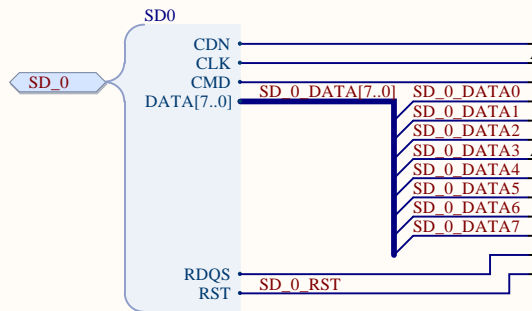
Revision	R1	R2	ADC value	DESC
0.1	NC	10K	0	XU3 0.1
0.2	100K	10K	372	XU3 0.2
0.3	22K	10K	1280	XU4 0.1
0.4	100K	22K	739	XU4 0.1
0.5	100K	33K	1016	
0.6	100K	47K	1309	
0.7	100K	56K	1470	
0.8	100K	68K	1657	

Title EXYNOS 5422 ADC/CLK/JTAG/BOOT			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea.
Size: A3	Number: 2	Revision: 0.1	Designed by: ruppi.kim@hardkernel.com
Date: 2016-02-01	Time: 2016-02-01 09:16:43	Sheet: 11 of 33	
File: EXYNOS5422_ADC_CLK_JTAG_BOOT.SchDoc			









U1F

MMC

CH0

VDDQ_MMC0 (1.8V)

XMMC0CDN/GPC0_2/EXT_INT9_2
 XMMC0CLK/GPC0_0/EXT_INT9_0
 XMMC0CMD/GPC0_1/EXT_INT9_1
 XMMC0DATA_0/GPC0_3/EXT_INT9_3
 XMMC0DATA_1/GPC0_4/EXT_INT9_4
 XMMC0DATA_2/GPC0_5/EXT_INT9_5
 XMMC0DATA_3/GPC0_6/EXT_INT9_6
 XMMC0DATA_4/GPC3_0/EXT_INT12_0
 XMMC0DATA_5/GPC3_1/EXT_INT12_1
 XMMC0DATA_6/GPC3_2/EXT_INT12_2
 XMMC0DATA_7/GPC3_3/EXT_INT12_3
 XMMC0RDQS/GPC0_7/EXT_INT9_7
 XMMC0RESETOUT/GPD1_0/EXT_INT14_0

~~AC3~~
~~AK10~~
~~AD2~~
~~AD1~~
~~AJ10~~
~~AH8~~
~~AJ5~~
~~AJ6~~
~~AC2~~
~~AC1~~
~~AB2~~
~~AH5~~
~~AH6~~
~~AD3~~
~~AB3~~

XMMC1BEPW/GPD1_2/EXT_INT14_2
 XMMC1CDN/GPC1_2/EXT_INT10_2
 XMMC1CLK/GPC1_0/EXT_INT10_0
 XMMC1CMD/GPC1_1/EXT_INT10_1
 XMMC1DATA_0/GPC1_3/EXT_INT10_3
 XMMC1DATA_1/GPC1_4/EXT_INT10_4
 XMMC1DATA_2/GPC1_5/EXT_INT10_5
 XMMC1DATA_3/GPC1_6/EXT_INT10_6
 XMMC1DATA_4/GPD1_4/EXT_INT14_4
 XMMC1DATA_5/GPD1_5/EXT_INT14_5
 XMMC1DATA_6/GPD1_6/EXT_INT14_6
 XMMC1DATA_7/GPD1_7/EXT_INT14_7
 XMMC1INTN/GPD1_1/EXT_INT14_1
 XMMC1RDQS/GPC1_7/EXT_INT10_7
 XMMC1WP/GPD1_3/EXT_INT14_3

CH2

VDDQ_MMC2 (1.8V/2.8V)

XMMC2BIUVR/GPC4_1/EXT_INT13_1
 XMMC2CDN/GPC2_2/EXT_INT11_2
 XMMC2CLK/GPC2_0/EXT_INT11_0
 XMMC2CMD/GPC2_1/EXT_INT11_1
 XMMC2DATA_0/GPC2_3/EXT_INT11_3
 XMMC2DATA_1/GPC2_4/EXT_INT11_4
 XMMC2DATA_2/GPC2_5/EXT_INT11_5
 XMMC2DATA_3/GPC2_6/EXT_INT11_6
 XMMC2WP/GPC4_0/EXT_INT13_0

VDDQ_MMC0 1.8V 150mA
 VDDQ_MMC1 1.8V 150mA
 VDDQ_MMC2 2.8V 250mA
 VDDP_MMC 1.8V 50mA

SSE5420_POP

MMC

CH0

VDDQ_MMC0 (1.8V)

CH1

VDDQ_MMC1 (1.8V)

CH2

VDDQ_MMC2 (1.8V/2.8V)

UFS

VDDQ_EXT (1.8V)

VDD_RX_UFS (1.0V)

VDD_TX_UFS (1.0V)

VDD_UFS_OSC (1.8V)

VDD_CMN_UFS (1.0V)

1.0V 60mA

1.0V 60mA

1.0V 60mA

1.8V 5mA

1.8V 1mA

XUFSNRESET/ETC6_7
 XUFSRXDN0
 XUFSRXDP0
 XUFSRXDN1
 XUFSRXDP1
 XUFSTXDN0
 XUFSTXDP0
 XUFSTXDN1
 XUFSTXDP1

XUFSXTI
 XUFSXTO

XUFSREFCLK
 XUFSREFCLK_OUT

XUFSREXT

VDD_CMN_UFS

VDD_RX_UFS

VDD_TX_UFS

VDD_UFS_OSC

VDDH_CMN_UFS

Y3

AJ4

AJ3

AH4

AH3

AL4

AL3

AM4

AM3

AP1

AN1

AK4

AK3

AH2

AK1

AL1

AJ1

AN2

VDD_UFS_OSC

AK2

Title EXYNOS 5422 MMC UFS

Size: A4

Number:7.

Revision0.1

Date: 2016-02-01

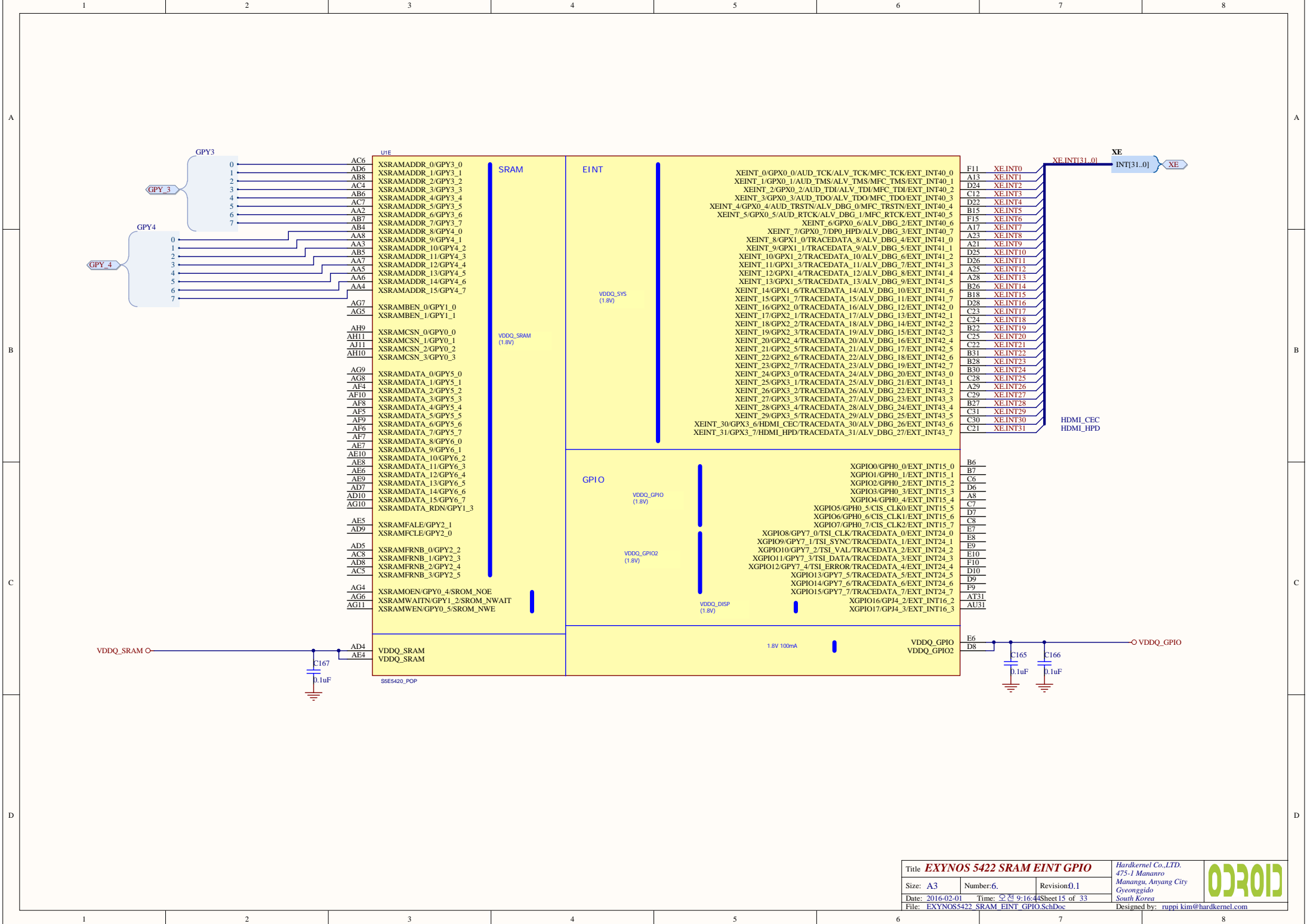
Time: 오전 9:16:44 Sheet 14 of 33

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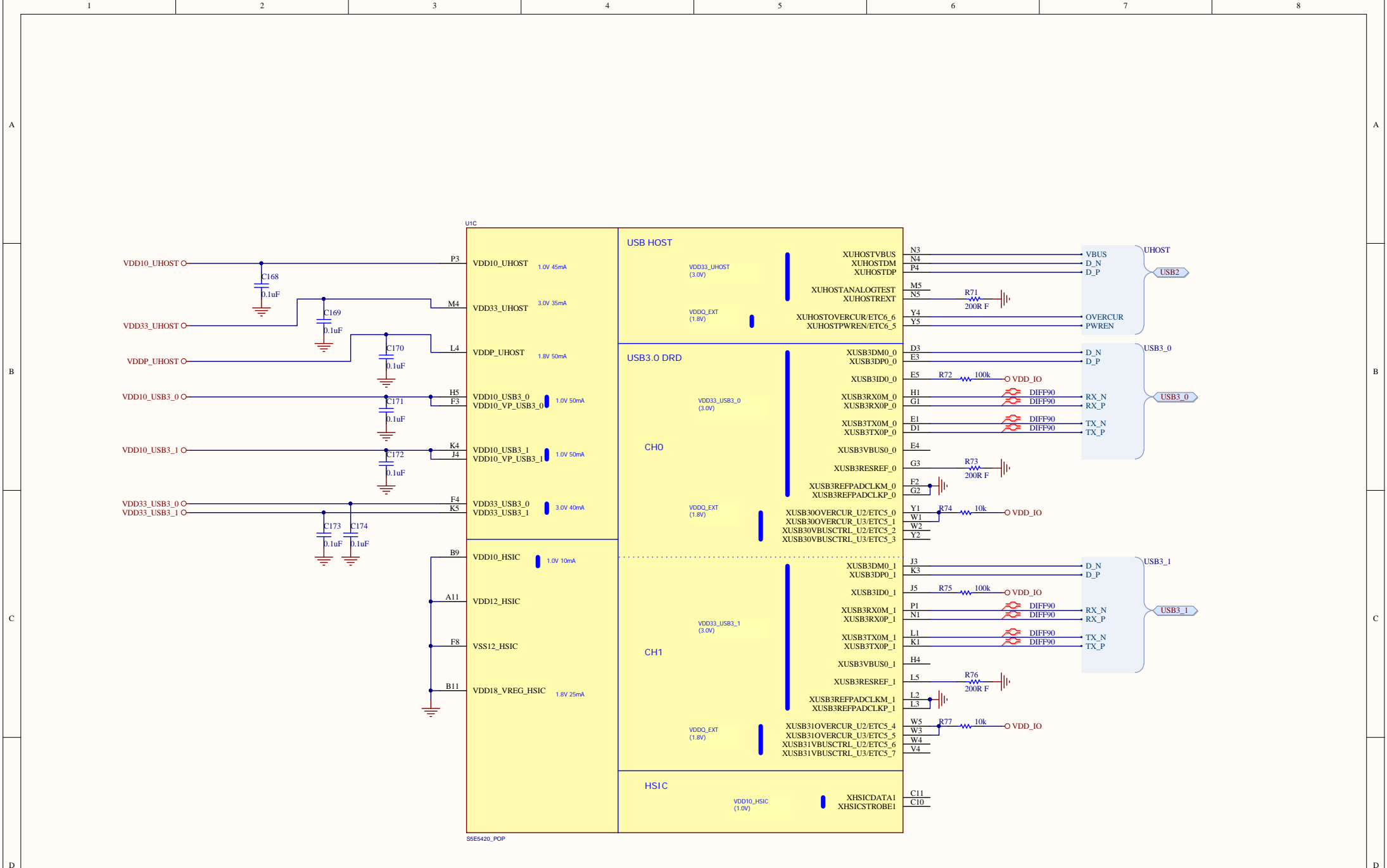
Hardkernel Co.,LTD.
 475-1 Mananro
 Manangu, Anyang City
 Gyeonggido
 South Korea

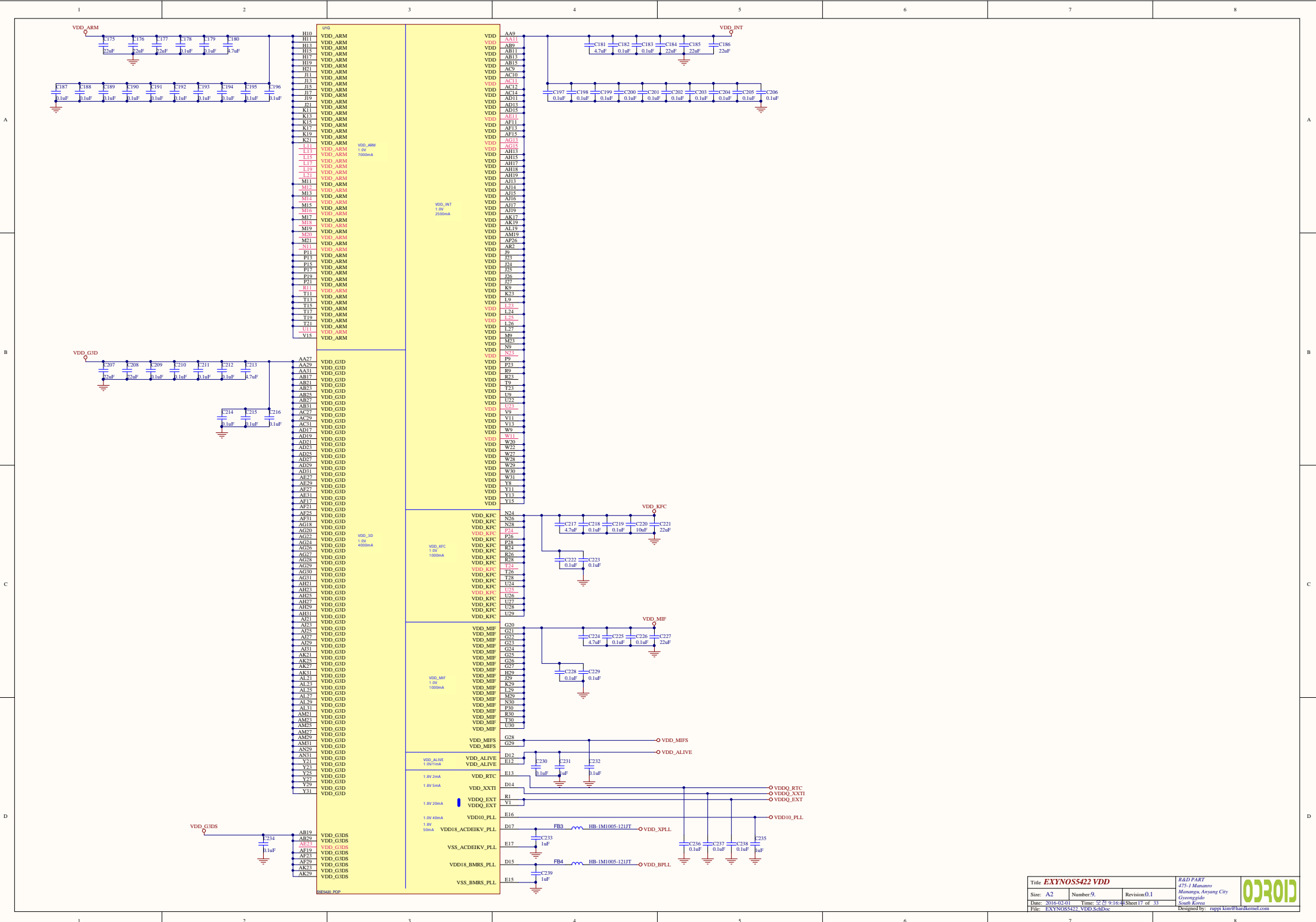


Designed by: ruppi.kim@hardkernel.com



Pin	Block	Signal Name	Internal Label
AC6	SRAM	XSRAMADDR_0/GPY3_0	
AD6	SRAM	XSRAMADDR_1/GPY3_1	
AB8	SRAM	XSRAMADDR_2/GPY3_2	
AC4	SRAM	XSRAMADDR_3/GPY3_3	
AB6	SRAM	XSRAMADDR_4/GPY3_4	
AC7	SRAM	XSRAMADDR_5/GPY3_5	
AA2	SRAM	XSRAMADDR_6/GPY3_6	
AB7	SRAM	XSRAMADDR_7/GPY3_7	
AB4	SRAM	XSRAMADDR_8/GPY4_0	
AA8	SRAM	XSRAMADDR_9/GPY4_1	
AA3	SRAM	XSRAMADDR_10/GPY4_2	
AB5	SRAM	XSRAMADDR_11/GPY4_3	
AA7	SRAM	XSRAMADDR_12/GPY4_4	
AA5	SRAM	XSRAMADDR_13/GPY4_5	
AA6	SRAM	XSRAMADDR_14/GPY4_6	
AA4	SRAM	XSRAMADDR_15/GPY4_7	
AG7	SRAM	XSRAMBEN_0/GPY1_0	
AG5	SRAM	XSRAMBEN_1/GPY1_1	
AH9	SRAM	XSRAMCSN_0/GPY0_0	
AH11	SRAM	XSRAMCSN_1/GPY0_1	
AJ11	SRAM	XSRAMCSN_2/GPY0_2	
AH10	SRAM	XSRAMCSN_3/GPY0_3	
AG9	SRAM	XSRAMDATA_0/GPY5_0	
AG8	SRAM	XSRAMDATA_1/GPY5_1	
AF4	SRAM	XSRAMDATA_2/GPY5_2	
AF10	SRAM	XSRAMDATA_3/GPY5_3	
AF8	SRAM	XSRAMDATA_4/GPY5_4	
AF5	SRAM	XSRAMDATA_5/GPY5_5	
AF9	SRAM	XSRAMDATA_6/GPY5_6	
AF6	SRAM	XSRAMDATA_7/GPY5_7	
AF7	SRAM	XSRAMDATA_8/GPY6_0	
AE7	SRAM	XSRAMDATA_9/GPY6_1	
AE10	SRAM	XSRAMDATA_10/GPY6_2	
AE8	SRAM	XSRAMDATA_11/GPY6_3	
AE6	SRAM	XSRAMDATA_12/GPY6_4	
AE9	SRAM	XSRAMDATA_13/GPY6_5	
AD7	SRAM	XSRAMDATA_14/GPY6_6	
AD10	SRAM	XSRAMDATA_15/GPY6_7	
AG10	SRAM	XSRAMDATA_RDN/GPY1_3	
AE5	SRAM	XSRAMFALE/GPY2_1	
AD9	SRAM	XSRAMFCLE/GPY2_0	
AD5	SRAM	XSRAMFRNB_0/GPY2_2	
AC8	SRAM	XSRAMFRNB_1/GPY2_3	
AD8	SRAM	XSRAMFRNB_2/GPY2_4	
AC5	SRAM	XSRAMFRNB_3/GPY2_5	
AG4	SRAM	XSRAMOEN/GPY0_4/SROM_NOE	
AG6	SRAM	XSRAMWAITN/GPY1_2/SROM_NWAIT	
AG11	SRAM	XSRAMWEN/GPY0_5/SROM_NWE	
AD4	SRAM	VDDQ_SRAM	
AE4	SRAM	VDDQ_SRAM	
AD4	GPIO	VDDQ_GPIO	
AE4	GPIO	VDDQ_GPIO2	
AD4	GPIO	VDDQ_DISP	
AE4	GPIO	VDDQ_DISP	





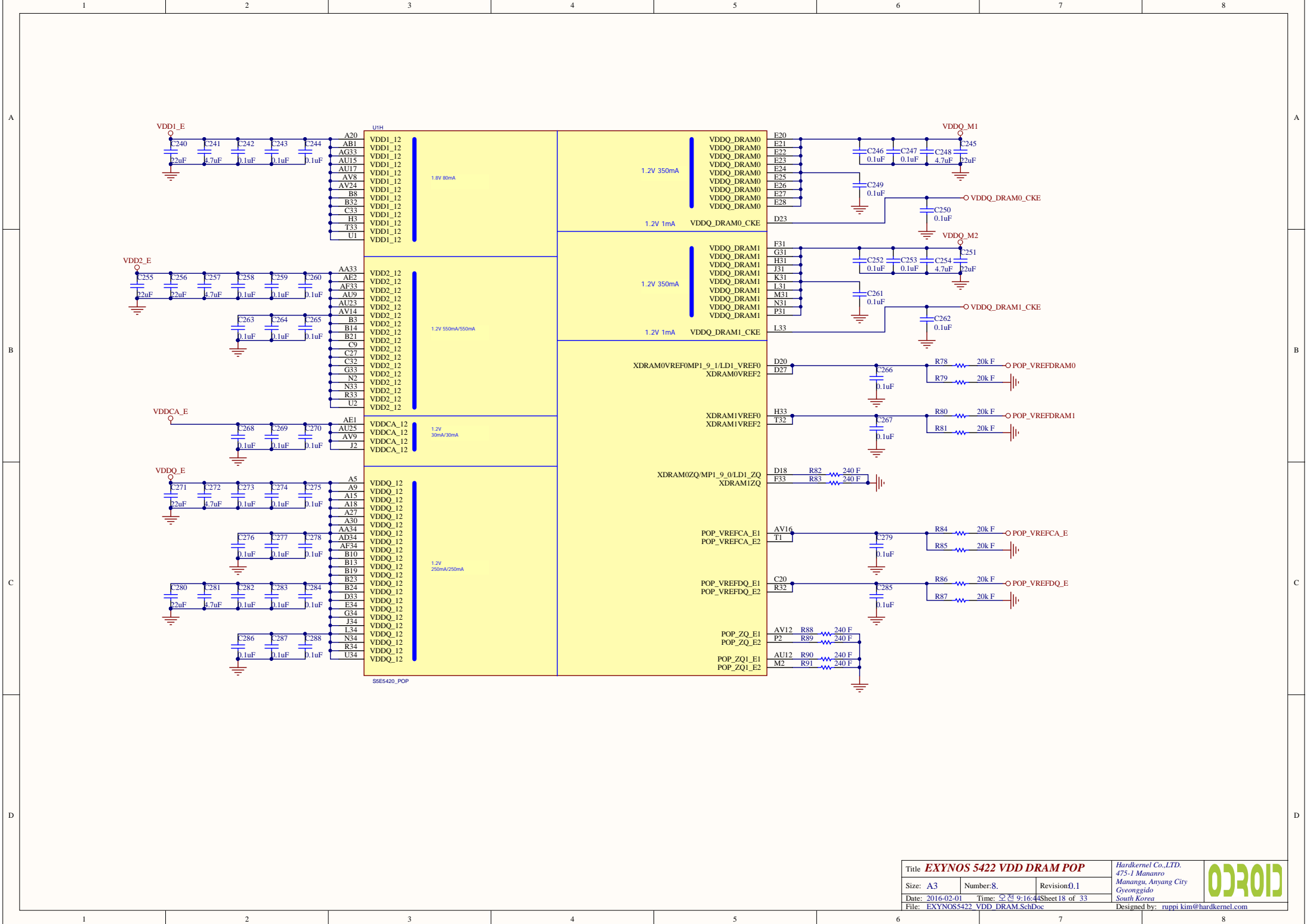
Pinout table listing pins and their associated voltage domains:

H10	VDD_ARM
H13	VDD_ARM
H15	VDD_ARM
H17	VDD_ARM
H19	VDD_ARM
H21	VDD_ARM
J1	VDD_ARM
J3	VDD_ARM
J5	VDD_ARM
J7	VDD_ARM
J9	VDD_ARM
J11	VDD_ARM
K1	VDD_ARM
K13	VDD_ARM
K15	VDD_ARM
K17	VDD_ARM
K19	VDD_ARM
K21	VDD_ARM
L11	VDD_ARM
L13	VDD_ARM
L15	VDD_ARM
L17	VDD_ARM
L19	VDD_ARM
L21	VDD_ARM
M1	VDD_ARM
M12	VDD_ARM
M13	VDD_ARM
M14	VDD_ARM
M15	VDD_ARM
M16	VDD_ARM
M17	VDD_ARM
M18	VDD_ARM
M20	VDD_ARM
M21	VDD_ARM
N1	VDD_ARM
P1	VDD_ARM
P13	VDD_ARM
P15	VDD_ARM
P17	VDD_ARM
P19	VDD_ARM
P21	VDD_ARM
R11	VDD_ARM
R13	VDD_ARM
R15	VDD_ARM
R17	VDD_ARM
R19	VDD_ARM
R21	VDD_ARM
U11	VDD_ARM
V15	VDD_ARM

Pinout table listing pins and their associated voltage domains:

AA2	VDD_ARM
AA3	VDD_ARM
AA4	VDD_ARM
AA5	VDD_ARM
AA6	VDD_ARM
AA7	VDD_ARM
AA8	VDD_ARM
AA9	VDD_ARM
AA10	VDD_ARM
AA11	VDD_ARM
AA12	VDD_ARM
AA13	VDD_ARM
AA14	VDD_ARM
AA15	VDD_ARM
AA16	VDD_ARM
AA17	VDD_ARM
AA18	VDD_ARM
AA19	VDD_ARM
AA20	VDD_ARM
AA21	VDD_ARM
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AA29	VDD_ARM
AA30	VDD_ARM
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AA32	VDD_ARM
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AA93	VDD_ARM
AA94	VDD_ARM
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AA96	VDD_ARM
AA97	VDD_ARM
AA98	VDD_ARM
AA99	VDD_ARM
AA100	VDD_ARM



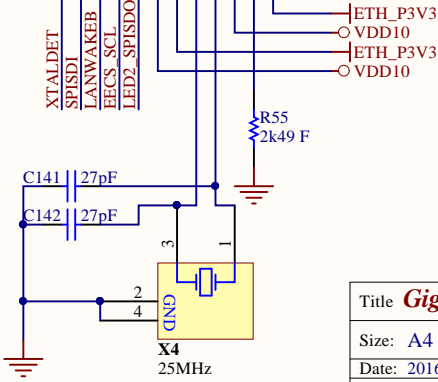
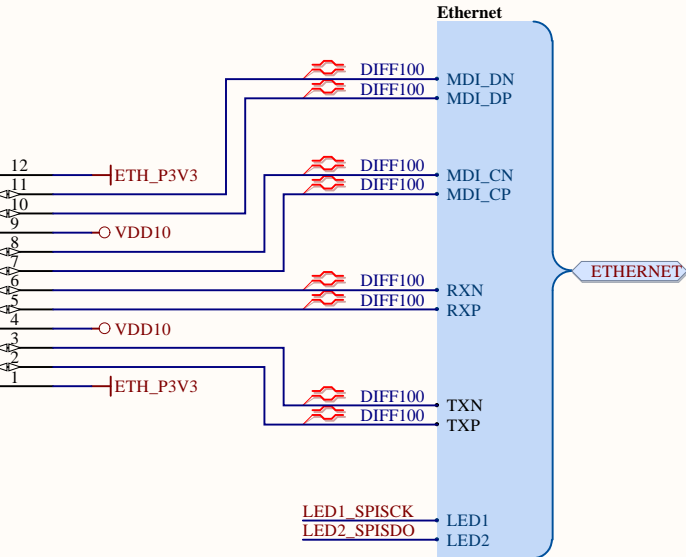
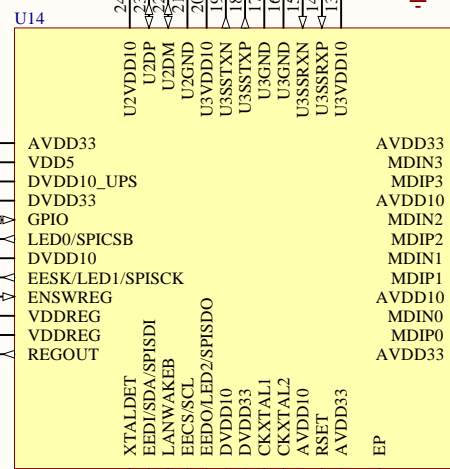
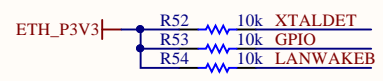
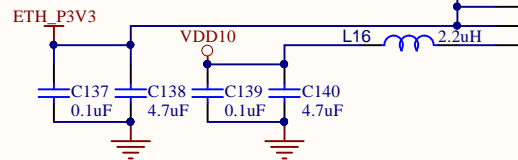
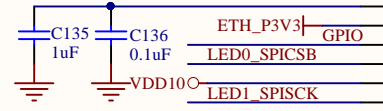
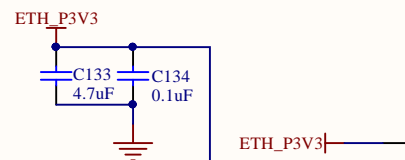
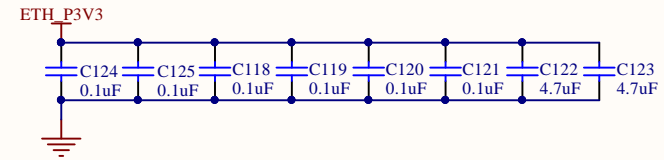
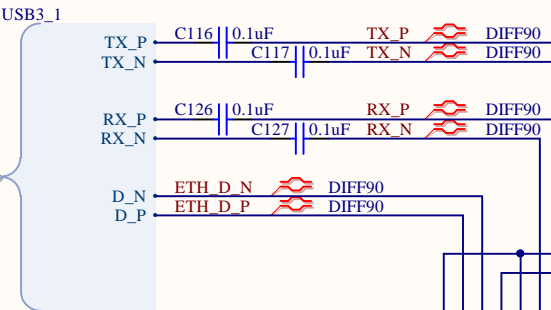
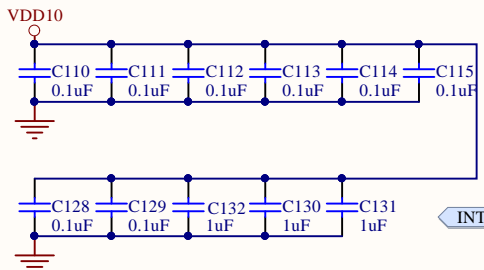


A1	VSS	A1	VSS
A10	VSS	A2	VSS
A11	VSS	A3	VSS
AA10	VSS	A4	VSS
AA2	VSS	A5	VSS
AA30	VSS	A6	VSS
AA3	VSS	A7	VSS
AA32	VSS	A8	VSS
AC20	VSS	A9	VSS
AC28	VSS	AA1	VSS
AD24	VSS	AA2	VSS
AD32	VSS	AA3	VSS
AH16	VSS	AA12	VSS
AE24	VSS	AA32	VSS
AE33	VSS	AB26	VSS
AF2	VSS	AB34	VSS
AF26	VSS	AC22	VSS
AG2	VSS	AC30	VSS
AG34	VSS	AD26	VSS
AH16	VSS	AD33	VSS
AH26	VSS	AE18	VSS
AH33	VSS	AE26	VSS
AH2	VSS	AE33	VSS
AH22	VSS	AF28	VSS
AJ2	VSS	AG14	VSS
AK18	VSS	AH1	VSS
AK26	VSS	AH20	VSS
AK3	VSS	AH28	VSS
AL20	VSS	AH34	VSS
AL28	VSS	AH8	VSS
AL34	VSS	AM26	VSS
AM18	VSS	AM3	VSS
AM26	VSS	AM33	VSS
AM3	VSS	AN26	VSS
AN18	VSS	AN34	VSS
AN3	VSS	AP9	VSS
AP9	VSS	AP18	VSS
AP18	VSS	AP31	VSS
AP34	VSS	AR1	VSS
AR14	VSS	AR21	VSS
AR33	VSS	AR34	VSS
AT14	VSS	AT22	VSS
AT40	VSS	AT32	VSS
AH1	VSS	AU2	VSS
AU3	VSS	AU6	VSS
AU10	VSS	AU11	VSS
AU18	VSS	AU20	VSS
AU26	VSS	AU32	VSS
AV1	VSS	AV2	VSS
AV15	VSS	AV20	VSS
AV33	VSS	AV34	VSS
B4	VSS	B25	VSS
B34	VSS	C1	VSS
C16	VSS	C34	VSS
D29	VSS	D20	VSS
D34	VSS	E2	VSS
E30	VSS	E31	VSS
F1	VSS	F5	VSS
F22	VSS	F23	VSS
F26	VSS	F27	VSS
F30	VSS	F32	VSS
G5	VSS	G15	VSS
G20	VSS	G2	VSS
H12	VSS	H14	VSS
H20	VSS	H22	VSS
H25	VSS	H26	VSS
H30	VSS	H32	VSS
J10	VSS	J12	VSS
J18	VSS	J20	VSS
J30	VSS	J32	VSS
K10	VSS	K13	VSS
K18	VSS	K20	VSS
K35	VSS	K36	VSS
K40	VSS	K42	VSS
L10	VSS	L12	VSS
L18	VSS	L20	VSS
L30	VSS	L32	VSS
M10	VSS	M2	VSS
M3	VSS	M3	VSS
M32	VSS	M33	VSS
N12	VSS	N14	VSS
N20	VSS	N22	VSS
N29	VSS	N32	VSS
P2	VSS	P23	VSS
R12	VSS	P33	VSS
R20	VSS	R14	VSS
R29	VSS	R2	VSS
T25	VSS	R31	VSS
T34	VSS	T27	VSS
U2	VSS	U10	VSS
V12	VSS	U33	VSS
V30	VSS	V30	VSS
W10	VSS	Y31	VSS
Y9	VSS	W12	VSS
Y26	VSS	Y11	VSS
		Y28	VSS
			VSS

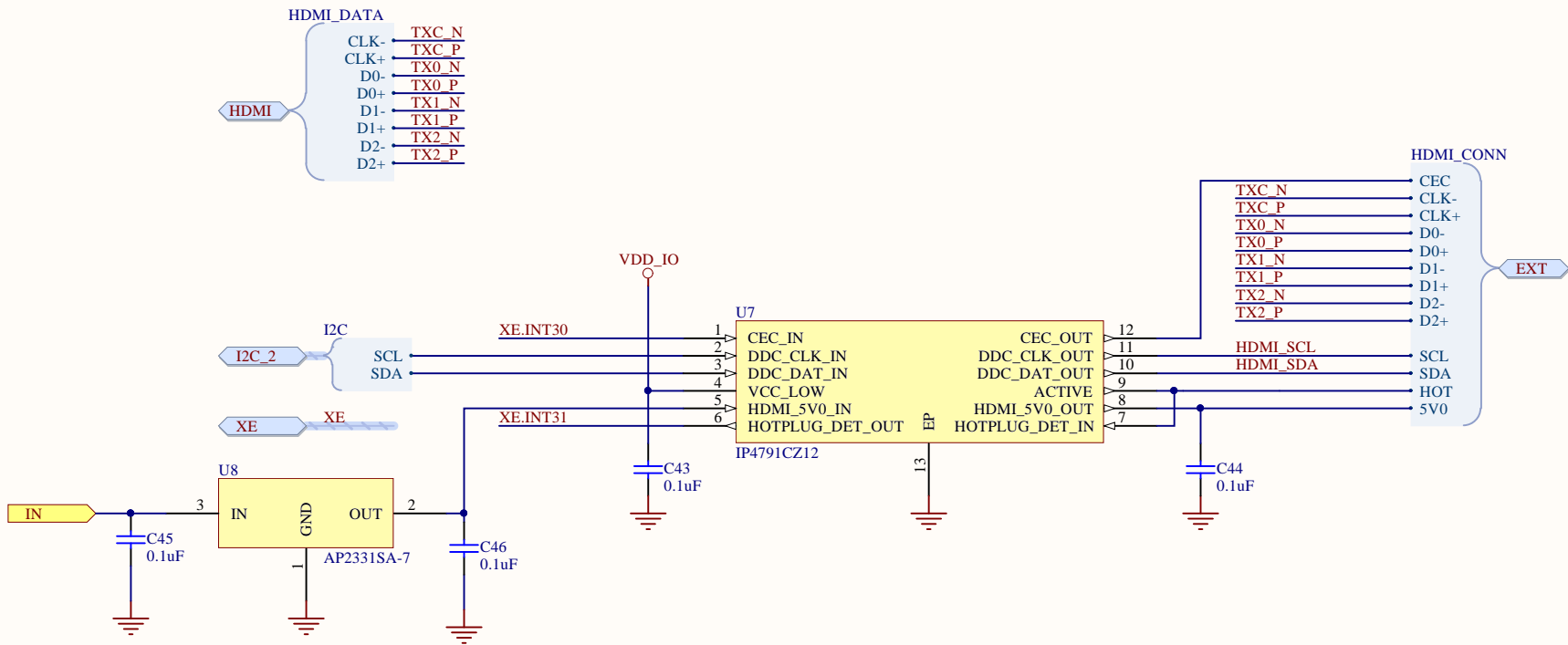
Y22	NC0	NC39	AA13
Y20	NC1	NC40	AA15
Y19	NC2	NC41	AA16
Y18	NC3	NC42	AA17
Y17	NC4	NC43	AA18
Y16	NC5	NC44	AA19
Y14	NC6	NC45	AA21
W19	NC7	NC46	AB14
W18	NC8	NC47	AB16
W17	NC9	NC48	AB18
W16	NC10	NC49	AB20
W15	NC11	NC50	AB22
W13	NC12	NC51	AC13
W12	NC13	NC52	AC15
W11	NC14	NC53	AC17
W10	NC15	NC54	AC19
W9	NC16	NC55	AC21
W8	NC17	NC56	AD14
W7	NC18	NC57	AD16
W6	NC19	NC58	AD18
W5	NC20	NC59	AD20
W4	NC21	NC60	AD22
W3	NC22	NC61	R14
W2	NC23	NC62	R15
W1	NC24	NC63	R17
W0	NC25	NC64	R19
T22	NC26	NC65	R3
T20	NC27	NC66	T4
T18	NC28	NC67	T16
T17	NC29	NC68	T18
T15	NC30	NC69	P28
T13	NC31	NC70	AF18
T12	NC32	NC71	P14
T11	NC33	NC72	P25
T10	NC34	NC73	AF20
T9	NC35	NC74	P16
T8	NC36	NC75	AF14
T7	NC37	NC76	AF22
T6	NC38	NC77	P18

BSE420_POP

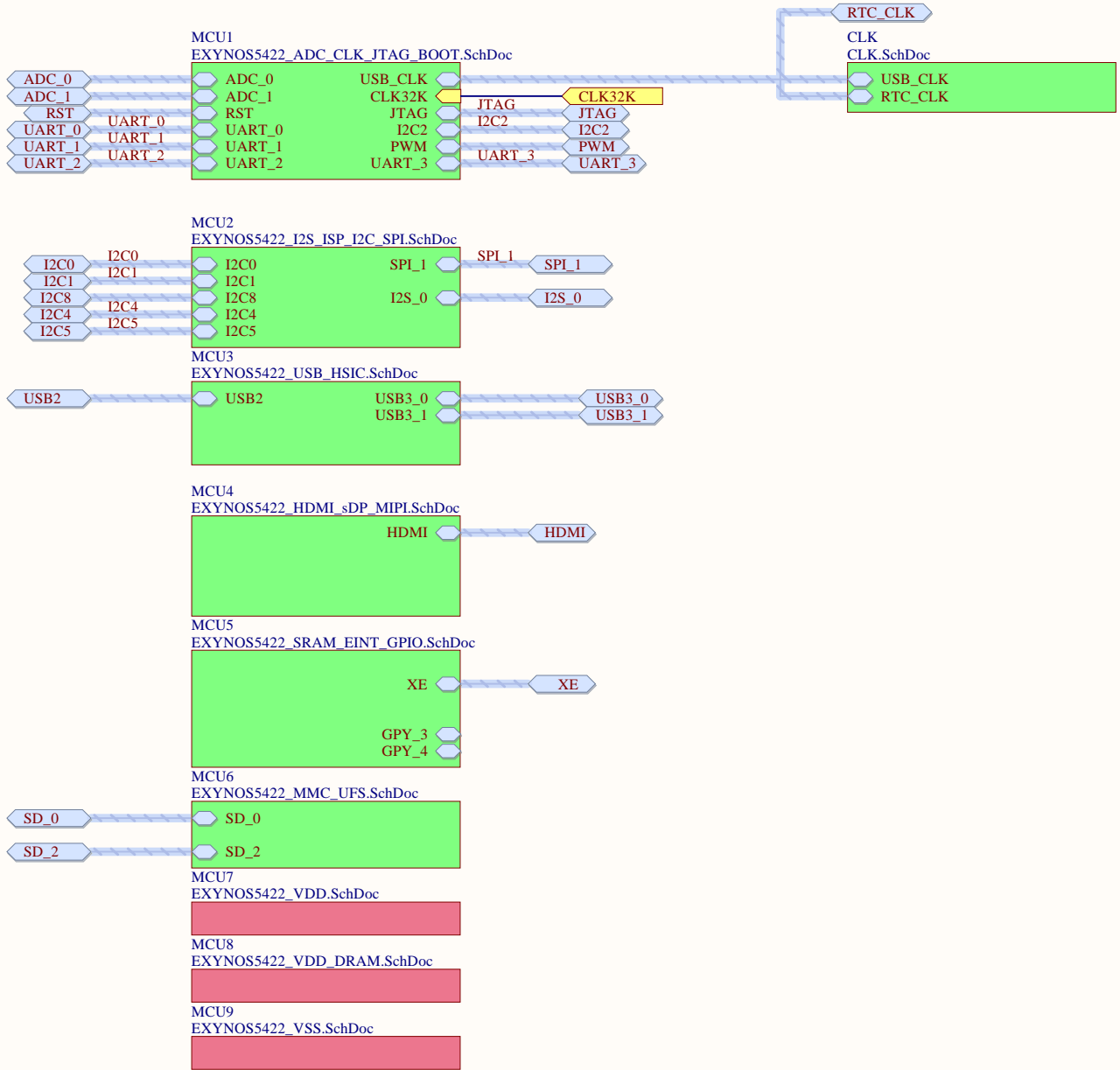




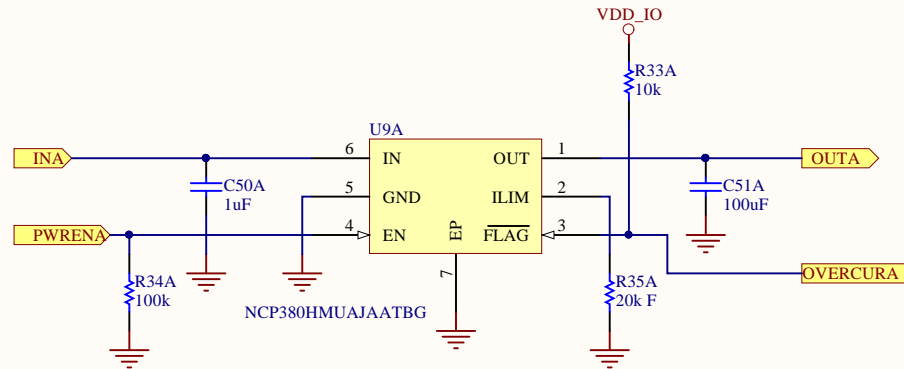
Title Giga Ethernet USB3.0 RT8153-VB			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:14.	Revision:0.1	Designed by: ruppi kim@hardkernel.com	
Date: 2016-02-01	Time: 오전 9:16:45	Sheet 20 of 33		
File: GIGA_ETHERNET_PHY_RT8153-VB-CG.SchDoc				



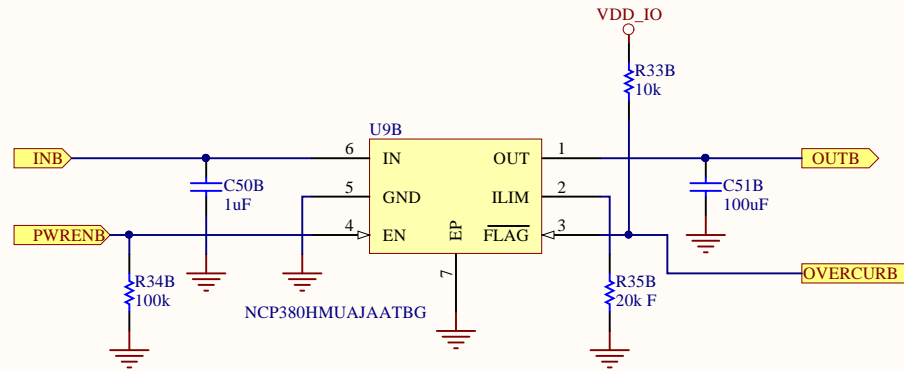
Title HDMI I2C			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:20.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:45	Sheet 21 of 33	Designed by: ruppi kim@hardkernel.com	
File: HDMI_I2C.SchDoc				



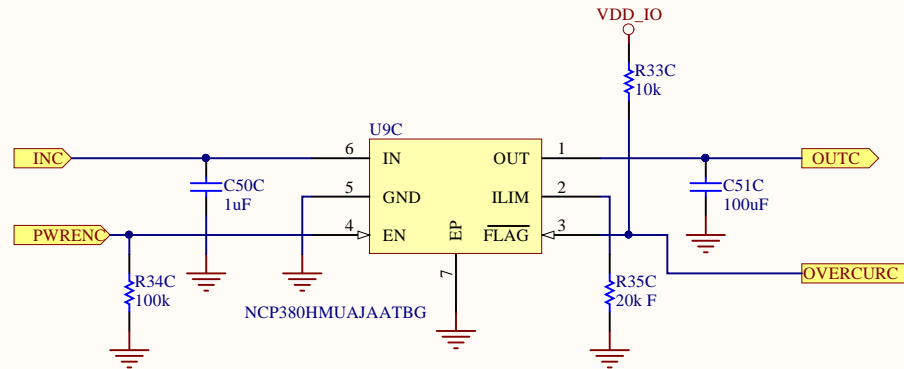
Title MCU EXYNOS5422		Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea		
Size: A4	Number: 1.	Revision: 0.1		
Date: 2016-02-01	Time: 오전 9:16:45		Sheet 22 of 33	
File: MCU_EXYNOS5422.SchDoc			Designed by: ruppi kim@hardkernel.com	




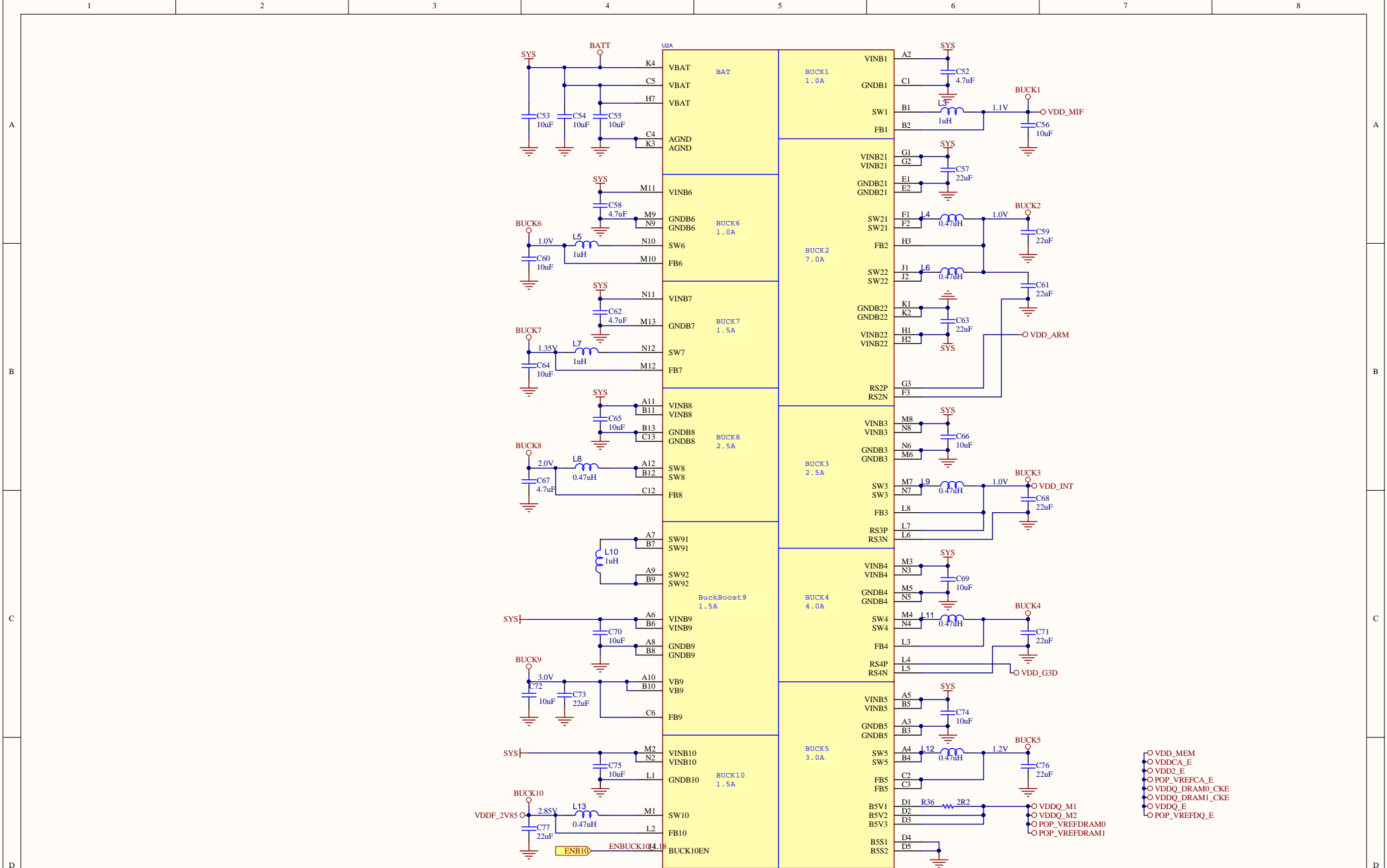
Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:16.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:45	Sheet 23 of 33		
File: NCP380HM.SchDoc			Designed by: ruppi kim@hardkernel.com	



Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:16.1.1	Revision0.1		
Date: 2016-02-01	Time: 오전 9:16:45		Sheet24 of 33	
File: NCP380HM.SchDoc			Designed by: ruppi kim@hardkernel.com	

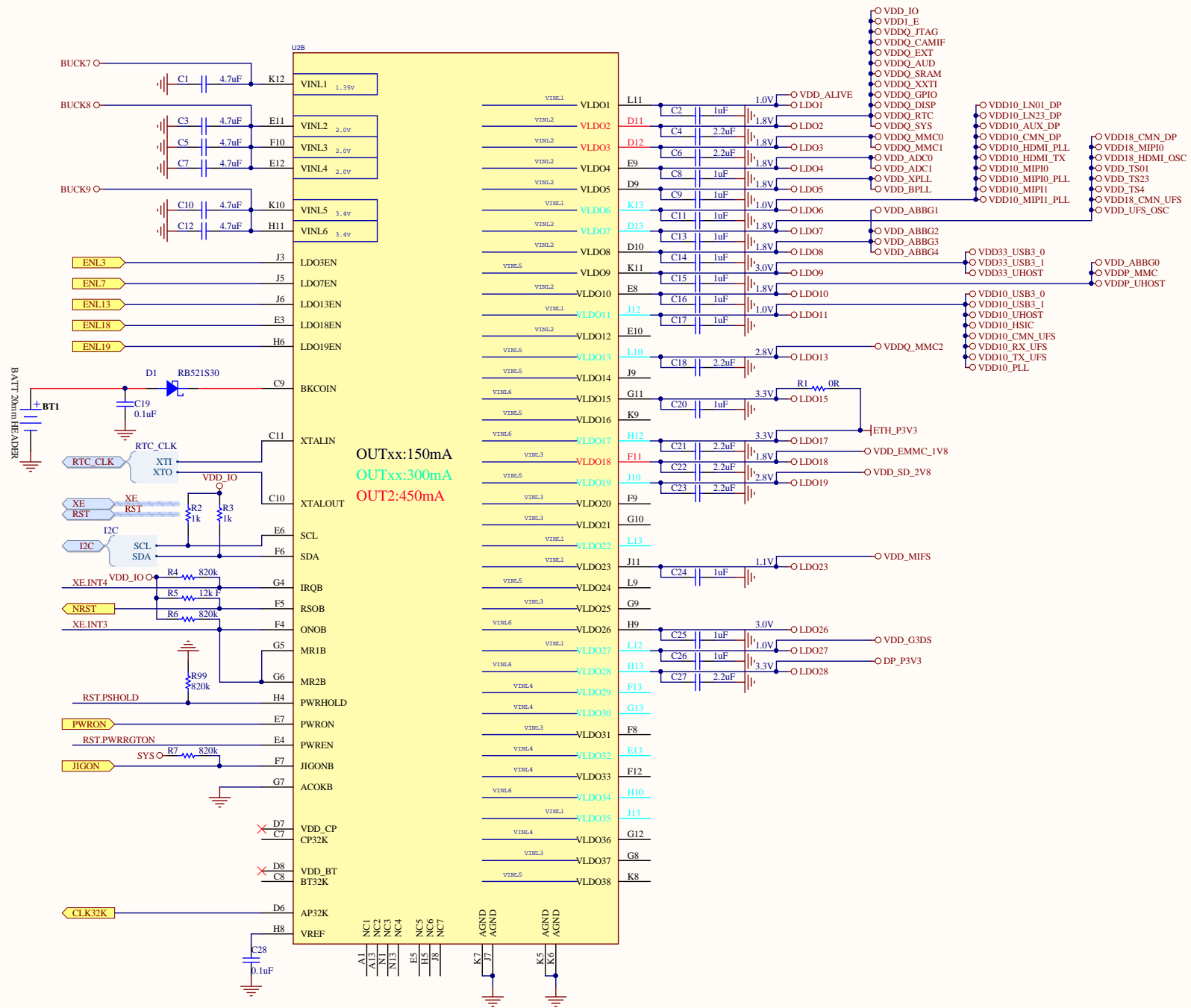


Title USB HOST Power Switch			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number: 16.2.1	Revision: 0.1		
Date: 2016-02-01	Time: 오전 9:16:45	Sheet 25 of 33	Designed by: ruppi.kim@hardkernel.com	
File: NCP380HM.SchDoc				

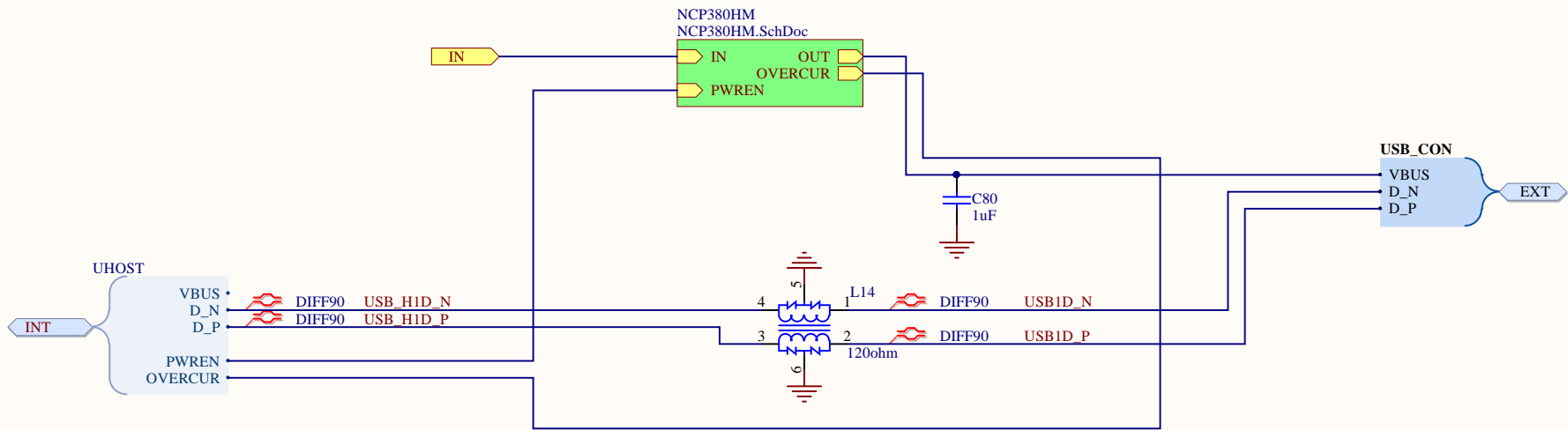


S2MPS11B_4TH
 I2C ADDR : 0xCC(PW) 0x0C(RTC)

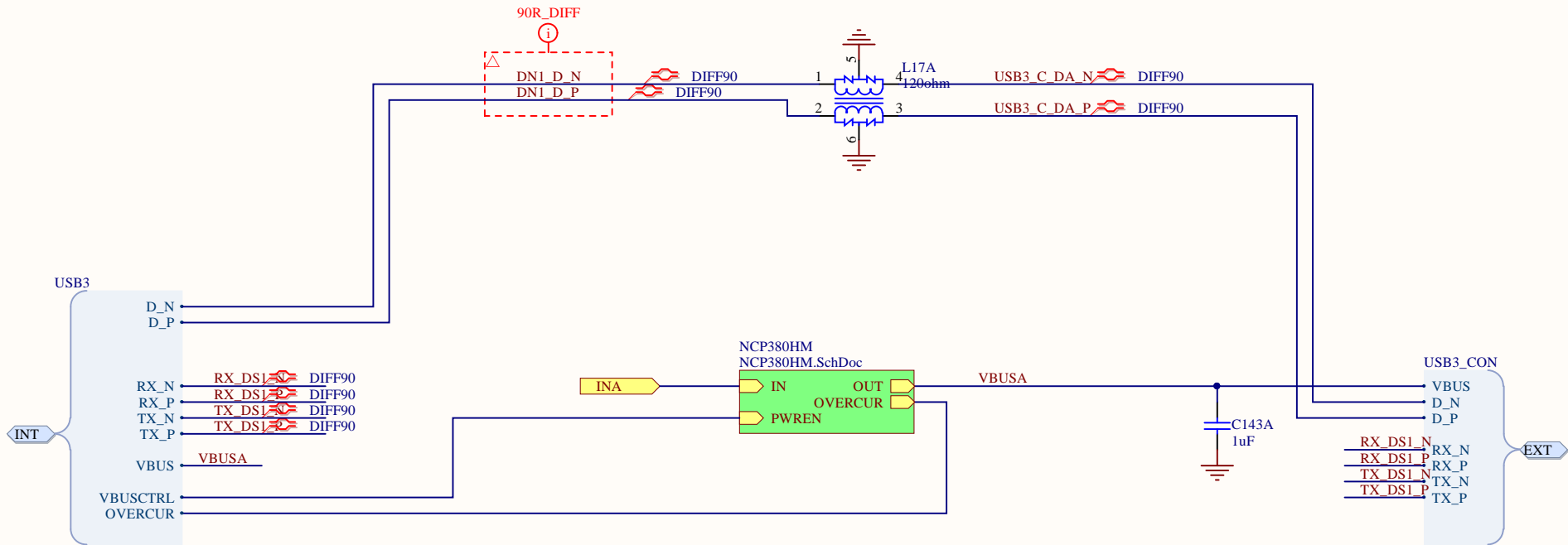
- VDD_MEM
- VDDCA_E
- VDD2_E
- POP_VREFCA_E
- VDDQ_DRAM0_CKE
- VDDQ_DRAM1_CKE
- VDDQ_E
- POP_VREFDQ_E



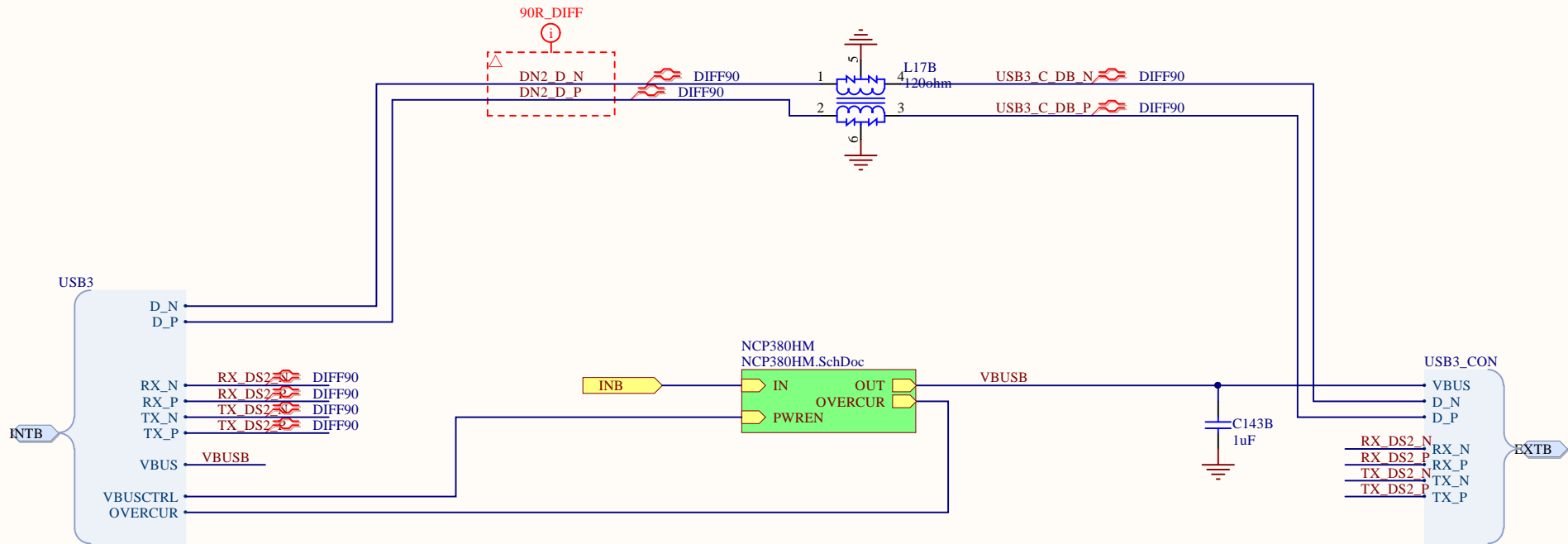
S2MPS11X_8
 I2C ADDR : 0xCC(FM) 0x0C(RTC)



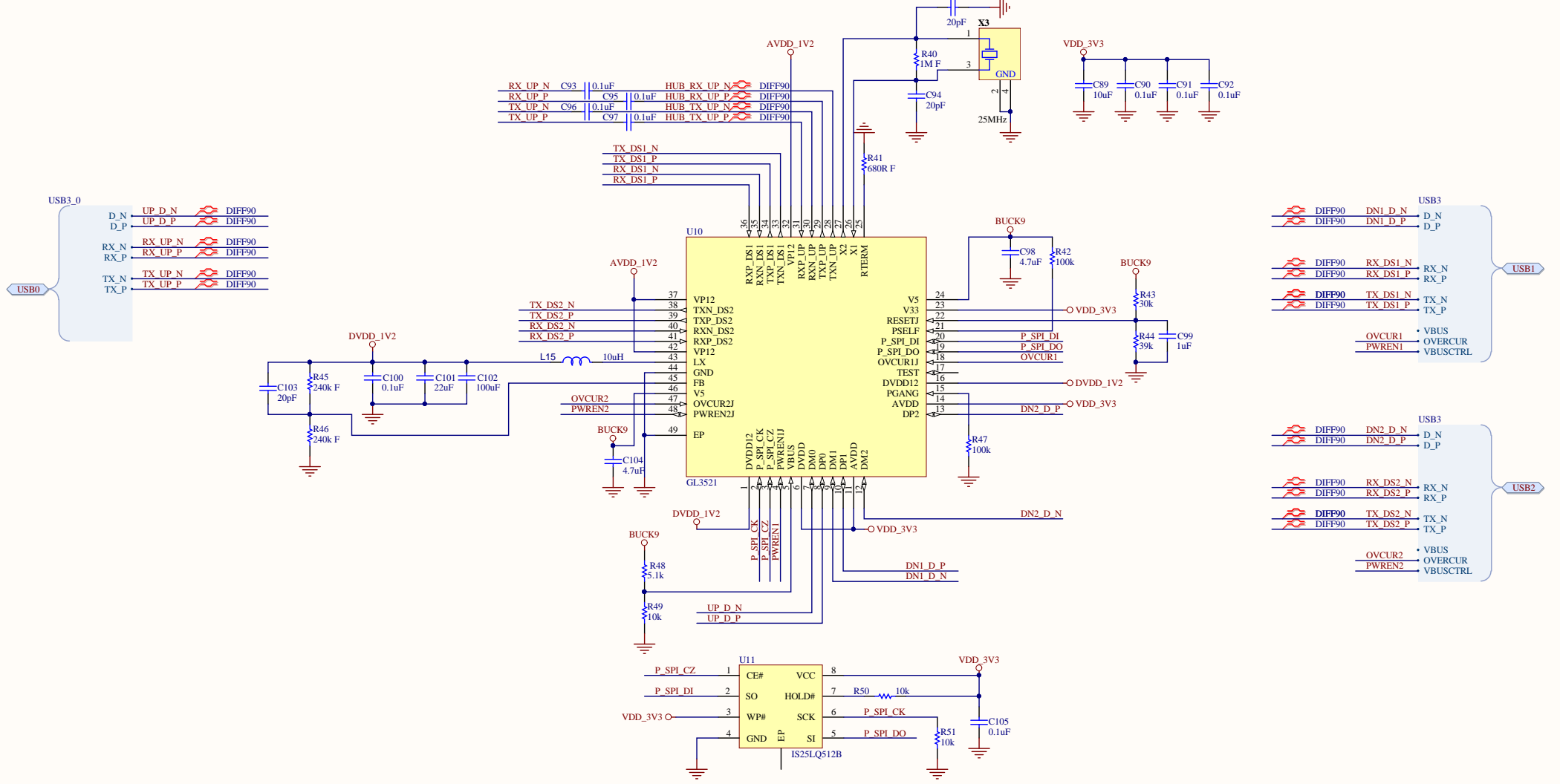
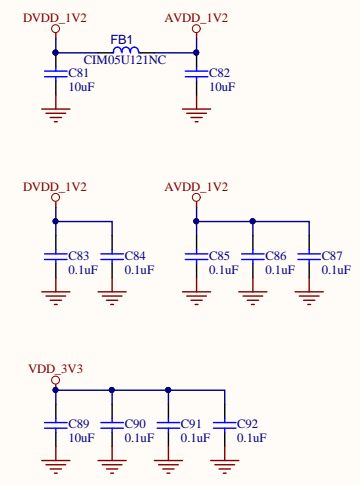
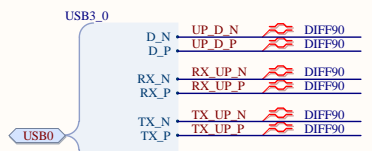
Title USB HOST PWR SW			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:28.	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:46	Sheet:28 of 33		
File: USB2_HOST_PWR_SW.SchDoc			Designed by: ruppi kim@hardkernel.com	

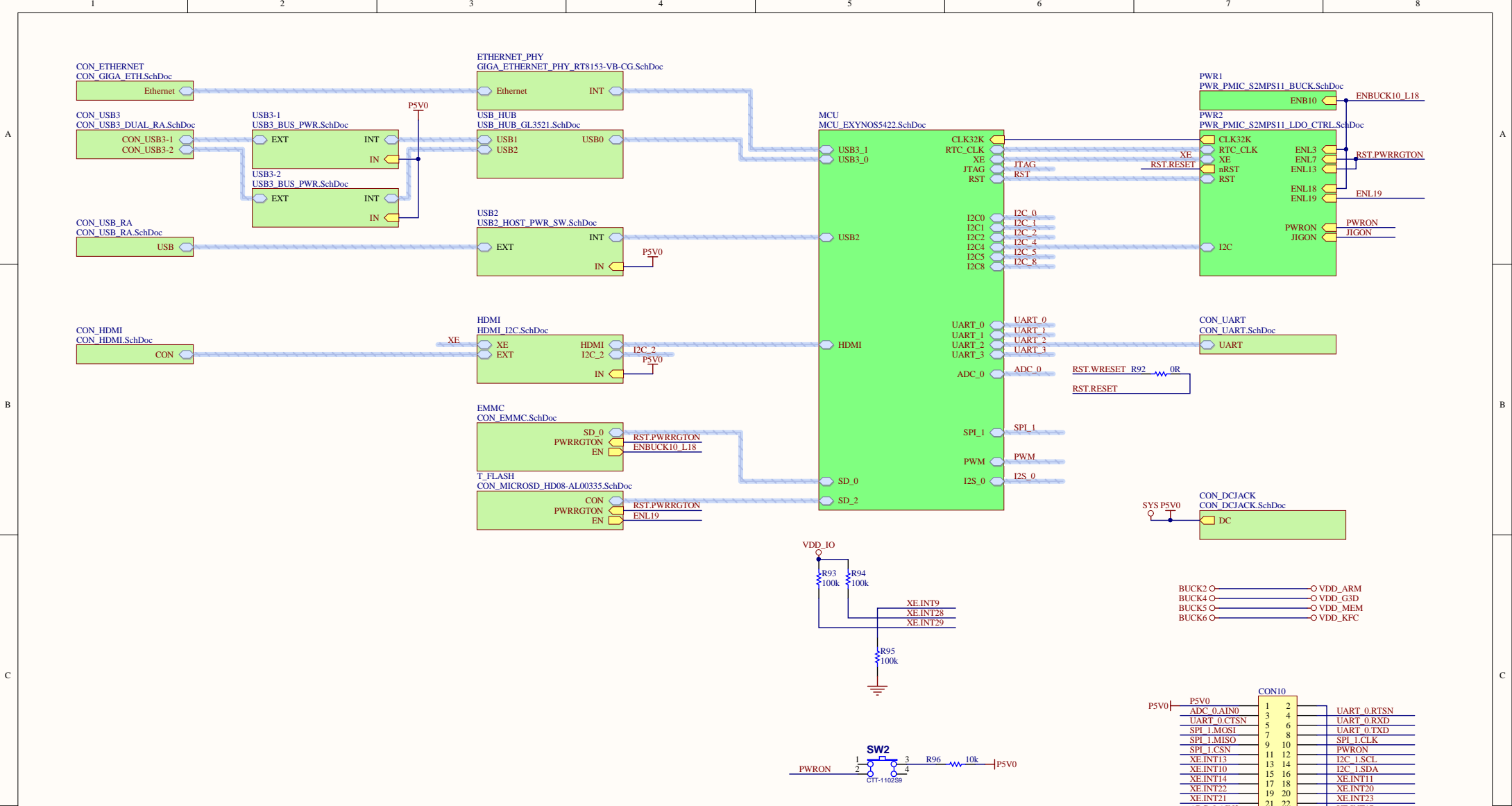


Title USB3 BUS POWER			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:19.1	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:46	Sheet:29 of 33		
File: USB3_BUS_PWR.SchDoc			Designed by: ruppi kim@hardkernel.com	

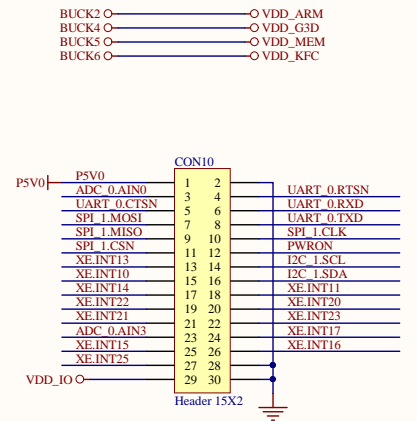
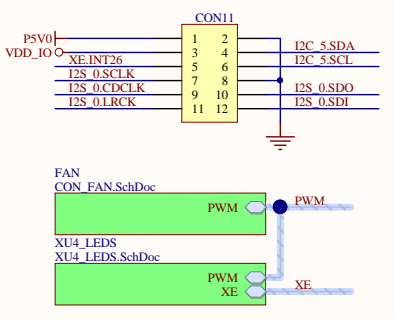
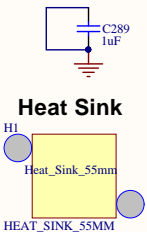


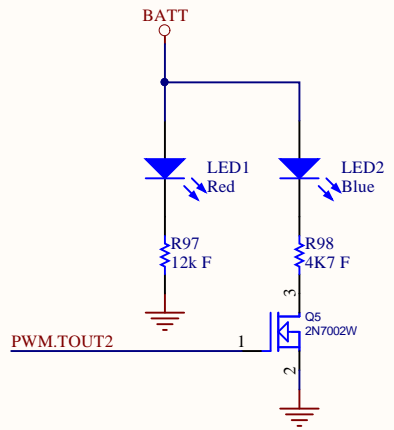
Title USB3 BUS POWER			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea	
Size: A4	Number:19.2	Revision:0.1		
Date: 2016-02-01	Time: 오전 9:16:46	Sheet 30 of 33		
File: USB3_BUS_PWR.SchDoc			Designed by: ruppi kim@hardkernel.com	






- ### Mounting Holes
- MH1 MOUNTING HOLE 3MM
 - MH2 MOUNTING HOLE 3MM
 - MH3 MOUNTING HOLE 3MM
 - MH4 MOUNTING HOLE 3MM





Title Indicator LEDs			Hardkernel Co.,LTD. 475-1 Mananro Manangu, Anyang City Gyeonggido South Korea Designed by: ruppi.kim@hardkernel.com	
Size: A4	Number:25.	Revision0.1		
Date: 2016-02-01	Time: 오전 9:16:46	Sheet33 of 33		
File: XU4_LEDS.SchDoc				